Attachment 3

Public Comments on the Draft EIR and Recirculated Draft EIR

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Comment Letter A1

November 15, 2021

Ms. Anna Prowant
Environmental Planner
County of San Diego, Department of Parks and Recreation
5500 Overland Avenue, Suite 410
San Diego, California 92123
CountyParksCEQA@sdcounty.ca.gov

Subject: Comments on the Draft Environmental Impact Report for the Alpine Park Project, SCH# 2021030196

Dear Ms. Prowant:

A1-1 The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a Draft Environmental Impact Report (DEIR) from the County of San Diego (County) Department of Parks and Recreation (DPR) (Lead Agency) for the Alpine Park Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding the activities involved in the Alpine Park Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW Role

A1-2 CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" (see Fish & G. Code, § 2050) of any species protected under the California Endangered Species Act (CESA; Fish & G. Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

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A1-2 cont.

CDFW also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program. The County participates in the NCCP program by implementing its approved Subarea Plan (SAP) under the San Diego County Multiple Species Conservation Plan (MSCP). The Project site is located with the boundaries of the County's approved MSCP covering southwestern San Diego County. Noteworthy is that the Wright's Field area was added to the Pre-Approved Mitigation Area (PAMA) of the County's MSCP SAP due to its very high biological resource values. More specifically, the heavy clay soils, extensive network of native grasslands with scattered vernal pools, and the presence of a number of highly sensitive plant and animal species make Wright's Field a unique area within the MSCP subregion. Although the MSCP is permitted under both the California NCCP and federal Habitat Conservation Plan (HCP) programs, the MSCP did not provide take coverage for the Quino checkerspot butterfly (*Euphydryas editha quino*; Quino), a federal endangered species that has been identified onsite. Impacts to Quino are therefore being addressed by the U.S. Fish and Wildlife Service (USFWS) under a separate HCP.

PROJECT DESCRIPTION AND SUMMARY

Proponent: San Diego County Department of Parks and Recreation

A1-3

Objective: The Project site is in the area covered by the Alpine Community plan. The Project site is currently zoned as Limited Agricultural Use (A70) and Open Space (S80). The site is subject to the General Plan Rural Lands Regional Category, with an Open Space-Conservation land use designation in the western portion of the property and a Semi-Rural Residential land use designation in the eastern portion. The Project site encompasses 96.6 acres of undeveloped land. Twenty-five acres will be developed and turned into an active park and the remaining 71.6 acres that will not be developed will be designated as open space and managed as part of the MSCP Preserve. The 25-acre active park will include: multi-use turf areas, baseball field, all-wheel area, bike skills area, recreational courts (i.e., basketball, pickleball, game table plaza), fitness stations, leash-free dog area, restroom facilities, administrative facility/ranger station, equestrian staging with a corral, nature play area, community garden, volunteer pad, picnic areas with shade structures, picnic tables, game table plaza, and trails. Included in the Project boundary will be a parking area with 250-275 single vehicle spaces. There will be two entrances to the parking area located on South Grade Road. The Project site will be open to the public from sunrise to sunset. Dogs are allowed on leashes in the Project boundaries and off-leash in the designated dog area. As stated above, the 71.6 acres that will not be developed will be called the Alpine Park Preserve (Preserve) and monitored and managed by the County. This management will include maintenance of one mile of existing trails and closure of informal use trails. An HCP addressing impacts to Quino checkerspot butterfly will include restoration and habitat enhancement for the species.

Location: The Project site is in eastern San Diego County, one mile south of Interstate 8, and approximately one mile south of the center of the town of Alpine. Alpine is an unincorporated community in the eastern portion of the County and is approximately 25 miles east of downtown San Diego. The Project site is north of South Grade Road, east of Tavern Road, and adjacent to the Backcountry Land Trust's (BCLT) Wright's Field Preserve. Residential and rural communities surround the 96.6-acre site.

Timeframe: There is no official start date, but Project construction will take 16 months to complete.

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COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. CDFW's comments are also intended to assist the County Parks Department to ensure the project meets the conditions of the County MSCP SAP.

I. Environmental Setting, Mitigation Measures, and Related Impact Shortcoming

Comment #1: Presence of Western Spadefoot (*Spea hammondii*) Egg Mass

A1-4

Issue: In the Biological Resources Report (BRR), in internal Appendix B, Table 2 notes the presence of western spadefoot eggs in an onsite road rut (AP-007) during fairy shrimp protocol surveys. Western spadefoot was not addressed in the DEIR as being present on the Project site. Page 4.4-3 in the DEIR identifies special-status species that were observed and/or have the potential to occur but does not mention western spadefoot in this section. The DEIR also states on page 4.4-30 that it would not have an effect on state or federal wetlands, which is true in the context of wetlands. However, in the impact discussion it states, "No wetland features or aquatic resources were found within the BSA during any field surveys." Although there may not be jurisdictional wetland features onsite, the soils onsite have the ability to hold water, allowing for an ephemeral species such as the western spadefoot to use the site for breeding and presumably for estivation and foraging.

A1-5

Specific Impact: Direct impacts to western spadefoot could result from Project construction and activities (e.g., equipment staging, mobilization, and grading); ground disturbance; vegetation clearing; and trampling or crushing from construction equipment, vehicles, and foot traffic. Indirect impacts could result from temporary or permanent loss of suitable nonbreeding habitat and breeding habitat.

Why Impacts Would Occur: Western spadefoots are burrowing anurans that breed in ephemeral pools, but the majority of their life is spent underground in adjacent terrestrial habitat. In a recent study, inland populations of western spadefoot showed dispersal up to 187 meters from a breeding pool (Halstead et al. 2021). This means that there is a high potential for adult western spadefoots on or near the Project site. Without appropriate species-specific avoidance measures, biological construction monitoring may be ineffective for detecting western spadefoot or other Species of Special Concern (SSC). This may result in trampling or crushing of western spadefoot individuals or egg masses. Demolition and paving after false negative conclusions may trap wildlife hiding under refugia and burrows.

A1-6

Evidence Impacts Would Be Significant: Western spadefoot is a candidate species under the federal Endangered Species Act (ESA), and a California Species of Special Concern (SSC). Western spadefoot is not a covered species in the County's MSCP SAP. Impacts to special-status species are discussed in section 4.4 in the DEIR but do not include western spadefoot. The DEIR states that "MM-BIO-1 through MM-BIO-5 would reduce the Project's impacts on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS, to less-than significant level." CDFW appreciates the intention behind these

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A1-6 cont.

mitigation measures but is concerned that the measures do not provide enough specificity to avoid or minimize impacts to special status species. CEQA provides protection not only for California Endangered Species Act (CESA)- and ESA-listed species, but for any species including, but not limited to, SSC. CDFW considers impacts to SSC a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. Take of SSC could require a mandatory finding of significance by the Lead Agency (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure

A1-7

Mitigation Measure #1: Species-specific Surveys, Habitat Creation, Post-relocation Monitoring - Prior to the start of the Project, ground disturbance, construction, or site preparation activities, the applicant shall retain the services of a qualified biologist to conduct pre-construction surveys for western spadefoot toad within all portions of the Project site containing suitable breeding habitat. Surveys shall be conducted during a time of year when the species could be detected (*e.g.*, the presence of rain pools). If western spadefoot toad or additional egg masses are identified on the Project site, the following measures will be implemented.

A1-8

(1) Under the direct supervision of the qualified biologist, western spadefoot toad breeding habitat shall be created within suitable natural sites outside the developed area plus a minimum 50-foot buffer from the forthcoming development; a minimum 100-foot buffer is recommended if it can be accommodated by the Project design. The amount of occupied breeding habitat to be impacted by the Project shall be replaced at a minimum of 2:1 ratio. CDFW recommends that two pools be created at disparate locations to off-set the loss of the existing breeding pool. The actual relocation sites design, and locations shall be approved by the Wildlife Agencies. The locations shall be in suitable habitat as far away as feasible from any recreation activities. The relocation basins shall be designed such that they only support standing water for several weeks following seasonal rains in order that aquatic predators (*e.g.*, fish, bullfrogs, and crayfish) cannot become established. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing pool(s) as feasible. No site preparation or construction activities shall be permitted in the vicinity of the currently occupied pool until the design and construction of the pool habitat in preserved areas of the site has been completed and all western spadefoot toad adults, tadpoles, and egg masses detected are moved to the created pool habitat.

A1-9

(2) Based on appropriate rainfall and temperatures, generally between the months of February and April, the biologist shall conduct pre-construction surveys in all appropriate vegetation communities within the development envelope. Surveys will include evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas of the site. All western spadefoot adults, tadpoles, and egg masses encountered shall be collected and released in the identified/created relocation basins described above.

(3) The qualified biologist shall monitor the relocation site for five years, involving annual monitoring during and immediately following peak breeding season such that surveys can be conducted for adults as well as for egg masses and larval and post-

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A1-10 cont.

larval toads. Further, survey data will be provided to CDFW by the monitoring biologist following each monitoring period and a written report summarizing the monitoring results will be provided to CDFW at the end of the monitoring effort. Success criteria for the monitoring program shall include verifiable evidence of toad reproduction at the relocation site.

Comment #2: Impacts to Native Grassland Habitat

A1-11

Issue: The DEIR proposed 11.73 acres of offsite mitigation for impacts to native needlegrass grassland but does not provide the location of where this mitigation will take place. The Project needs to meet compensatory mitigation requirements of the MSCP, which require impacts to be mitigated at a 2:1 ratio, assuming that the mitigation will occur within the PAMA of the County's MSCP SAP. This is a relatively large amount of native grassland requiring replacement and may be very difficult to accomplish.

A1-12

Specific impact: Valley needlegrass grassland is at the central and southern area of the BSA and it represents a large contiguous vegetation community that is unique in this area. Without an offsite mitigation site, the Project would result in permanent loss of native needlegrass grassland. This vegetation community is known to provide habitat for special-status plant and wildlife species including Quino, and it is considered prime foraging habitat for several species of raptors.

Why Impacts Would Occur: Native grasslands provide habitat for special-status plants and wildlife species. Impacts to special-status plants and wildlife species may occur through habitat loss or modification, resulting in reduced reproductive capacity, population declines, or local extirpation of a sensitive or special-status plant or wildlife species.

A1-13

Evidence Impacts Would Be Significant: The DEIR states that valley needlegrass grassland is the most common vegetation community in the Biological Survey Area (BSA), compromising 22.1 acres of the total BSA. In the BSA there is also disturbed valley needlegrass grassland (0.8 acre) and nonnative grassland (9.1 acres). Valley needlegrass and disturbed valley needlegrass habitat are Tier I communities under the County's MSCP SAP. The DEIR indicates that County DPR will provide compensatory mitigation for sensitive vegetation communities within the open space and/or within offsite locations. Table 4.4-4 states that 27.73 acres is required to mitigate for impacts to native grassland (Tier I) communities, with 16 acres of onsite mitigation and 11.73 acres of offsite mitigation. Inadequate avoidance, minimization, and mitigation measures for impacts to sensitive vegetation communities will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or (USFWS).

A1-14

Recommendation #1

CDFW recommends the County DPR retain a suitable offsite mitigation location for impacts to native grassland communities. Once the site has been chosen, it will need to be approved by CDFW and USFWS (Wildlife Agencies) prior to commencement of Project activities.

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II. Additional Comments and Recommendations

Comment #3: Monitoring Bat Boxes

A1-15 CDFW appreciates the MM-BIO-5 that states County DPR will work with a bat expert to design and install bat boxes prior to removal activities. We also appreciate the level of monitoring that is proposed after the bat boxes are installed. CDFW requests to be notified of any ongoing coordination and that the monitoring information be included in annual reports and/or be included in the County's annual report for the MSCP.

Comment #4: Alternative Project Design

CDFW acknowledges that the County could construct an active use park and be consistent with the requirements of the MSCP and appreciates the coordination that has occurred with County Parks to minimize impacts from an active park project. CDFW nonetheless recommends that a design for a more "passive park" be further considered as an alternative because of the presence of highly sensitive habitats (clay soils, native grassland, oak woodland) and species on and/or adjacent to the conserved areas of Wright's Field. In Section 6 of the DEIR, four parks were proposed as alternatives. Of these four parks, Alternative 4, Reduced Project Alternative, proposes a reduced active park acreage of 20 acres and 76 acres of open space. CDFW appreciates that this alternative is included in the DEIR, but Alternative 4 would still include active use features such as multi-use fields, baseball field, basketball and pickleball courts with the estimated daily capacity of up to 500 visitors. The impacts from these activities include
A1-16 lighting, noise, and other human disturbance.

Recommendation #2

CDFW recommends adding an alternative for a fully passive park design. This design would include the passive-use elements that are included in the Alternative 4 park design but would eliminate the active-use features. A passive park would allow the County to meet some of the recreational objectives for the Alpine community, provide an open space preserve and minimize impacts to the habitat encompassing the Wright's Field conservation area. Project alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources. A project alternative should be considered even if an alternative would impede to some degree the attainment of the Project objectives or would be more costly (CEQA Guidelines, § 15126.6).

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or
A1-17 supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to

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A1-17 cont. CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

A1-18 The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

A1-19 CDFW appreciates the opportunity to comment on the DEIR to assist the San Diego County Department of Parks and Recreation in identifying and mitigating Project impacts on biological resources and for consistency with the MSCP.

Questions regarding this letter or further coordination should be directed to Emily Gray, Environmental Scientist at Emily.Gray@wildlife.ca.gov.

Sincerely,

DocuSigned by:
David Mayer
D700B4520375406...
David Mayer
Environmental Program Manager
South Coast Region

Ec:
Karen Drewe, – Karen.Drewe@wildlife.ca.gov
Jenny Ludovissy, – Jennifer.Ludovissy@wildlife.ca.gov
Jennifer Turner, – Jennifer.Turner@wildlife.ca.gov
Cindy Hailey, - Cindy.Hailey@wildlife.ca.gov
State Clearinghouse, – State.Clearinghouse@opr.ca.gov
Jonathan Snyder, – Jonathan_Snyder@fws.gov

References

California Environmental Quality Act (CEQA). California Public Resources Code in section 21000 et seq. The “CEQA Guidelines” are found in Title 14 of the California Code of Regulations, commencing with section 15000.

California Office of Planning and Research. 2009 or current version. CEQA: California Environmental Quality Act. Statutes and Guidelines, § 21081.6 and CEQA Guidelines, § 15097, §15126.4(2)

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California Department of Fish and Wildlife. 2020. California Natural Diversity Database. Accessed at: https://wildlife.ca.gov/Data/CNDDB.

California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline. Fish & Game Code §3503

County of San Diego Multiple Species Conservation Plan, https://www.sandiegocounty.gov/content/sdc/pds/mscp/sc/docsmaps.html#docs

County of San Diego. 1998. San Diego Multiple Species Conservation Program, Plan. Final MSCP Program Plan, August 1998.

Halstead, B.J. et al. 2021. Conservation Implications of Spatiotemporal Variation in the Terrestrial Ecology of Western Spadefoots. The Journal of Wildlife Management 85(7):1377-1393;2021. DOI: 10.1002/jwmg.22095.

Attachment A:

CDFW Mitigation Measures and Recommendations:

	Mitigation Measures	**Timing**	**Responsible Party**
Mitigation Measure #1: **Species-specific Surveys, Habitat Creation, Post-relocation Monitoring**	Prior to the start of the Project, ground disturbance, construction, or site preparation activities, the applicant shall retain the services of a qualified biologist to conduct pre-construction surveys for western spadefoot toad within all portions of the Project site containing suitable breeding habitat. Surveys shall be conducted during a time of year when the species could be detected (*e.g.*, the presence of rain pools). If western spadefoot toad or additional egg masses are identified on the Project site, the following measures will be implemented. (1) Under the direct supervision of the qualified biologist, western spadefoot toad breeding habitat shall be created within suitable natural sites outside the developed	Prior to/after construction	County DPR

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	area plus a minimum 50-foot buffer from the forthcoming development; a minimum 100-foot buffer is recommended if it can be accommodated by the Project design. The amount of occupied breeding habitat to be impacted by the Project shall be replaced at a minimum of 2:1 ratio. CDFW recommends that two pools be created at disparate locations to off-set the loss of the existing breeding pool. The actual relocation sites design, and locations shall be approved by the Wildlife Agencies. The locations shall be in suitable habitat as far away as feasible from any recreation activities. The relocation basins shall be designed such that they only support standing water for several weeks following seasonal rains in order that aquatic predators (*e.g.*, fish, bullfrogs, and crayfish) cannot become established. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing pools as feasible. No site preparation or construction activities shall be permitted in the vicinity of the currently occupied ponds until the design and construction of the pool habitat in preserved areas of the site has been completed and all western spadefoot toad adults, tadpoles, and egg masses detected are moved to the created pool habitat. (2) Based on appropriate rainfall and temperatures, generally between the months of February and April, the biologist shall conduct pre-construction surveys in all appropriate vegetation communities within the development envelope. Surveys will include evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas of the site. All western spadefoot adults, tadpoles, and egg masses encountered shall be collected and released in the identified/created relocation basins described above (3) The qualified biologist shall monitor the relocation site for five years, involving annual monitoring during and immediately		

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Recommendation #1	CDFW recommends the County DPR retain a suitable offsite mitigation location for impacts to native grassland communities. Once the site has been chosen, it will need to be approved by CDFW and USFWS (Wildlife Agencies) before the start of the Project.	Prior to construction	County DPR
Recommendation #2	CDFW recommends adding an alternative that includes a fully passive park design. This design would include the passive-use elements that are included in the Alternative 4 park design but would eliminate the active-use features. A passive park would still allow the County to meet some recreational objectives for the Alpine community, provide an open space preserve and minimize impacts to the habitat encompassing the Wright's Field conservation area. Project alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources. A project alternative should be considered even if an alternative would impede to some degree the attainment of the Project objectives or would be more costly (CEQA Guidelines, § 15126.6).	Prior to construction	County DPR

From: sandiego
To: CEQA, CountyParks
Subject: [External] RE: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report (September 30, 2021 - November 15, 2021)
Date: Thursday, September 30, 2021 10:04:15 AM

A2-1 Your email has been received and will be distributed to the appropriate San Diego Water Board's staff.

From: sandiego
To: CEQA, CountyParks
Subject: [External] RE: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report (September 30, 2021 - November 15, 2021)
Date: Friday, October 15, 2021 11:34:33 AM

A3-1 Your email has been received and will be distributed to the appropriate San Diego Water Board's staff.

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State of California – Natural Resources Agency
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

February 27, 2023

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Department of Parks and Recreation
5500 Overland Avenue, Suite 410
San Diego, California 92123
CountyParksCEQA@sdcounty.ca.gov

Subject: Comments on the Recirculation of the Draft Environmental Impact Report for the Alpine Park Project, SCH #2021030196

Dear Anna Prowant:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of the Recirculated Draft Environmental Impact Report (DEIR) from the County of San Diego (County) Department of Parks and Recreation (DPR) for the Alpine Park Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for an opportunity to provide comments and recommendations regarding the activities involved in the Alpine Park Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

A4-1

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CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" (see Fish & G. Code, § 2050) of any species protected under the California Endangered Species Act (CESA; Fish & G. Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

CDFW also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program. The County participates in the NCCP program by implementing its approved Subarea Plan (SAP) under the San Diego Subregional Multiple Species Conservation Plan (MSCP). The Project site is located with the boundaries of the County's approved MSCP SAP covering southwestern San Diego County. Noteworthy is that the Wright's Field area was added to the Pre-Approved Mitigation Area (PAMA) of the County's MSCP SAP due to its very high biological resource values. More specifically, the heavy clay soils, extensive network of native grasslands with scattered vernal pools, and the presence of a number of highly sensitive plant and animal species make Wright's Field a unique area within the MSCP subregion. Also noteworthy is that although the MSCP is permitted under both the California NCCP and federal Habitat Conservation Plan (HCP) programs, the MSCP did not provide take coverage for the Quino checkerspot butterfly (*Euphydryas editha quino*; Quino), a federal endangered species that has been identified onsite. Impacts to Quino are therefore being addressed by the U.S. Fish and Wildlife Service (USFWS) under a separate HCP. Quino was also previously petitioned to the Fish and Game Commission for listing as a State endangered species; however, no decision has been made by the Commission at this point in time.

A4-1 cont.

PROJECT DESCRIPTION AND SUMMARY

Proponent: San Diego County Department of Parks and Recreation

Objective: The Project site is in the area covered by the Alpine Community plan. The Project site is currently zoned as Limited Agricultural Use (A70) and Open Space (S80). The site is subject to the General Plan Rural Lands Regional Category, with an Open Space-Conservation land use designation in the western portion of the property and a Semi-Rural Residential land use designation in the eastern portion. The Project site encompasses 96.6 acres of undeveloped land. Twenty-five acres will be developed and turned into an active park and the remaining 71.6 acres that will not be developed will be designated as open space and managed as part of the MSCP Preserve. The 71.6 acres that will not be developed will be called the Alpine Park Preserve (Preserve) and monitored and managed by the County. This management will include maintenance of one mile of existing trails and closure of informal use trails. An HCP addressing impacts to Quino checkerspot butterfly will include restoration and habitat enhancement for the species.

The DEIR is being recirculated by the County based on revisions and modifications made to certain chapters or portions of the document. The recirculated sections include changes to Section 4.4, Biological Resources; Section 4.9, Hazards and Hazardous Materials; Section 4.20, Wildfire; Chapter 6, Alternatives; and associated technical appendices.

Location: The Project site is in eastern San Diego County, one mile south of Interstate 8, and approximately one mile south of the center of the town of Alpine. Alpine is an unincorporated community in the eastern portion of the County and is approximately 25 miles east of downtown

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San Diego. The Project site is north of South Grade Road, east of Tavern Road, and adjacent to the Backcountry Land Trust's (BCLT) Wright's Field Preserve. Residential and rural communities surround the 96.6-acre site.

Timeframe: There is no official start date, but Project construction will take 16 months to complete.

COMMENTS AND RECOMMENDATIONS

A4-2

CDFW offers the following comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. CDFW's comments are also intended to assist the County Parks Department to ensure the project meets the conditions of the County MSCP SAP.

CDFW appreciates the ongoing communication regarding the project, as well as the opportunity to provide input during the monthly coordination meetings with the County. We also appreciate the County addressing our previous comments that were made in our November 15, 2021, letter, specifically our comments regarding western spadefoot (*Spea hammondii*) mitigation measures. The following comments address new impacts that were included in the Recirculated Biological Resources section.

A4-3

1. Additional Fire Fuel Reduction Zone in the Proposed Preserve: During a monthly coordination meeting (August 11, 2022), the County discussed that fire fuel clearance is proposed within 100 feet of the volunteer parking pad in the northern portion of the active park. This new fuel reduction area would encroach into the proposed Alpine Park Preserve. Per the Fire and Emergency Operational Assessment (FEOA), the location of the pad would result in the need for a Zone A and Zone B fire fuel modification zone. Zone A (30 feet) includes clearing of vegetation and would result in "landscape replacement". Zone B (100 feet) includes clearing vegetation at least 75 percent to reduce the fire line intensity, which would be achieved by removing shrubs by a minimum of 50 percent, and grass/herb fuels by a minimum of 80 percent. During that meeting, the Wildlife Agencies (jointly, CDFW and the U.S. Fish and Wildlife Service (USFWS)) expressed concern that fuel modification would occur within the Preserve, impacting native habitat, and asked the County to consider moving the volunteer pad/dwelling to a central location within the park boundaries.

   Section 7.2 of the Biological Resources Report (BRR) states that the County re-designed the site plan in the fall 2022 to move the volunteer parking pad from its previous location which was 12 feet from the edge of the proposed Preserve. CDFW appreciates the Recirculated DEIR including our concerns and taking the Wildlife Agencies' recommendation to move the volunteer parking pad/dwelling to the interior of the Project footprint to avoid any fuel medication within the Preserve. CDFW also recommends that a detailed Fuel Modification Plan (FMP) be included in the final Resource Management Plan (RMP).

A4-4

2. Native Grassland Mitigation: CDFW appreciates the efforts by the County to mitigate the impacts to native grassland with 17.48 acres of onsite preservation, 4.84 acres of restoration, as well as mitigating offsite with 7.41 acres of restoration of non-native

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A4-4 cont.

grassland on Wright's Field Preserve. As stated in the BRR, all restoration will be conducted in accordance with the Habitat and Restoration and Enhancement Plan (HREP) to be approved by the Wildlife Agencies. The HREP will include success criteria, and if success criteria and restoration goals are not met, the County will implement adaptive management measures approved by the Wildlife Agencies. As mentioned in our meetings (May 12, 2022 and June 9, 2022), if success criteria/restoration goals are not met, the County should mitigate for the impacts to native grassland with in-kind vegetation. CDFW would not likely agree to out-of-kind mitigation for the offsite restoration on Wright's Field and if the restoration were to fail, the County would need to coordinate with the Wildlife Agencies on next steps going forward.

ENVIRONMENTAL DATA

A4-5

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data
The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

A4-6

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

A4-7

CDFW appreciates the opportunity to comment on the Recirculated DEIR to assist the San Diego County Department of Parks and Recreation in identifying and mitigating Project impacts on biological resources and for consistency with the MSCP.

Questions regarding this letter or further coordination should be directed to Emily Gray, Environmental Scientist, at Emily.Gray@wildlife.ca.gov.

Sincerely,

DocuSigned by:
David Mayer
D700B4520375406...

David Mayer
Environmental Program Manager
South Coast Region

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ec: CDFW
Karen Drewe – Karen.Drewe@wildlife.ca.gov
Cindy Hailey – Cindy.Hailey@wildlife.ca.gov
OPR
State Clearinghouse – State.Clearinghouse@opr.ca.gov
USFWS
Jonathan Snyder – Jonathan_Snyder@fws.gov

References

California Environmental Quality Act (CEQA). California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

California Office of Planning and Research. 2009 or current version. CEQA: California Environmental Quality Act. Statutes and Guidelines, § 21081.6 and CEQA Guidelines, § 15097, §15126.4(2)

California Department of Fish and Wildlife. 2020. California Natural Diversity Database. Accessed at: https://wildlife.ca.gov/Data/CNDDB.

County of San Diego Multiple Species Conservation Plan, https://www.sandiegocounty.gov/content/sdc/pds/mscp/sc/docsmaps.html#docs

County of San Diego. 1998. San Diego Multiple Species Conservation Program, Plan. Final MSCP Program Plan, August 1998.

From: sandiego
To: CEQA, CountyParks
Subject: [External] RE: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report Recirculated Portion (December 16, 2022 - February 14, 2023)
Date: Friday, December 16, 2022 6:51:30 PM

A5-1 Your email has been received and will be distributed to the appropriate San Diego Water Board's staff.

From: russ-dawn@sdcoxmail.com
To: CEQA, CountyParks
Subject: [External] reg my comments on Alpine Regional Park Draft EIR
Date: Friday, November 12, 2021 12:17:06 PM

November 12, 2021
Attn: Ms. Prowant

I1-1 My husband and I have resided in Alpine since 1975. We came here because of the small town rural community. We are both real estate Brokers and have been operating our own real estate office since 1979 in downtown Alpine. We raised all three of our children in this community. Alpine has grown, but it has been planned growth over the years. As residents for 46 years now, we love our community. We would like to see that it is preserved for future generations.

I1-2 The location that the County has selected for this proposed park is the wrong location. It is located in a rural residential area with windy roads, without bike lanes, pedestrian walkways and in a lot of places no shoulder or very little shoulder. There have been multiple fatalities in the same location of where both entrances will be located on S Grade Rd. The County is projecting at least 500 people per day, that is a total of 3500 per week and 14,000-15,000 per month. Bottomline is, that the infrastructure will not support this large Regional Park. I am aware of other efforts to improve our roadways that are currently underway or are in the planning stage which impacts were not analyzed in the DEIR. Can you explain why this was omitted? Can you please explain how this location will be safe for Alpine's families and children? The added traffic of a projected 500 people will make it unsafe on our own windy rural roads.

I1-3 Per your DEIR report, it is projected that 16,471272.8 gallons of water is to be used for the park per year. That is an absorbent amount of water. We are currently in a Severe Drought and Governor Newsom has asked for a reduction in our water usage by 15% per household. How is the County proposing to conserve water? The estimate for cost of water just for the 8 acres of landscaping alone is approximately $200,000 per year and that is for (per DEIR report) 13,846,272.8 gallons per year. It is totally irresponsible for a public agency to propose such water uses during a severe drought with no end in sight. The bigger question is, who is going to pay for this excessive water usage?

I1-4 There is very little mentioned in the 567 page DEIR report regarding Green House Emissions. The project construction activities alone would result in generating of GHG emissions that would conflict with the 2017 Scoping Plan. Impacts would be potentially significant during construction. The impacts after completion would need to be evaluated since transportation creates 29% of GHG (based on studies). Increased traffic will result in increased GHG emissions which undoubtedly cannot be mitigated for, unless the park is reduced to a passive park intended for the local community. This needs to be addressed. How is the County going to address this?

I1-5 There are so many concerns and issues with the proposed location of this mega park. The lighting is of concern, the excessive noise, traffic and pollution. This is a very high fire risk area and was more recently impacted in the West Fire in 2018. With higher usage, visitors and San Diegans coming up here, there is even a higher risk of fires, because these folks do not live in a high fire risk area like we do. They do not understand the higher fire safety that Alpineans have to practice. Also, the

I1-5 cont. increased vehicle traffic increase the possibility for fire ignition, not to mention the BBQ pits, cigarettes and the potential catastrophic loss of life if visitors plus residents are unable to evacuate.

I1-6 The County has been deceptive to the Alpine Community stating that this park would be for our local community. When in fact, what is being proposed is another Regional park to attract visitors and others from San Diego. Currently the existing Wrights Field, that is 202 acres is currently labeled by the County (in the DEIR report) as a Neighborhood Park. So the question becomes why do we have to have a Regional Park abutting up to our already existing local Park? Alpine is over parked for Regional Parks, please see https://1drv.ms/b/s!AjOSesLmgg8SiRV1y4kcbywrEQNG
We already have local parks in Alpine. One 2 acre park at Boulders Oaks Neighborhood Park. We have two more at our middle school and Shadow Hills Elementary School that total 24 acres (per the County DEIR). We also have the Alpine Community Park. It is also noted per the DEIR report that the Cleveland National Forest is within our Project area and has 28,020 acres that is labeled a Regional Park. So why do we need another Regional Park with a price tag of 28 million?
This property is designated as Pre-Approved Mitigation per the MSCP. Not to mention the previous attempts to develop the land failed partly due to the high biological value of the resources.

I1-7 Since a large part of the actual park will fall into the Farmland of Local Importance according to the FMMP map, why would we want as a community, a concrete park with at least 275 asphalt parking spaces with planted grass and trees, when it is already a natural preserve that should only warrant a nature preserve park?

Sincerely,
Dawn August
Broker
Alpine Premier Properties
1411 Rock Terrace
Alpine, CA 91901
619 445-6246
Russ-dawn@sdcoxmail.com

From: Brad Bach
To: CEQA, CountyParks
Subject: [External] Alpine proposed park project
Date: Monday, November 15, 2021 1:51:09 PM

To whom it may concern,

I2-1 I would like to take this opportunity to state some concerns that I have regarding the proposed park development project in Alpine.

I2-2 Having read residents' valid and well stated concerns, and opposition in some cases, I will simply state for myself that I do not think that the present plan fits in well with what most people have chosen to live in Alpine for. Most want rural, natural, quiet living. People that don't feel we need a Starbucks on every other corner and don't need a skate park in Alpine. We would like to leave this large property, Wright's Field in a very natural state, largely as it presently is. This doesn't mean that developing a parking area and some limited amenities isn't a good plan, but certainly transforming it into a large all wheel recreation type of park with loads of

I2-3 concrete and promoting activities that will generate a large traffic impact,

I2-4 lighting impact, and noise pollution, is not a good choice. And I know that

I2-5 the noise question has been explained by the County, but I don't buy it. Even with berms and mitigation the noise impact will be significant. This is an extremely low ambient noise area so sound really is noticed at a distance. Not to mention all of the noise generated by the additional automobile traffic. Also, along with others, I too challenge the

I2-6 planned grass areas with the tremendous amount of water use involved as well as mowing maintenance. In our region of the country that is simply bad planning. Or just not planning.

I2-7 The bottom line is that I would support a modified, much more limited park plan. Just not this one. I don't think that it is right for Alpine.

I2-8 Please respect the wishes of the residents. Not everybody wants to develop every area into an urban type of setting. The residents that have chosen Alpine to call home have done so for a reason and the County park plan doesn't fit into that reason.

Sincerely,

Brad Bach

From: Elaine Benjamin
To: CEQA, CountyParks
Subject: [External] Alpine Park Project (SCH No. 2021030196)
Date: Saturday, November 13, 2021 12:40:24 PM

Dear Ms. Prowant,

I appreciate the opportunity to comment on the Alpine Park Project Draft Environmental Impact Report. I have been a resident of Alpine for over 30 years.

I3-1 I am a proponent of the smaller version of the park. I attended a meeting in 2019 to voice my vision of a park. The consensus of the people attending the meeting was for a 12 acre park with emphasis on hiking, biking, and horseback riding trails, a leash free dog park, a rustic natural style playground, and picnic tables. I was very disappointed to see a much bigger, more developed park be proposed.

I3-2 I do not feel the DEIR adequately clarifies how water will be brought in to the park, or what waste removal system will be developed. Will wells be drilled or county water be used? Will the park be serviced by a septic system, or will sewer lines be installed? These are important questions and they must be answered before moving forward, as the impact will be felt by the surrounding community.

I3-3 It is not clear in the DEIR how South Grade Road would not be aversely affected by this project. A road that is already very busy. I am concerned that many children from the surrounding area will be traveling on foot, bike, and skate board on South Grade Road to get to the park, which would put them at a high risk of becoming involved in an accident. We have already had a fatality in that area.

I3-4 Alpine already has several athletic fields available.
An All Wheel skate park is not compatible with the natural surroundings, and would require supervision and increase traffic on South Grade.

I3-5 Outdoor lighting needs to be addressed as it would impact surrounding homes, wildlife, and increase light pollution.

I3-6 A nature-based park that serves the community of Alpine would be an asset to all who live here. A smaller park would not require on site supervision, maintenance of infrastructure, and would be compatible with Wright's Field, and not negatively impact the unique flora and fauna that grows and thrives there.

I3-7 Thank you for taking my concerns and question into consideration.

Sincerely,

Elaine Benjamin
2627 Eltinge Dr.
Alpine, Ca, 91901

From: Kymberly Bennett
To: CEQA, CountyParks
Subject: [External] Draft EIR Alpine Park Project
Date: Tuesday, November 2, 2021 9:18:26 AM

Dear Anna Prowant,

I4-1 I have looked over the EIR and as a county resident of Alpine, I do not want anything done to Wright's Field at all. No "improvements" by the county should be made. We are proud of our open space preserve and want to keep it the way it is for future generations to enjoy.

I4-2 Putting in any kind of park will attract the wrong kind of element to our small town from other lying areas. They will graffitti it and ruin it in a matter of months. We do not have the policing resources to continually monitor the so-called "park" for vandalisim or under age drinking that will occur.

I4-3 As an Alpine resident since 2003, I have seen too much money wasted on county endeavors. One, the "high school" that never was. I pay over $230 a year on my property taxes for a non-existent high school.

NO TO THE WHOLE PARK PROJECT IN ALPINE!!!

--
Kymberly Bennett
619-517-0845

From: patricia borchmann
To: CEQA, CountyParks
Cc: patricia borchmann
Subject: [External] Opposition to proposed 24-acre park plan in Alpine
Date: Monday, November 15, 2021 10:30:06 AM

Anna Prowant,

I5-1 It is important that County of San Diego fully consider strong public opposition to the proposed park plan near Alpine. I join many other stakeholder to inform County planners and suspervisors of logical, scientific reasons many are opposed to the overzealous park proposal in Alpine, which will destroy 24 acres of healthy, intact open space with sensitive habitat, and instead replace it with unsustainable non-native lawns and artificial concrete paths. This rural Alpine are is not the next suburban community for developers to waste, as another cookie-cutter monotonous space, that provides litttle, or no tangible community benefit. The public stakeholders in San Diego county expect, and deserve a better plan, that will integrate sustainable planning, native landscape materials, preserve natural habitat, and contribute to climate solutions.

From: Garth Brown
To: CEQA, CountyParks
Subject: [External] Alpine Park
Date: Friday, October 15, 2021 11:47:32 AM

I6-1 I welcome the new park for the Alpine community, but please, please, please do not install STOP signs on South Grade Road at the park entrances.

Sent from my iPad

From: Keli Cadenhead
To: CEQA, CountyParks
Subject: [External] Wright"s Field
Date: Monday, November 15, 2021 6:49:25 AM

I7-1

Please SAVE Wrights Field!!! We DO NOT want a sports park in the middle of this native grassland.

As the Jewel of Alpine, it is used by so many, to BE in nature, to walk their dogs, to ride bikes, and still not have to go so far to do it.

The wild life is precious, we can find some quiet outdoor time to spend IN nature. Will the Engelmann Oak woodland still be there after your planned park???

This is our generation's last best chance to save the small-town feel and rural heritage of Alpine for future generations. Save Wright's Field for our children and our grandchildren.

Keli Cadenhead
Peutz Valley, Alpine

From: Family Carroll
To: CEQA, CountyParks
Subject: [External] Alpine County Park DEIR Public Comments
Date: Monday, November 15, 2021 12:26:29 PM

I8-1 The park by design is beautiful however there are serious safety concerns for vehicles and pedestrians alike and increased noise pollution for neighbors. #1: There is no sidewalk or pedestrian path incorporated into the design. How will the local children/adults safely access the park without driving a vehicle to the location? #2: The roads are narrow, very curvy and increased vehicle traffic will endanger pedestrians who will attempt to ride bicycles or walk to the park. #3: the noise pollution will increase with the skateboard park. Noise pollution from the skate park specifically will carry over into the existing residences/neighborhoods. Any park design elements should mimic the quiet rural area/neighborhood.

I8-2

I8-3 The park size is great I just wish the design was more aligned/designed with the current quiet, rural, nature area.

Thank you,
Alejandra Carroll
Alpine resident
619 300-6634

Attn: Anna Prowant
@ San Diego Parks

November 14, 2021

Re: Alpine Environmental Impact Report

Dear Ms. Prowant,

I9-1 *My name is Hector and would like to comment about the Environmental Impact Report as it relates to areas from the report that appear to have incomplete response to the specific subject being covered. We are Alpine residents located adjacent to the proposed Park Development and respectfully request that the Planning Group, Supervisors, and any party that is involved in the project addresses our concerns that are laid out in the Environmental Impact Report. Note in RED underlined questions relative to each section of the EIR.*

I9-2 *We have many concerns ranging from size and scope of Park to specifics about the park development that will impact our quality of life based on the extent of intrusion that the development realizes. Concern with EIR under Section 4.17 Transportation and Circulation. "Implementation of the project would not result in any potentially significant impacts related to transportation & circulation." There is no insight on Environmental impact to traffic congestion since the new proposed option will attract people from all over the county.*

The fact that 250 plus parking spots are under consideration to allow parking clearly demonstrates that the local Alpine Community will not be the sole beneficiary of the project. With increased traffic, there will be a requirement from San Diego County Planning Commission to provide for solution in anticipation of the increased traffic congestion. See as Reference article published in the San Diego Union Tribune written by Deborah Sullivan on September 20, 2021.

I9-3 ***Our home** is adjacent to the proposed park on the northern boundary below. Of all the Alpine Community, we will be impacted by the Park Project the most and would respectfully request that our observations are heard.*



Please address our questions that are inserted into each Section of the Environmental Impact Report.

I9-4 **4.1 Aesthetics and Visual Resources**
AES 2. Degradation of views from our property:
Impact-AES-2: Substantially Degrade Rural Views from Public Vantage Points During Operation. Operation of the project would transform rural, undeveloped land to a complex regional park with several different development features, substantially degrading the existing rural views available from South Grade Road and Wright's Field Preserve.

I9-5 PS **MM-AES-2: Maintain Areas of Native Vegetation Along the Project Boundaries.** All boundaries of the Alpine Park shall be planted with areas of native vegetation to provide a transition from existing rural fields and native habitat to the landscaping and development of the County Park. Drought tolerant and native plants shall be located

I9-5 cont. along the eastern and southern boundaries along South Grade Road, and on the western boundary along Wright's Field Preserve, and on the northern boundary. ***What "NATIVE VEGETATION" will be utilized to replace the current natural habitat and proposed vegetation to be replanted?*** **Parks northern boundary faces our home property.** ***How are we guaranteed that the new vegetation will aesthetically and visually be same or better than the current natural vegetation?***

I9-6

I9-7 ***What measures will be taken to ensure that the new vegetation will survive without impacting water resources that currently impact the entire state?***

AES 3. Installation of Lighting at night –

Impact-AES-3: New Source of Light Adversely Affecting Nighttime Views. Operation of the project would result in new sources of lighting at the active park that could illuminate the nighttime sky and adversely affect nighttime views. **Since our home is directly facing the park boundary, this will directly impact our nighttime visual views.** ***Can you provide us with alternative to having nighttime lighting as originally proposed to the community back in 2019?*** X-8

I9-8

Mitigation-AES-3: Turn Off Outdoor Lighting 1 Hour After Closing. County DPR shall turn off all outdoor lighting at the parking lots, driveways, & recreational facilities in the active park 1 hour after the park closes or use motion-sensors to limit duration of lighting, except for certain lighting for safety. Outdoor lighting shall be turned on, when necessary, when the park is open. ***What will be the source of energy for the lighting?***
If renewable energy will be used, can you expand on how it will be implemented without creating an aesthetic and visual eyesore?

I9-9 **4.2 Agriculture and Forestry Resources:** Implementation of the project would not result in any potentially significant impacts related to agriculture and forestry resources. X-9

4.3 Air Quality

Impact AQ-1: Objectionable Odors. The project may have potentially significant odor impacts related to manure located in the equestrian staging areas and corrals.

Mitigation-AQ-1: Prepare and Implement a Manure Management Plan. The County DPR shall comply with the following best management practices, which will be documented in a Manure Management Plan:

I9-10

- The equestrian areas, including the staging area and horse corrals, shall be cleaned at least once per day Including the removal of manure. Manure stockpiled in receptacles shall be covered with a lid or tarp. Receptacles shall be located at the farthest feasible distance from nearby residents and/or sensitive receptors. ***What guarantee is there that the accumulation of manure and urine from equine will not create objectionable odor?***
  What guarantee is there that manure will not cultivate potential hazard from insects carrying disease such as West Nile Virus? X-10

I9-11 **4.4 Biological Resources:**
BIO-1 - Significant impact on biological resources such as Quino checkerspot butterfly, decumbent goldenbrush, Engelmann Oaks, Cooper's hawk and red shouldered hawk, Pallid bat, sensitive communities (valley needlegrass grassland, flat-topped buckwheat stands, and nonnative grasslands), ***What evidence is being provided other than data in EIR that current habitat will survive?***
Does EIR provide details on how the proposed park with the inherent and significant increase of use of area not impact the Park Habitat as well as the adjacent Wrights Field Preserve? X-11

I9-12 **Impact-BIO-1**: **Significant Impacts on QCB Occupied Habitat.** Occupied Quino checkerspot butterfly (QCB) habitat would be affected by construction and maintenance of the project. Impacts on occupied QCB habitat would be significant. X-12

I9-13 PS **MM-BIO-1: Obtain Federally Listed Species Permitting.** The County DPR shall seek a Section 10 Incidental Take Permit (ITP) (or Section 7 ITP if there is a federal nexus) for impacts on QCB-occupied habitat and seek a determination that no adverse impacts on the Hermes copper butterfly would occur because of impacts on proposed designated critical habitat for Hermes copper butterfly. Mitigation for impacts on occupied QCB habitat X-13

I9-13 cont.

shall be provided in the form on onsite preservation of occupied habitat for QCB within the open space preserve, as well as the assurance that no net loss of QCB host plants will occur because of the project. The County DPR shall ensure that there is no net loss of QCB host plants by performing onsite enhancement and restoration activities within QCB habitat, including planting dot-seed plantain, removing thatch to support healthy populations of dot-seed plantain, and maintaining and monitoring these enhancement areas for a minimum of 5 years. Construction activities shall not occur until the ITP is secured. Conservation measures shall be implemented pursuant to that ITP and will include measures to restore and enhance QCB habitat and provide permanent habitat protection and maintenance activities within the open space/preserve. ***If impact is significant, then the natural habitat is disregarded and does the end result (Park Development) justify "significant impact on habitat" as stipulated in report?***

I9-14

4.5 Cultural Resources

Impact-CUL-1: **Potential to Unearth and Damage Significant Archaeological Resources During Construction.** Excavation of the project has the potential to unearth and damage significant archaeological resources during construction of the project. Therefore, implementation of the project may cause a substantial adverse change in the significance of an archaeological resource as defined in State CEQA Guidelines Section 15064.5.

MM-CUL-1: Prepare and Implement a Cultural Resources Monitoring and Discovery Plan. Prior to the commencement of any ground-disturbing activities within previously undisturbed soils within the project area, the County DPR shall retain a qualified archaeologist (pre-approved by County DPR) who meets the Secretary of the Interior's Professional Qualification Standards (36 Code of Federal Regulations [CFR], Part 61) to prepare a Cultural Resources Monitoring and Discovery Plan (CRMDP) for the project area. Procedures to follow in the event of an unanticipated discovery apply to all project components. The CRMDP shall be submitted to the County DPR, as applicable based on the jurisdiction wherein the project component is located, and shall be reviewed and approved by County DPR, the relevant agency. If County DPR does not have in-house expertise to review the CRMDP, they shall respectively hire an expert who meets the Secretary of the Interior's Professional Qualification Standards (36 CFR 61) and the County DPR shall pay for said expert prior to the commencement of any ground-disturbing activities within the areas requiring archaeological monitoring. County DPR's CRMDP review shall ensure that appropriate procedures to monitor construction and treat unanticipated discoveries are in place. County DPR's review and approval of the CRMDP shall occur

I9-15

4.6 Energy: Implementation of the project would not result in any potentially significant impacts related to energy. **Agree that no Energy impact if the Park Alternative does not require night illumination or activity that requires energy sourcing. In the case of the proposed Sports Complex Alternative, night illumination is being mentioned whenever a competitive event takes place within the park.** ***Where would the energy come from under this alternative?***

I9-16

4.7 Geology and Soils

Impact-GEO-1: Potential Impact on Paleontological Resources. Ground-disturbing activities that would extend deep enough to encounter previously undisturbed deposits of the Lusardi Formation in the southern and western portions of the project site would have the potential to impact paleontological resources.

Mitigation-GEO-1: Implement a Paleontological Resource Mitigation Program. Ground-disturbing construction activities in the southern and western portion of the project site shall be subject to paleontological and geologic resource sensitivity screening prior to commencement of construction. The resource sensitivity screening shall determine which ground-disturbing activities would be deep enough to encounter previously undisturbed deposits of the Lusardi Formation. County DPR shall retain a Qualified Paleontologist who shall oversee paleontological monitoring by a qualified Paleontological Monitor or cross-trained Paleontological /Archaeological monitor during ground disturbing activities. The paleontological monitoring shall include the following measures:

- **A Qualified Paleontologist shall attend the preconstruction meeting(s)** to consult with the grading and excavation contractors or subcontractors concerning excavation schedules, paleontological field techniques, and safety issues.
- **A Qualified Paleontologist or Paleontological Monitor or cross-trained Paleontological / Archaeological Monitor** shall be on site, on a full-time basis, during ground-disturbing activities that

occur 10 feet or more below ground surface, to inspect exposures for contained fossils. The Paleontological Monitor shall work under the direction of the project's Qualified Paleontologist. A "Paleontological Monitor" shall be defined as an individual selected by the Qualified Paleontologist who has experience in monitoring excavation and the collection and salvage of fossil materials.

- **If fossils are discovered on the project site**, the Qualified Paleontologist shall recover them and temporarily direct, divert, or halt grading to allow recovery of fossil remains.
- **The Qualified Paleontologist shall be responsible** for the cleaning, repairing, sorting, and cataloguing of fossil remains collected during the monitoring and salvage portion of the mitigation.
- **The Qualified Paleontologist shall deposit and donate prepared fossils**, along with copies of all pertinent field notes, photos, and maps, in a scientific institution with permanent paleontological collections, such as the San Diego Natural History Museum, approved by County DPR.
- **Within 30 days after the completion of excavation** and pile-driving activities, a final data recovery report shall be completed by the Qualified Paleontologist and submitted to County DPR for review and approval. The final report shall document the results of the mitigation and shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.

I9-16 cont.

Who has been designated as the Paleontologist and / or community advocate that will have full access and communicate to us if important findings take place?

4.8 Greenhouse Gas Emissions and Climate Change:

Impact-GHG-1: Generation of GHG Emissions that May Have a Significant Impact on the Environment. The project's construction activities would result in the generation of GHG emissions that could directly or indirectly have a significant impact on the environment because the project would not comply with the 2017 Scoping Plan. Impacts would be potentially significant for construction. GHG emissions from operation of the project would have a less-than-significant impact on the environment.

I9-17

Mitigation-GHG-1: Implement Construction Best Management Practices. The County shall ensure implementation of the following measures during project construction:

- Require equipment to be maintained in good tune and to reduce excessive idling time.
- Utilize alternative fueled equipment & vehicles, such as renewable diesel, renewable natural gas, compressed natural gas, or electric.
- Require older equipment be retrofitted with advanced engine controls, such as diesel particulate

4.9 Hazards and Hazardous Materials

Impact HAZ-1: Potential Release of Contaminated Soil. Construction of the project would potentially result in the release of contaminated soil into the environment. Impacts would be potentially significant.

Mitigation -HAZ-1: Prepare and Implement a Soil Management Plan. Prior to the commencement of soil disturbing construction activities, the County will retain a licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer with experience in contaminated site redevelopment and restoration to prepare and submit a soil and groundwater management plan to the County for review and approval. After the County's review and approval, the County will implement the soil and groundwater management plan, to include the following:

I9-18

- **A Site Contamination Characterization Report** (Characterization Report) delineating the vertical …….. and groundwater sampling to characterize the existing vertical and lateral extent and concentration of residual contamination.
- **A Soil Testing and Profiling Plan** (Testing and Profiling Plan) for materials that will be disposed of during construction. Testing will occur for all potential contaminants of concern, including CA Title 22 metals, polycyclic aromatic hydrocarbons), volatile organic compounds, herbicides, pesticides, polychlorinated biphenyls, or any other potential contaminants, …….. compliant offsite disposal facility. All excavation activities will be actively monitored by a Registered Environmental Assessor for the potential presence of contaminated soils & compliance with the Testing and Profiling Plan.
- **A Soil Disposal Plan** (Disposal Plan), which will describe the process for excavation, stockpiling, dewatering, treating, loading, and hauling of soil from the site. This plan will be prepared in accordance with the …….. but not be limited to, segregation into separate piles for waste profile analysis based on organic vapor and visual and odor monitoring.

I9-18 cont.

- **A Site Worker Health and Safety Plan** (Safety Plan) to ensure compliance with 29 CFR Part 120, Hazardous Waste Operations and Emergency Response, regulations for site workers at uncontrolled hazardous waste sites. The Safety Plan will be based on the characterization report and the planned site construction activity to ensure that site workers potentially exposed to contamination in soil are trained, equipped, and monitored during site activities. The training, equipment, and monitoring activities will ensure that workers are not exposed to contaminants above personnel exposure limits established by Table Z, 29 CFR Part 1910.1000. The Safety Plan will be signed by and implemented under the oversight of a California State Certified Industrial Hygienist. ***How does the "site work health and safety plan" address how site workers will address flora and fauna that will be part of creating the park such as sensitive habitat and encountering birds, bird nests, rattlesnakes, and any other critters?***

I9-19

4.10 Hydrology and Water Quality: Implementation of the project would not result in any potentially significant impacts related to hydrology and water quality. ***Why is there no indication of how water would be sourced for the continued maintenance of grounds and use in public restroom areas?***

I9-20

4.11 Land Use and Planning: Implementation of the project would not result in any potentially significant impacts related to land use and planning. ***How do you address land use and planning that is impacted relative to wetlands and protected species?*** **When our home was built adjacent to the proposed park site, the county focused concern of land use and required builder mitigation relative to approval of the land use.** ***What is different in the case of the Park Project?***

I9-21

4.12 Mineral Resources: Implementation of the project would not result in any potentially significant impacts related to mineral resources.

I9-22

4.13 Noise and Vibration

Impact-NOI-1: Construction Noise During Installation of the Sewer System. Predicted noise levels associated with construction for the park would comply with the County's 8-hour Leg standard of 75 dBA. However, construction associated with the extension of the sewer system would exceed the County's 8-hour threshold for construction noise. As such mitigation would be required to reduce impacts to less than significant. To address noise impacts from construction of the proposed sewer extension, installation of a barrier that breaks the line of sight between the source and receiver would provide 5 dB noise attenuation (FHWA 2017). ***How will this impact not only the residents but the flora and fauna directly on site? Does your proposed noise attenuation guarantee that nothing will be harmed or impacted because of the noise?***

I9-23

Mitigation-NOI-1: Install Temporary Sound Barriers. Prior to and during construction activities for the proposed sewer line extension, the construction contractor shall install temporary sound barriers that break the line of sight (a minimum of 10 feet) between construction equipment and noise-sensitive receivers. These sound walls shall be installed at any location where construction is located within 100 feet of the property line of an occupied residence or other noise-sensitive land use, such as schools. ***We live adjacent to the boundary, what guarantee is there that noise quality wont impact us directly?***

I9-24

Impact-NOI-2: Onsite Operational Noise at the Active Park. Although the Noise Impact Analysis did not identify any significant impacts, a number of best practices and operational controls would be in place during the operation of the Alpine Park and were assumed as part of the analysis. These are based on typical rules and regulations enforced at existing County parks. The Alpine Park was slated to be a Community Park. ***The quality of life relative to traffic and congestion, impact on intrusive lighting and noise resulting from increased capacity to Park does not truly address the noise that will be generated from increased traffic?***

I9-25

Mitigation-NOI-2: Enforce Standard Rules and Regulations. County DPR shall enforce all applicable standard rules and regulations for DPR facilities including, but not limited to, the following:

• Quiet Hours are from 10:00 p.m. to 7:00 a.m. ***During discussion about the proposed park in 2019, the Park would close when the sun went down. Why did this change?***

• Dogs must be licensed and restrained on a leash not longer than 6 feet and attended at all times. (This restriction will not apply to dogs within the designated dog park space.)

• No person shall disturb the peace and quiet of a County Park by any loud or unusual noise, or by the sounding of automobile horns or noise-making devices, or by the use of profane, obscene, or abusive language or gestures.
• No person shall use, transport, carry, fire, or discharge any fireworks, firearm, weapon, air gun, archery device, slingshot, or explosive of any kind across, in, or into a County Park.
• The applicable requirements of DPR Policy Number C-06, Noise Regulation in County Parks will be enforced.

I9-25 cont.

Mitigation-NOI-3: Set Operational Limits and Restrictions. Except for occasional special events conducted pursuant to a specific permit (conditional use permit, special event permit, etc.), enforce the following operational restrictions:
• Prohibit the use of noise-generating equipment (noisemakers, bullhorns, air horns, amplified stereos/radios, etc.) by spectators. The only exception is for official use of the announcer's PA systems or other devices required for proper operation of the intended and approved activities.
• End all onsite events no later than 10:00 p.m. *During discussion about the proposed park in 2019, the Park would close when the sun went down. Why did this change?*

I9-26

4.14 Population and Housing: Implementation of the project would not result in any potentially significant impacts related to population and housing**. *When the County approached the community about the Park Project, discussion was also made to increasing density to Alpine. I believe that the Plans for increased density projects was put on hold.* An article published in the San Diego Union Tribune by Deborah Sullivan Brennan, the County "supervisors voted to adopt state guidelines for calculating such impacts, which may reduce the traffic and environmental effects of new development…" This said, any housing development will require traffic and congestion analysis as part of its EIR. *How does a Park Project, which will draw people from all around the county, not consider population and housing impact relative to its development?***

I9-27

4.15 Public Services: Implementation of the project would not result in any potentially significant impacts related to public services. How so? Increased traffic will require public safety in the form of road and park security. There is no information relative to the increased cost in this area because of the facilities, an onsite living person will not be able to adequately supervise a major Park Project. *How is the required public safety going to be managed? Who will be responsible for this? Local sheriffs? Ranger? County? How is this important factor supposed to work?*

I9-28

4.16 Recreation: Implementation of the project would not result in any potentially significant impacts related to recreation.

I9-29

4.17 Transportation and Circulation:
Implementation of the project would not result in any potentially significant impacts related to transportation and circulation. This section is probably what brings more attention to the study since the current location has congestion whenever there is excess of 20 cars visiting the current site. On holidays and some weekends, the congestion increases due to inappropriate parking and street circulation**. How can the new park not require the appropriate access accommodations without creating a throughput issue?**
Who is responsible for managing the anticipated increase in "transportation and circulation?"

I9-30

On the road accessing the proposed Park, there has been 2 recent accidents on South Grade. A hit and run accident on February 11, 2021, involving a 19-year-old pedestrian. Another incident on June 22, 2018, involving a senior citizen that was mortally wounded while exiting the Park site due to inability of driver to have full line of sight as he approached the pedestrian. What transportation and congestion issues are not being evaluated by the EIR since adding 250 plus parking locations will require careful planning and access to and from park? The current road conditions do not align with the anticipated project volume of congestion. The study does not mention this important aspect of the study since it will impact access, congestion, noise, and public safety from a transportation point of view. *How can the community be guaranteed that traffic congestion will not be an issue to the point that no Alpine resident or visitor to the park will be able to access and drive to and from the park without any risk of injury?*

4.18 Tribal Cultural Resources:
Impact-TCR-1: Excavation Related to the Project Would Potentially Damage Tribal Cultural Resources. Ground-disturbing construction activities associated with the project have the potential to unearth unknown TCRs that may be located in the project area. Impacts would be potentially significant.

MM-CUL-1; **MM-CUL-2**; and **MM-CUL-3**, as described above.

I9-31

MM-TCR-1: Conduct Native American Monitoring. A Kumeyaay Native American monitor shall be present at all areas of proposed ground disturbance during all initial ground disturbance. This monitoring shall occur on an as-needed basis and is intended to ensure that Native American concerns are considered during the construction process. Native American monitors would be retained from tribes who have expressed an interest in the project and have participated in discussions with County DPR. If a tribe has been notified of scheduled construction work and does not respond, or if a Native American monitor is not available, work may continue without the Native American monitor. Roles and responsibilities of the Native American monitors shall be detailed in the Cultural Resources Monitoring and Discovery Plan described in MM-CUL-1. Costs associated with Native American monitoring shall be borne by County DPR.

4.19 Utilities and Service Systems Impact- ***Maintenance of the grounds does not specify what the consumption of water and origin thereof will be. No indication of how water would be sourced for the continued maintenance of grounds and use in public restroom areas?***

UTIL-1: Operation of the Project Has the Potential to Require New or Expanded Water Facilities: Operation of the project would increase demand on water infrastructure serving the project site, potentially requiring the relocation or construction of new or expanded water facilities to serve proposed uses. Construction of these
I9-32 facilities could result in physical impacts on the environment.

MM-UTIL-1: Complete Water Study to Assess Water Infrastructure Capacity. Prior to issuance of a building permit, County DPR shall coordinate with PDMWD to assess the capacity of existing water infrastructure that would serve the project site and, if it is determined that insufficient capacity exists to serve the project, the project proponent shall implement the necessary improvements prior to operation of the project, as determined by PDMWD. Should it be determined that the project would result in the need for new or expanded water facilities, the project proponent shall analyze the potential environmental effects of the improvements in accordance with CEQA.

4.20 Wildfire. Implementation of the project would not result in any potentially significant impacts related to
I9-33 wildfire. **We live adjacent to the park and during the 2018 Fire, the fire reached the area where the Park is proposed.** ***How can Wildfire not be a consideration to the EIR of this project?*** **If structures are built, they will be subjected to potential wildfire.** ***Why is this not considered a significant impact?***

There are 4 Project Alternatives. A semblance of Alternative 4 was the most desired by most Alpine Community Members that were involved in the project prior to the purchase of the land. We welcomed the project but were caught off guard when the Alternative model of what the County was proposing is completely different to what the community involved from the beginning was in favor of. We thought at
I9-34 ***that time, that our voice & vote counted. Recall that Alpine participants had workshops and were separated into groups to evaluate what was desired as the optimal park. Each group provided an overview of what they believe best suited the community. At that time, during 2019, we were all on board and remain on board to a park solution that is less intrusive. Alternative 2, Sports Complex is a regional Park plan opposite of what Alpine residents desired and considered as a community park.***

Alternative 1 – No Project Alternative. Under the No Project Alternative, none of the proposed actions described in Chapter 3, *Project Description*, would occur at the 96.6-acre project site. The site would remain undeveloped and
I9-35 would not include 25 acres of active recreational uses, including potential multi-use turf areas, a baseball field, an all-wheel park, a bike skills area, recreational courts (i.e., basketball, pickleball, game table plaza), fitness stations, a leash-free dog area, restroom facilities, an administrative facility/ranger station, an equestrian staging and a corral, a nature play area, a community garden, a volunteer pad, picnic areas with shade structures, picnic tables, and

I9-35 cont. multi-use trails. The creation of a Habitat Conservation Plan for the remaining 71.6 acres would also not occur under this alternative.

Alternative 2 – Sports Complex Alternative. "Under the Sports Complex Alternative, a greater area of the project site would be allocated to active recreational uses and **would include sports fields intended for competitive sports, including club soccer and baseball teams. Under this alternative, a total of 50 acres of the project site would be developed with multi-use turf areas for soccer, etc., as well as baseball fields, and other** I9-36 **features described in Section 3.3.1 of Chapter 3, including a skate park and an equestrian staging area. In addition, because this sports complex would be intended to accommodate competitive teams, extended hours would be allowed and field lighting for nighttime activities would be installed**. The number of parking spaces would also be increased to accommodate the increase in parking demand that could occur with the larger active recreational space. The remaining 46 acres of the project site would include open space/conservation area for which a Habitat Conservation Plan would be created." **How has a community supported Plan change from 10 to 50 plus acres?**

Alternative 3 – Reconfigured Project Alternative. Under this alternative, the area of active recreation would be the same as under the project (25 acres) but moved to the southern portion of the site and with adjustments to the amenities and proposed design of the park. All the active use features would remain, including the multi-use fields, baseball field, basketball, pickleball courts, skate, and bike parks. The picnic areas, equestrian staging, dog park, I9-37 and community garden areas would remain. The landscaped screening berm would be removed, and the parking lot/drive aisles would be relocated to the interior of the site so that the exterior would remain green-scaped with native vegetation. A walking path would be added to the periphery of the active park area. This alternative would also include conservation of the remaining 71.6 acres of the project site with implementation of a Habitat Conservation Plan.

Alternative 4 – Reduced Project Alternative. Under the Reduced Project Alternative, the total square footage of the park would be reduced to 20 acres. All the active use features would remain, including the multi-use fields, baseball field, basketball, and pickleball courts, except for the skate and bike parks, which would be eliminated. Passive recreation amenities would remain and would include the equestrian staging area, the multi-use trails, the I9-38 game table plaza, the dog park, picnic areas, and the community garden, but all at reduced square footages. The remaining area—76.6 acres—would consist of conservation/open space area, including multi-use trails and a Habitat Conservation Plan. **This Project Alternative was the one the community of Alpine was led to believe would be the choice Park Development, what changed when support from Alpine Community during meetings was not for Option 2?**

Environmentally Superior Alternative. Pursuant to CEQA, the EIR is required to identify the environmentally superior alternative. Although the No Project Alternative (Alternative 1) reduces the greatest number of significant I9-39 impacts, CEQA requires that when the environmentally superior alternative is the No Project Alternative, another alternative should be identified. The Reduced Project Alternative (Alternative 4) reduces the second-largest number of significant impact (see Table 6-3) because, unlike Alternatives 2 and 3, this alternative would reduce the overall acreage of active park space and would also eliminate the bike and skate parks. Alternative 4 would also meet the project objectives.

Please address our questions being submitted. And consider that we continue to support an Alpine Park Project. We support a less intrusive Park to the current habitat. We've been involved from the beginning of the project and would welcome the same consideration that was provided to us when the Alpine Community first began to have outreach with the San Diego County Park Development Group.

I9-40 ***Respectfully,***

Hector & Ann Casas
2542 Engelmann Oak Lane
Alpine, CA 91901
760-427-0441

Below are sources of information that was used as reference material to the questions or observations being provided in this letter:

Both Federal and State DOT proposed guidelines on non-metropolitan project development. In looking for feedback from Regulatory Agencies, the Department of Transportation at both Federal and State level address the requirement to involve other agencies that will be impacted directly or indirectly from the proposed Park Development Plan.

- **23CFR 135(a)-(g)** Process of development, nonmetropolitan areas **(g)(5)** Included Projects, **Subsection E**, Requirements of anticipated full funding - the transportation improvement program shall include a project, or an identified phase of the project, only if full funding can reasonably be anticipated to be available for the project within the time period contemplated for completion of the project. ***This regulation stipulates that consideration to the transportation and congestion inherent to a Park Development is required to be addressed. Why is this not addressed since it is important and may require that the current road is amplified to possible a 4 lane road?***

- San Diego Union Tribune article by Deborah Sullivan, September 20, 2021. ***This article addresses the requirement by the county to address the increased traffic inherent to the Park Development and how it must be addressed by the San Diego County Development Group. Why is this not significant to the Park Development?***

- California Environmental Quality Act. New guidelines under AB 819 (Levine, 2021). ***These new guidelines that will take effect in January 2022prior to the Park Development require improved communication to all agencies involved in the park development directly and indirectly. Will Alpine Community be provided with the appropriate communication on the project going forward?***

I9-41

The San Diego Union-Tribune

San Diego County's traffic impact rules could limit new housing in unincorporated areas

Faced with a lawsuit by environmental groups, the county voted to adopt stricter rules for evaluating the potential impact of traffic from new developments.

BY DEBORAH SULLIVAN BRENNAN SEPT. 20, 2021, 5 AM PT San Diego —

"The San Diego County Board of Supervisors recently voted unanimously to rescind its rules for calculating the potential impact of traffic from proposed new housing developments.

Instead, the supervisors voted to adopt state guidelines for calculating such impacts, which may reduce the traffic and environmental effects of new development, but it also may make it harder to build in unincorporated areas, county officials said.

The Board of Supervisors made the change in response to lawsuits brought by several environmental groups, who argued that the county's version of the traffic impact rules violated state law.

The new rules take effect immediately and will affect housing projects currently in the application process, said Mark Slovick, deputy director for San Diego County Planning and Development Services.

The rules set standards for "vehicle miles travelled" or VMT, an estimate of the number and length of vehicle trips that residents who live in a new development are expected to take. The figure indicates the extent of traffic impact and greenhouse gas emissions a development site will generate, so the fewer vehicle miles traveled the better.

To get approval for a project, developers must show that their project will generate fewer vehicle miles traveled than the area's average. If they don't, they must show how they will mitigate the traffic impacts, or they must complete an environmental impact report and request an exemption, Slovick said.

Under the county's old guidelines, the vehicle miles traveled for new projects in unincorporated county areas were measured against the averages for unincorporated San Diego County.

However, state guidelines require developers compare vehicle miles traveled for their project against the average for the entire region, including dense, urban areas.

That's a less favorable comparison for back-country housing projects, which have little access to bus lines or other public transit and are often located many miles from employment and shopping centers.

Nevertheless, the state's standard is consistent with the county's General Plan, which was updated a decade ago to discourage sprawl development in remote areas and encourage infill housing projects in urban areas near transit. With drivers spending less time on the road, the region could reduce traffic, air pollution and greenhouse gas emissions that contribute to climate change, officials said.

Supervisor Terra Lawson-Remer said the process required by state law supports the goal of building new homes near public transit and workplaces.

It's a "holistic effort to support transit-effective housing and confront the climate emergency," she said. "It cuts regulations and makes it easier to build in the right places and harder to build in the wrong places."

Advocates for the building industry said tightening the standard to meet state guidelines would halt construction of new homes at a time when the county faces a housing crisis.

"This action will result in a moratorium on housing in the unincorporated area," said Lori Holt Pfeiler, President and CEO of the Building Industry Association of San Diego County, adding that it would remove developers' flexibility to try to meet the county's standards. "We do know how to build housing and work with community goals we all have."

I9-41 cont.

Environmental advocates urged the county to adopt the state guidelines for calculating vehicle miles travelled, arguing that failure to do so would allow more sprawl development and hasten climate change.

"We are in a climate emergency," said Noah Harris, transportation policy advocate with Climate Action Campaign. "Transportation accounts for more than half of greenhouse gas emissions. San Diego is home to some of the most dangerously polluted neighborhoods in the state ... Climate and housing can be addressed together."

The county adopted its previous transportation study guide in June 2020. At that time, state law called for agencies to compare the number of vehicle miles travelled to the regionwide average, but it didn't spell out what constitutes a region. So local officials defined it as unincorporated county.

Last September the Cleveland National Forest Foundation, the Coastal Environmental Rights Foundation and the Sierra Club filed suit, alleging that the county's guide violated the California Environmental Quality Act and SB 743, the 2013 state law that established the new methodology.

In June the Governor's Office of Research and Planning clarified that unincorporated county areas should use standards based on an entire county's average for vehicle miles travelled. That effectively sealed the case for the environmental groups, forcing San Diego County to deal with the matter in a board meeting or in court.

Supervisor Jim Desmond said he originally voted for the county guidelines using only unincorporated areas as the basis for vehicle miles traveled and preferred that approach. But he voted in favor of updating the rules Wednesday, noting that the court likely would require that change anyway.

"A pure regional model is going to halt all development in our unincorporated area," he said. "Environmental groups don't want any sprawl or development in unincorporated areas ... I think what staff is presenting today is our best, worst choice. I think it's better to rescind today and avoid this suit, so the county can keep some local control."

The changes affect about half a dozen proposed projects that would have met the previous standards but won't meet the updated ones, Slovick said. The county will work with those permit applicants on addressing the new rules, he said.

"The law doesn't include any grandfathering provisions for changes like this," he said, "so projects can no longer use the county's guidelines. So, we're meeting with our applicants and will evaluate on a case-by-case basis."

The board also directed staff to return in January with ways to streamline regulations for housing developments, officials said."

California Environmental Quality Act. New guidelines under AB 819 (Levine, 2021) will take effect on January 1, 2022, and will change various CEQA communication, noticing, and filing requirements, including:

- Allowing responsible agencies to be notified via email. (PRC § 21080.4(a).)
- Allowing responsible agencies to communicate with the lead agency via email regarding the scope of the environmental review. (PRC § 21080.4(a).)
- Requiring lead agencies to submit an electronic copy of DEIRs and proposed negative declarations or mitigated negative declarations to the State Clearinghouse. (PRC § 21082.1(c)(4).)
- Requiring lead agencies to post DEIRs, EIRs, negative declarations, or mitigated negative declarations on the lead agency's website. (PRC § 21082.1(d).)
- The notices required by Section 21092, 21092.2, 20192.3 must be posted on the lead agency's website in addition to one of the previous options. (PRC § 21092(b)(3); 21092.2(d), 21092.3.)
- State agency notices of determination and notices of exemption must be filed electronically with the State Clearinghouse, which must keep the notice on a public website for 12 months. (PRC § 21108.)
- Local agency notices of determination and notices of exemption must be filed electronically with the county clerk if that option is available. (PRC § 21152(d).)
- The county clerk may post the notice on its website instead of within the physical office. (PRC § 21152(c).)

I9-41 cont.

Incidents on South Grade that brings attention to foreseeable issue with traffic and congestion that is not being addressed in the EIR sections on Public Safety and Traffic and Congestion:

JM Johnson - 02/11/2021

Alpine Pedestrian Hit-and-Run Crash on South Grade Road Alpine Pedestrian Hit-and-Run Crash on South Grade Woman, 19, Severely Injured in Alpine Hit-and-Run on South Grade Road

ALPINE, CA (February 10, 2021) – A hit-and-run crash severely injured a pedestrian along South Grade Road in Alpine. According to the San Diego Union-Tribune and ABC 10 News, the accident occurred on Wednesday morning. Officers reported the collision at around 11:15 a.m.

The incident happened when a **19-year-old woman** was walking southbound along the west road edge of South Grade Road. At the same time, a vehicle was traveling in the same direction.

June 22, 2016 (Alpine)

East County News Service-Updated June 24 with information from the CHP— **A 64-year-old woman** walking her dog was struck and killed by a car this morning at South Grade and Calle de Compadres near Wright's Field in Alpine. The accident caused temporary closure of South Grade Road.

According to the California Highway Patrol spokesman Kevin Pearlstein, the driver, a 57-year-old man from alpine was driving 2004 Honda Civic southbound at 35 to 40 miles per hour when he struck the pedestrian, who appeared to be crossing the road toward her parked vehicle. "**Due to the change in elevation of the roadway, the driver of the Honda was unable to avoid the pedestrian who had appeared directly in his path of travel," Pearlstein said,** adding that the driver did apply his brakes but could not avoid the collision. The driver was not injured and was not cited. The tragedy prompted a post on the Alpine Community Network from a resident calling for wider shoulders to protect children walking to school, people walking their dogs and those riding horses from cars driving past at rapid speeds per hour or more. The identity of the victim has not yet been released by authorities.

By Wendy Fry and Laura McVicker - Published June 22, 2016, • Updated on June 23, 2016, at 7:49 pm

Flowers Left at Scene of Fatal Pedestrian Crash in Alpine. The Alpine community is mourning the loss of a mother & respected community member who was hit and killed by a car while crossing the street Wednesday. Andrea Smith, 64, was crossing South Grade Road in Calle De Compadres when she was struck by an oncoming Honda Civic. The 57-year-old driver behind the wheel of the Honda was taking his son to school, the

family told NBC 7 San Diego. He apparently did not see the woman as she walked toward her parked car because of the change in elevation of the roadway, California Highway Patrol (CHP) officers said.

The driver, who has not been identified, was unable to stop in time, officers said. At the time, Smith was crossing the street to get back to her car, parked near a trail head. She had her two dogs with her, who ran away in the chaotic moments after the crash. Smith died at the scene. The driver was not hurt.
The driver's wife said he raced out of the car to try and save her, but she was lifeless within seconds. She says he is devastated and feeling burdened. Smith's son said she was a respiratory therapist at Rady Children's Hospital for 20 years and had just retired a few months ago.

I9-41 cont.

Community members, shocked by the news, came to the scene of the crash to leave flowers. "It's a big deal because this is a small town and everybody knows everybody and it really hit hard to know that somebody was just crossing the street," said Danielle Pupa, an Alpine resident. **An accident re-constructionist was on scene all Thursday, trying to figure out ways the road could be made safer. "There are pedestrian calculations you can perform based on how far the pedestrian was thrown through the air or depending on the motion ...** it's a little bit gruesome but those are tools someone like me will use to figure out what happened," said **Dan Toneck, an accident re-constructionist**. Alcohol or drugs were not believed to be a factor

Alpine Community Network via Facebook: **December 7, 2012 at 1:42 pm**
The latest info: (from the Union Tribune) UPDATE: 12-7-12 1:38 PM – The latest info from the UT: ALPINE — **A 31-year-old Alpine man was killed Thursday night when his truck went out of control on South Grade Road at Via Viejas**, the California Highway Patrol said. His name was not yet released pending notification of family. The man was driving a gray 2000 Chevrolet Silverado 1500 pickup westbound about 5:25 p.m. at what witnesses said was a high rate of speed, about 75 mph in a 45-mph zone, CHP Officer Brian Pennings said. The driver failed to maintain control of the truck, which drifted to the right shoulder. He then overcorrected to the left and the truck crossed into the eastbound lane. It hit a cinder block wall and a power pole on the south side of the road, snapping the pole at its base and causing a power outage for three houses, Pennings said.

From: Sandy Castle
To: CEQA, CountyParks
Subject: [External] Alpine park
Date: Saturday, November 6, 2021 3:13:19 PM

I10-1 I am so thoroughly against this Huge park/sports complex. Originally, I was all for it as I really want an off leash dog area, but this is not what I signed up for. This is Huge, way too big and not something Alpine wants or needs.

I10-2 Listen to the Alpine residents and redefine this to a smaller community park. Where did all this come from? Think of all the wildlife that will be destroyed, think of all the discontent is is already causing...Think of the Traffic. Then

I10-3 consider all the water use it will need in this time of drought. Just THINK please...this has gotten way out of hand. Thank you, Sandy Castle...Alpine resident

I-11 Voicemail Comment: John Christine 10/07/2022

I11-1 Hello Anna, this is John Christine, my number is (828) 577-5482. I got property adjacent to the Alpine Park Project and it looks like a great deal there. I have a question - are you guys going to be drilling a water well for all this for the turf and other things? My question - are you going to be drilling a water well or does this get served off of the water system? Anyway, thank you for calling me back when you have a chance. You have a great day.

From: VIC COOPER
To: CEQA, CountyParks
Cc: vicc@sbbr.biz
Subject: [External] Alpine Park Project (sch nO. 2021030196
Date: Monday, November 15, 2021 7:57:48 AM
Attachments: Cooper 2387 S Grade Rd.jpg

Dear Ms. Prowant,

Thank you for the opportunity to comment on the Alpine Park Project's (Projects) Draft

Our family has lived in Alpine for four generations starting in the late 30s. I've lived at our resident 2387 South Garage Road since 1960 (South East Corner of the proposed Alpine park)

I have attended the very first proposed park meeting with the APG and SD County starting in 2020 and all that followed. X-1

I12-1

I would ask that you include our concerns within the public comments on the current DEIR

Sewer, ***Water, Storm Water Runoff, Environmental concerns'***

Alpine Proposed Park

Vic & Ramona Cooper

2387 South Grade Road (South East corner of the proposed park)

I12-2 No one has been able to answer my most basic questions from two years ago with letters sent to the APG and the County *(See below)* . What is is Plan? **Sewer** no county connection

I12-3 available; The land considered for the park has had multiple perk tests over the last 40 years, no developments were ever permitted due to failed perk test. ***Water*** is scarce commodity in all of San Diego East County and it will be a threat to our community with water shortages and water rationing mention almost yearly **(Nov. 2021;Caltrans sign I-8 east "Severe Drought Conditions**) , drilling a well it's not the answer, ground water levels in Alpine are low already it's very hard for residents to get a permit to drill a well in any area in East County why would

I12-4 the county even propose it?. ***Storm Water Runoff*** currently all storm water runoff from the northern end of the proposed park flows on to South Grade Rd. all the runoff goes south through neighboring residence including our property. Currently the storm drains are full of debris and silt. the silt has caused erosion in our own yard and the natural drainage can no longer handle the volume of water during strong rains, it causes flooding on both of our driveways as well as neighbors to the east and the west. What will happen with a 250 car parking lot and sports fields you cannot capture the runoff due to the natural terrain

I12-5 ***Environmental concerns'*** Endangered Habitat, Endangered Species, Quality air control, Quality of life and scenic natural grasslands.

San Diego East county is known for natural grass lands, it will never be the same if this

I12-5 cont. project is allowed to continue as proposed devastating the community. APG and the County are showing no concern for the residents of Alpine.

I12-6 Our local representatives were shown time and time again thru poling at park meetings the results were clear the residence of Alpine wanted an open space preserve with improved trails limited but safe parking to enhance back country land trust Wright's Field preserve. APG and the county say they listened if they had listened this would not be the project proposed. The fact is they put every item suggested into this 25 acre parcel which I believe anyone with environmental concerns would never let proceed

Below is a sample of letters I've sent expressing our concerns that the proposed park would expand far beyond the Nature Preserve.

01-06-21 Judy.Tjiong-pietrzak@sdcounty.ca.gov

Judy,

I12-7 I would like to address some issues regarding the Virtual Public Meeting on 01-14-21.The flyer sent out states after multiple public meetings community feedback and professional consultation created a Park Master Plan, and the concept plan features amenities most desired by our local community.

My family and neighbors with homes surrounding Wrights Field were in attendance for all three in person meetings held at the Alpine Community Center, the overwhelming majority at all meetings supported a nature preserve type park with improved trails and some type of parking.

The first virtual public meeting for the park featured a skate park with no other alternatives mentioned and the online questionnaire did not address any options or suggestion other than the skate park.

I12-8 It looks to me by the pictures presented on the flyer the county is going forward in presenting a version that includes play grounds ball fields witch will require infrastructure to support this type of development.

I12-9 We have asked and voiced our concerns at every meeting about storm water runoff, lack of existing sewer connection for this type of project, lack of Environmental impact reports and protected plants and wildlife corridor already established for the area. As well as traffic and public safety. No one has addressed those concerns from the county to date. With the Wrights Field Preserve and Findel Ranch Preserve adjacent to the proposed park how does the county plan to protect these designated endangered natural habitats.

We would like to see these issues addressed prior to any further meetings.

I12-10 Thank you

Vic Cooper Hello Vic!

I'm sorry for a delayed response.

I12-11 I remember seeing you at the Alpine Park Public meetings. I realized that there are some questions I haven't been able to answer. We are working around the clock to create a park

I12-11 cont.

that can balance and fulfill the needs of the Alpine residents. We are in the process of preparing the California Environmental Quality Act (CEQA) analysis and associated environmental technical reports. When complete, these documents will be available for public review, which will likely occur in the next few months. You will have a chance to comment at that time. Department of Parks and Recreation has a dual mission of providing recreation and preservation. We are working hard to design a project that meets both of these missions.

Judy Tjiong-Pietrzak

Park Project Manager

858.527.2524

Thank you

Vic Cooper & family

November 15, 2021

Via e-mail

Anna Prowant (*countyParksCEQA@sdcounty.ca.gov*)
County of San Diego
Parks and Recreation Department
5500 Overland Avenue, Suite 410
San Diego, CA 92123

Re: Alpine County Park Project and Draft Environmental Impact Report

Dear Ms. Prowant,

I13-1 I, Dain DeForest, am an Alpine homeowner who has concerns over the construction and maintenance of the proposed Alpine County Park. I believe that this park is too big for the community and will create too much traffic and draw from outside the community. It is not a necessity to have this park here and removes PAMA land, which would be more valuable if kept as is.

I13-2 Most of the mitigation in the DEIR is deferred and therefore not legal under CEQA. I would like to see additional alternatives for a smaller park with more community support that is an environmentally superior alternative. Additional locations should be explored for this project.

I13-3 The Department of Parks and Rec did not listen to public input, and instead have proposed a plan that will change the landscape irrevocably. I believe that the DEIR does not properly address the concerns of Biology, Traffic, Noise and GHG pollution. Please provide evidence for the need of the project.

I13-4 Currently DPR cites a lack of local parkland, yet in this DEIR they cite the project as a “regional” park and have applied for a grant that requires “regional draw” to the project. This regional sized park, is not designed to fill the space of a “local” park in Alpine and therefore that rational cannot be used to create a “need” for parkland. Alpine is doing well as a rural based community ad does not need, nor want, these amenities.

I13-5 Please consider this and the response of others as direct opposition to the project, thank you.

-Dain DeForest

619-820-9716

Kevin & Dana de la Torre
2550 Engelmann Oak Lane
Alpine, CA 91901

November 14, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

I14-1 Thank you for the opportunity to comment on the Alpine Park Project's ("Project") Draft Environmental Impact Report (DEIR). By way of introduction, we have lived in Alpine since the 1980's and we have both witnessed and participated in the growth of the Alpine community. Among all of the changes that we have witnessed, no one topic is more important and carries more passion to the community than Wright's Field[which in this context includes both the area owned by the Land Trust and the area the County has purchased]. We have come to appreciate the significance of this area and we understand the balance that needs to be maintained between growth and preservation. In this context we have reviewed the DEIR.

I14-2 To begin with, perhaps the one thing that surprises us the most about the DEIR is that it did not consider the alternative that was overwhelmingly proposed by the Alpine community when the County came to Alpine and requested our input. This alternative is most closely described by the one supported by Preserve Alpine's Heritage which is a Nature Based Passive Park. We feel that this proposal captures the support that Alpine has for the County to develop this area but also preserves all of the environmental, native habitat, and socially responsible aspects which are critically important to the community. Therefore at a minimum we strongly recommend and request that you include the Nature Based Passive Park as one of the alternatives for the Board to consider. Additionally, below please find our questions/concerns.

Section 4.1 Aesthetics and Visual Resources

Threshold 3: We feel that this report does not adequately mitigate the issues identified. The County scope is far too narrow. Shouldn't your analysis consider the impact this has on views from all areas around the project? How does the County propose to mitigate these issues for those with vantage points higher than ground level, which is a substantially greater number of individuals?

I14-3

Threshold 4: We feel that this report does not adequately mitigate the issues identified. The County scope is far too narrow. Shouldn't your analysis consider the impact of lighting in various weather conditions? What impact does this have with fog or rain? Additionally in the summer time the days are longer so what is the environmental impact on wildlife such as coyotes and owls who are nocturnal and are highly active around dusk? How is the County proposing to mitigate this disruption?

Section 4.4 Biological Resources

Threshold 1,2,4 & 5: We feel that this report does not adequately mitigate the issues identified. The

I14-4

County proposes to either replace sensitive areas or address identified problems in a reactive or wait and see approach. What is the County going to do if any of these measures fail? How is the County going to restore any destroyed habitats or wildlife if they're proposed solutions are ineffective? Why is the County not considering reducing the scope and or elements of the project to mitigate?

Section 4.5 Cultural Resources

Threshold 1: We feel that this report does not adequately mitigate the issues identified. The County

I14-5

proposes a reactive or wait and see approach. How is the County going to repair or restore any damage to archeological findings after they have been destroyed during the construction process? What dedicated resources are going to provide 100% oversight to all construction activity? Why is the County not considering reducing the scope and or elements of the project to mitigate?

Section 4.7 Geology & Soils

Threshold 5: We feel that this report does not adequately mitigate the issues identified. It is widely known that the soil on this property is not adequate to support septic systems. The report

I14-6

acknowledges the soil issue. Why is the County proposing a wait and see approach when the data indicates that a septic system will not be adequate? Additionally, the extension of the sewer line is a fiscally expensive alternative. Why is the County not considering reducing the scope and or elements of the project to mitigate?

Threshold 6: Please see comments from Threshold 5 above.

Section 4.9 Hazards and Hazardous Materials

I14-7 Threshold 7: The County has not accessed all of the risks associated with wildland fires. This park is in an extreme fire location due to the topography of the area. How is the County going to mitigate the bottle neck risks created by the park plan in the event of an emergency evacuation?

Section 4.13 Noise and Vibration

I14-8 Threshold 1: This report fails to identify how it is going to mitigate the increased noise level generated by certain elements of the park. How is the County going to mitigate the noise created by the skate park? How is the County going to mitigate the noise created by the bike park? How is the County going to mitigate the noise created by the ball fields?

Section 4.19 Utilities and Service Systems

I14-9 Threshold 2: Why is the County proposing the development of this property with a relatively high water requirement when water shortages and water conservation have been a critical issue in Southern California for over a decade? Why is the County not considering reducing the scope and or elements of the project to mitigate?

Section 4.20 Wildfire

I14-10 Threshold 1: We feel that this report does not adequately address the larger issue that needs to be mitigated. Because of the size of this project and the number of parking spaces, how is the County mitigating the risks created by the increase in traffic pushed onto South Grade Road during an emergency evacuation? What infrastructure improvements is the County making and paying for to handle the influx of cars on South Grade Road during an evacuation? What plans have been finalized between the County and other agencies impacted by this issue?

Section 6 Alternatives

Please note that our comments regarding the alternatives to this project were expressed at the beginning of this letter. However, we do feel that an alternative which aligns most closely with the Nature Based Passive Park proposed by Preserve Alpine's Heritage would substantially mitigate the vast majority of the issues that we feel are interfering with the County's Plan.

I14-11 Please understand that we are very thankful that the County is willing to make a significant investment in Alpine. As accountants we understand the significance of this decision. We feel that the nature of this letter being designed for questioning the project gives the appearance that we don't support the park. In truth we do. However, the preservation of the essence of Wright's Field is critical to the Alpine community. We hope that the County will be mindful of this and reduce the scope and function of the park to adequately address this requirement. Please feel free to contact us at dkdlt@cox.net and we would like to have you send all notices relating to this project to this email.

Best regards,
Kevin & Dana de la Torre

November 15, 2021

TO: Anna Prowant, CountyParksCEQA@sdcounty.ca.gov
FROM: Christine Figari, cfigari@well.com

I15-1 Dear Ms. Prowant,
Thank you for the opportunity to comment on the DEIR for the Alpine Park Project (Project) proposed by the Department of Parks and Recreation (DPR).

As a resident of Alpine who travels almost daily along South Grade Road past the Project location, there are several areas on which I'd like to comment.

Section 4.1. Aesthetics and Visual Resources.

I15-2 Page 4.1-9 states visual impacts are considered significant if the project would result in, among other things, "…a substantial adverse effect on a scenic vista." Page 4.1-13 states, "...implementation of the active park would result in a significant impact." The four simulations created are inadequate 1) to address the significant impacts the project would have on Alpine's character and identity, and therefore 2) to determine if the mitigation measures are sufficient. With incomplete visual simulations, how can you prove the mitigation measures would reduce the impact to a less-than-significant level?

I15-3
- There is no visual simulation of the view facing the Project from the hill in the northeastern portion of the County's property. What will the visual impact be from that location? Please create a visual simulation from that location.

I15-4
- Page 4.1-13 discusses the impact of views from the trails in Wright's Field Preserve. Regarding several elements in the Project, it's stated, "These project features would not include large structures that would completely obstruct views." That indicates some views would be obstructed. What will the visual impact be from the trails? Please create a visual simulation from that location.

I15-5
- Page 4.1-15 states, "… and photovoltaic (PV) panels that would be installed in the parking lot mounted on overhead structures to power the outdoor lighting". Page 4.19-16 states, "Photovoltaic panels would be installed in the parking lots for lighting throughout the proposed park." What are the dimensions of the PV panels? Where will they be located? What impact will the panels have on the views? Please create a visual simulation that includes the PV panels.

I15-6
- In Figure 4.1-3 Viejas Mountain is not seen because it's almost completely hidden behind clouds. I'm surprised that this image was used since Viejas Mountain defines Alpine's identity and the view along South Grade Road seems surely to be impacted. See photos on next page: #1 I took in the late afternoon on November 14, 2021, and #2 which appears in the DEIR. Why wasn't an image used that clearly shows the scenic vista of Viejas Mountain? Please create a visual simulation that includes all of Viejas Mountain.

#1 Existing view, which I took, in the late afternoon on November 14, 2021.



#2 Existing view, as shown in the DEIR, with Viejas Mountain almost completely obscured by clouds. This image is insufficient for a visual simulation and I request a new simulation clearly showing Viejas Mountain.



Section 4.4. Biological Resources,

I15-7 Page 4.4-15 states, ""The following special-status wildlife species were observed within the BSA during surveys and will be assessed for impacts from implementation of the project…" Page 4.4-16 states, "The following special-status wildlife species were observed within the BSA during surveys and will also be assessed for impacts…" This sounds like DPR is deferring the analysis and I have concerns about that.

- Is DPR deferring the analysis of these special-status wildlife?
- When will the proper analysis be conducted?
- Without an assessment now, how do we know the proper mitigation measures have been/will be proposed?

Section 4.10. Hydrology and Water Quality

I15-8 Throughout this section there is incomplete and at times seemingly inconsistent information. 4.10-17 states "Stormwater retention basins would be located throughout the park." Page 4.10-21 states, "There are no existing or planned stormwater drainage systems proposed by the project, nor does the project require such systems." Later, on the same page is, "…the project would include design features including bio-retention basins, for the control of drainage on the site…" and still later on the same page, "Therefore, the project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems…" Figure 3-2 shows only one "Retention Basin." These leave me with several questions.

- What stormwater retention basins, stormwater drainage systems and bio-retention basins are planned?
- Where will they be located?
- In addition to this basic information, there is insufficient detail included (e.g., what groundwork is needed, what surface area impacts will there be, is this considered in the cut/fill estimates, how will the stormwater be directed, where will the pollutants flow) to determine that there are no mitigation measures required. Please include all relevant information to prove the impact analysis and determination is correct and there is no mitigation required.

Section 4.19. Utilities and Service Systems

I15-9 Page 4.19-18 states, "Therefore, given this uncertainty regarding available water supply, which is necessary for operation of the project, potential impacts are considered to be significant." The mitigation measure for this is, "Water availability shall be confirmed prior to issuance of building permits. The confirmation of water availability by PDMWD shall be provided in written form by PDMWD."

- If it's determined that there is not enough water available, what are the mitigation measures?
- As written, the mitigation measure is insufficient. As written, how does this prove that the impacts would be reduced to less than significant levels?

Chapter 6: Project Alternatives

I15-10 Page 6-4 states, "Alternatives that were carried forward and analyzed below provide variations to adjust various components of the project that would help reduce environmental impacts." Table 6-2 summarizes the buildout acreages for the four alternatives that were carried forward.

I15-10 cont.

Alternative 2, “Sports Complex Alternative” would significantly increase the Active Park Acreage and significantly decrease the Open Space/Conservation Acreage. The description of Alternative 2 on Page 6-5 states, “...extended hours would be allowed and field lighting for nighttime activities would be installed. The number of parking spaces would also be increased to accommodate the increase in parking demand that could occur with the larger active recreational space.”

- What elements of Alternative 2 would “…help reduce environmental impacts”?

I15-11

A significant number of the NOP commentators requested alternatives that would be smaller and nature-based. This type of park was not included in the alternatives. Alternative 4, “Reduced Park Alternative” only slightly decreases the Active Park Acreage and still contains elements that have significant environmental impact (e.g., aesthetics, traffic, biological resources, geology, water supplies).

- Properly designed, a smaller, nature-based park would meet the project objectives and have a significantly lower environmental impact. Why was a smaller, nature-based park not included as an alternative, especially given the comments in the NOP and, from DPR’s own data, the desires of the majority of residents who attended the first two public meetings in Alpine?
- Please include an alternative for a smaller, nature-based park.

Again, thank you for the opportunity to comment.

Sincerely,
Christine Figari

cfigari@well.com

November 15, 2021

Anna Prowant
County of San Diego Department of Parks and Recreation
5500 Overland Ave, Suite 410
San Diego, CA 92123
Email: CountyParksCEQA@sdcounty.ca.gov

Re: DRAFT ENVIRONMENTAL IMPACT REPORT for the Alpine County Park Project
State Clearinghouse (SCH) #2021030196

Dear Anna,

I16-1

I have emailed both MSWord and pdf document copies to you as my formal response to the DEIR for the Alpine County Park Project. I trust you will transmit it to the appropriate parties.

I16-1

It would be helpful if you could please provide by return email a notice of receipt of the document.

Thank you for your help.

Sincerely,

Bob

Robert M. Figari
rfigari@well.com
415 259-8153

Robert Figari rfigari@well.com November 15, 2021

Comments on DRAFT ENVIRONMENTAL IMPACT REPORT for the Alpine County Park Project

What follows are my comments regarding the DEIR.

Section 4.14

Population and Housing

In this section, I'll provide background information from the DEIR and other sources, and then present my request.

I16-2

Background

The DEIR includes many population estimates that do not agree at all with US Census Bureau results. The US Census Bureau reports significantly less population in Alpine than the DEIR uses. This is important because Section 14.1 Population and Housing, the Existing Conditions and Projected Population data (Table 4.14-1. Existing and Projected Population in Unincorporated San Diego County) form the basis in determining both Threshold 1 and 2 impact and mitigation factors in that DEIR section as well as other parts of the document.

For example, Table 4.14-1. of the DEIR titled Existing and Projected Population in Unincorporated San Diego County provides the basis for population estimates used in the DEIR. Alpine population is pegged at 17,609 in 2010 based upon "The 2010 San Diego Association of Governments (SANDAG) estimates for population and housing in the Alpine CPA identify a population of 17,609 with a total of 6,551 housing units (County of San Diego 1979)".

According to the 2020 United States Census Bureau results for Alpine (CDP), CA (https://www.census.gov/quickfacts/fact/table/alpinecdpcalifornia/POP010220#POP010220), the current population is 14,696. And in 2010 Alpine's population was recorded as 14,236. The SANDAG 2010 estimate more than 20% higher than the Census Bureau 2020 result! In terms of increase, according to the Census Bureau the increase in Alpine's population was only 3% over 10 years.

The SANDAG population estimates of 17,609 in 2010 (which DPR uses as a population basis in the DEIR) are grossly inaccurate and overstate the population by 20% compared to the 2020 US Census Bureau results.

Request:

- **Regarding section 4.16.3.3 of the DEIR where reference is made to "the central Alpine area" (a location term that appears throughout the DEIR), I could find no definition or**

map that explains or illustrates what exactly is considered "central Alpine". Please provide specific information on what is meant by that term and where it originated from.

- **Why did DPR and DEIR not use the latest census data included in the 2020 US Census Bureau results as the basis for the DEIR instead of the 2010 SANDAG estimates?**
- **Please explain what current population figures the DEIR used for Alpine**
- **Please explain how those current population figures were arrived at.**
- **Please explain how DPR arrived at the statement in section 4.16.3.3 of the DEIR that begins with "Because the population is expected to increase". What is the rate of increase DPR is projecting? What is the starting date and source and what are the projected dates and source that show that expected increase? And what are the expected results?**
- **Please provide calculations of the effect on Threshold 1 and 2 impact and mitigation factors if the Census Bureau data is used in place of whatever other source was used. What would the effect be if the 2010, 2020 and 2050 population figures the DEIR is based upon are are 30% too high?**
- **Please explain how the initial 2010 population figures SANDAG developed could be 20% higher than what the Census Bureau published.**
- **The Census Bureau population figures for Alpine for 2010 to 2020 increased just 3%. The DEIR is projecting a 36.1% increase for unincorporated areas from 2010 to 2050. What is the projected percentage increase for Alpine for 2010 to 2050? How was this number arrived at? How do you reconcile the much higher projected 2010 DEIR increases with the low Census Bureau increases?**
- **If the Alpine population figures the DEIR is using for 2010, 2020 and 2050 for Alpine are actually (as suggested by the Census Bureau figures) 20-30% too high, what would the effect be on the entire DEIR?**

I16-2 cont.

Chapter 6

Alternatives

6.4.1 Alternatives Considered But Rejected

6.4.1.1 Alternate Location Alternative

"This alternative was rejected because it would not meet many of the project objectives, including creating a place where all Alpine residents can gather and connect as a community. This alternative also would not enable long-term natural and cultural resources management. Furthermore, this alternative does not meet the CEQA standard as being a "feasible" alternative given that the County does not own other properties in Alpine, and therefore could not accomplish implementation of a new park at these other potential locations within a reasonable period of time."

Re: "would not meet many of the project objectives including creating a place where all Alpine residents can gather and connect as a community."

Comments:

I16-3 To satisfy the community gatherings objective, why couldn't, for example, an amphitheater be built at the proposed location for community gatherings and the other park elements be created in other locations (skatepark downtown, horse center further out, joint-use of baseball fields, etc.). This approach would certainly meet the second objective of active and passive recreation. This approach would obviously devote more of the proposed park land for the MSCP preservation. The preserve/integrate natural features objective wouldn't be affected by this approach. With the increasing population, the quality of life would be enhanced far more by having smaller parks available to a wider community that do not require auto travel. And regarding the last three objectives, I do not how this approach would not meet the objectives.

Request:

- **Please provide substantiation for this statement in specific reference to each objective and in the context of my comments below.**
- **And please explain in more detail why this option was rejected.**

I16-4 Re: "This alternative also would not enable long-term natural and cultural resources management."

Request:

- **How would this approach "not enable long-term natural and cultural resources management"?**
- **How do you define "long-term natural and cultural resources management"?**

I16-5 Re: "Furthermore, this alternative does not meet the CEQA standard as being a "feasible" alternative given that the County does not own other properties in Alpine, and therefore could not accomplish implementation of a new park at these other potential locations within a reasonable period of time."

Request:

- **Why would this approach not be feasible now under CEQUA, especially if it would improve the environmental concerns of developing such a concentrated swath of native land?**
- **According to rough maps the County provides of potential park locations, it appears many of the sites considered are already somewhat developed and less sensitive environmentally, so please provide specific reasons for why each site was rejected. (Ownership identification is not necessary)**
- **What does current ownership of properties have to do with determining alternatives for creating a new park?**
- **Did DPR ever consider this alternative before it was committed to the current proposal or was it only considered when Alpine citizens asked for it after the DPR developed its own plan?**
- **Why did the County buy the current land before determining what park attributes or elements the citizens of the Alpine CPA want?**

I16-5 cont.

- **Why did the County buy the current land before examining the multi-park approach and considering other potential park sites less environmentally sensitive?**

Comments: It is absurd to consider what land the County owns now. The goal for DPR was to first determine what kind of park the community wants and then find the best site(s) for that kind of park. DPR put the cart before the horse, ie, bought the land before the park was designed. You provide no guidelines for what a "reasonable period of time" is, which is a somewhat disingenuous position to take considering the years you have taken to put this proposal together.

Missing Alternative: Background, Source Material, Requests/Comments

In this section, I will first give background information, then provide source material and finally state my specific requests and comments.

Background

DPR presents four alternatives to the proposed plan in the DEIR. Under CEQUA guidelines, DPR does not have to consider all possible alternatives, but has an obligation to present alternatives that are reasonable, appear to be feasible, and would avoid or substantially lessen at least one of the project's significant environmental effects.

For reasons difficult to understand, DPR did not include as an alternative, the recommendations made in the San Diego County Parks Master Plan (PMP) which would significantly lessen environmental effects.

I16-6

And, even stranger, DPR did not include as an alternative, the plan recommendations gathered from participants in the DPR's initial Alpine public outreach efforts. It is important to note that these initial sessions were very open brainstorming sessions and occurred <u>before</u> DPR began interjecting many of its own park proposal elements into subsequent outreach sessions.

The park element recommendations of the Alpine residents in these initial outreach meetings not only lessen environmental effects, but also echoed precisely what the PMP research process recommended.

What follows is the source material supporting what is stated in the previous paragraphs. Specifically, in section 4.16.3.3 of the DEIR, it is stated that "The County's PMP [Parks Master Plan] serves as a guidance document for the acquisition and development of future parks and recreation facilities in the unincorporated county."

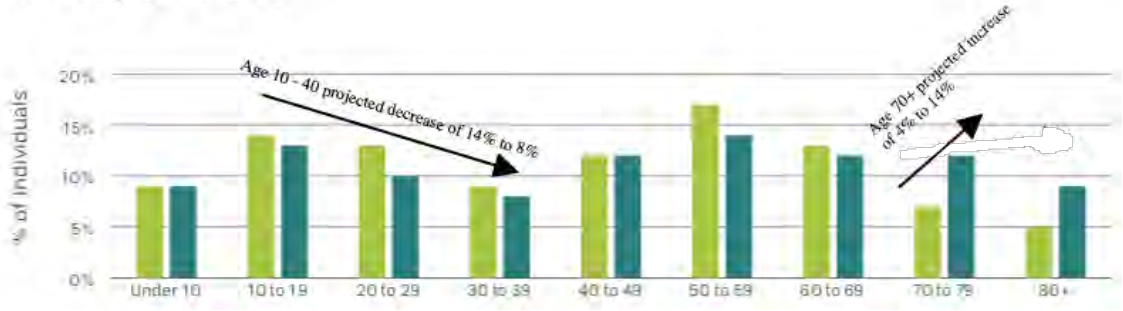
Starting on pg 42, this PMP guidance document presents the "existing (2014) and projected (2040) trends (ethnicity, age, and median household income) and provides an understanding of future demands for each CPA in the County".

The Sociodemographic Trends for the Alpine Community Plan Area (CPA) as stated in the PMP guidance document includes:

2. There is projected to be fewer residents ages 0-69 and more residents ages 70 and older.
5. Population density is projected to increase by 61% in the central Alpine CPA.

This same data is provided graphically on pg. 43 (with my notations):

FIGURE 4-8: AGE (ALPINE CPA)



I16-6 cont.

This graph clearly illustrates exactly what the PMP Sociodemographic Trends states: the decrease in the younger child and adult population that would typically be more inclined toward a park with "active" elements and the strong trend toward more older adults that would typically be more inclined toward a park with less active and more "passive" elements.

Based upon these researched trends, your PMP guidance document then provides Future Recommendations:

1. Consistent with projected demographics, provide opportunities for running, jogging, fishing, road biking, mountain biking, camping, and hiking.
2. Due to a projected increase in residents ages 70 and older, provide fitness programs, like aerobics classes.
3. Due to a projected increase in population density in the central Alpine CPA, consider intensifying services in this area.
4. Due to a projected decrease in population density in the area surrounding the central Alpine CPA, consider reducing services in this area.

Also, the DEIR states in Section 14.6.3.3 that "Because the population is expected to increase, the PMP recommended the development of additional running, fishing, road biking, mountain biking, camping, and hiking facilities and the intensification of recreational services in the central Alpine area where population is expected to increase most."

The online DPR Alpine Public Outreach Summary provides the results of the initial surveys. These are the direct quotes from the summary (boldface/underline added for clarity):

> "The results of the questionnaire revealed the <u>top five activities</u> the responders selected were **walking/jogging, riding a mountain bike on a trail/in a park, nature, dog park, and picnicking**. The 5 activities with <u>the fewest votes</u> were **swimming pool, football, softball, bocce ball, and tennis/pickleball**."

"The top five elements chosen from the questionnaire were **natural areas, restrooms, sidewalks and trails, shade trees, and drinking fountains**. The least preferred elements were **court and field lighting**."

"The top five elements selected from the image boards were **multi-use trails, bike park, dog park, nature-based play, and picnic shelter**. The least favored were **horseshoe pits, table tennis, tennis, softball, and youth football**."

"The top five activities revealed in the online survey were **nature, playing at a playground, walking/jogging, riding a mountain bike on a trail/in a park, and restrooms**. The least preferred was **court and field lighting**."

I16-6 cont.

As you can see, what Alpine residents desire mirrors what the PMP research recommends: mostly passive and mid active elements.

Why wasn't some form of this missing alternative included in the DEIR since it represents both the research of the PMP and the will of the people of Alpine? It is a popular, reasonable, feasible alternative that would lessen the environmental impact and meet the stated project objectives.

Alternative 1 means no park. Alternative 2 packs even more unpopular elements into the park. Alternative 3 just moves elements around. Alternative 4 leaves in the least desired elements, but reduces the area for the most desired elements. This makes no sense at all.

I16-6 cont.

Request:

- **Please provide substantiation in your responses to my specific questions and in the context of the background information provided above**
- **Why doesn't the DEIR include an alternative that represents the recommendations of the County PMP?**
- **Why were the Sociodemographic Trends appearing in the County PMP not featured in creating the proposed plan or at the very least in an alternative plan?**
- **Why were the Future Recommendation appearing in the County PMP not featured in creating the proposed plan or at the very least in an alternative plan?**
- **Why is there not an alternative that represents the recommendations submitted by Alpine residents at the initial outreach sessions before DPR interjected their own active park elements?**
- **Why were the known preferences of Alpine residents from the initial public outreach not featured in an alternative park plan?**

Section 4.9

Hazards and Hazardous Materials

In this section, I provide some background followed by my request.

Background

The DEIR section on Hazards and Hazardous materials seems to only focus on the construction timeline. I had asked before (you have published my letter requesting such in this DEIR) in the NOP for information on hazardous materials use in the future for maintenance. To date, I have not been responded to directly nor do I see such information in this DEIR.

Below is the pertinent text from my letter including my EIR request:

Hazardous Materials: Given the number of acres devoted to artificial turf and natural grass, I'm concerned about hazardous chemicals and pesticides needed to install and maintain the surfaces in good condition. I request to see an analysis of the chemicals and pesticides that will be used over the life of the park and the impact on, among others, neighboring wells, surrounding watersheds and biological resources.

Biological Resources: In addition to an analysis of the impact of hazardous materials (chemicals and pesticides used on the artificial turf and natural grass) on biological resources, the EIR should include a thorough analysis of the other direct and indirect effects on biological resources, such as the introduction of gophers, moles, skunks and other non-native species.

I16-7

In the EIR I request that:
1) all of the aforementioned concerns be thoroughly analyzed,
and that
2) the impacts of these concerns are avoided or mitigated below the level of significance.

Request:

- **As before, I request the aforementioned concerns be thoroughly analyzed and proof of such be provided to me or included in a revised DEIR.**
- **And I request that these concerns are avoided or mitigated below the level of significance.**
- **I'm particularly interested in research you have conducted on the effect of an increased population of such "pests" as gophers, moles, skunks, and other somewhat pernicious critters due to the introduction of human garbage and public use debris.**
- **If you have not done such research, then please do so. The impact of the critters and the control techniques you employ needs to be determined in this DEIR.**
- **Please provide what critters you expect to invade the park, what population levels you anticipate and what steps you will take in controlling them.**

From: SL Forsburg
To: CEQA, CountyParks
Subject: [External] Save Alpine Open Space
Date: Monday, November 15, 2021 8:53:19 AM

To Anna Prowant:

I17-1 As a regular hiker and outdoor enthusiast, I am opposed to the overzealous park proposal in Alpine that will destroy 24 acres of healthy open space natural lands and habitat along the edge of a wildlife preserve, and replace it with

I17-2 unsustainable non-native lawns and concrete paths. Not only is this destructive of open space but is irresponsible use of water!

SLForsburg@gmail.com
San Diego
Typed badly on my iPad

From: rafael fregoso
To: CEQA, CountyParks
Subject: [External] Alpine County Park DEIR Public Comments
Date: Monday, November 15, 2021 10:35:02 AM

Good morning

My name is Rafael Fregoso Sr.

I18-1 I live adjacent to The proposed park area, actually right next to where the proposed hundreds of parking spaces are to be built.

We just want a small nature-based park. The chances of no park being built at all are unlikely, so present points on why the proposed park is not the right option.

I18-2 How are you going to prevent vehicle accident with hundreds of vehicles coming out of the park every day ?

I18-3 How about vehicle noice pollution for us and all residents that live around the proposed park. How is that going to be controlled?

I18-4 Why a sports complex when all we want is a nature base park to continue using existing trails. Why ?

Rafael Fregoso Sr.
619-977-6118

From: Michael Funtas
To: CEQA, CountyParks
Subject: [External] Alpine County Park
Date: Wednesday, November 17, 2021 4:56:09 PM

Dear Ms. Prowant,

I19-1 I am writing to ask you to reconsider the location of the baseball diamond in the new park. According to the maps, the diamond is in the middle of the park and is a feature that will only be used 20 to 30 days out of the year at most. I think it belongs at the south end of the park. Let's face it, 9 months out of the year, kids will be in school until 3:30 or 4:00. Seniors will be using the park when the kids are not there. Let's keep those seniors in mind.

I19-2 Additionally, we support a reduced size to the park as in the original proposal. This is not the right location for a Regional Park of this size.

Michael Funtas

From: Christina Hanson
To: CEQA, CountyParks
Cc: Christina Hanson; afurasek5@gmail.com
Subject: [External] Alpine County Park DEIR Public Comments
Date: Friday, November 5, 2021 8:11:15 AM

Christina and Aaron Furasek
3743 Via Cielo Azul
Alpine, CA 91901

November 5, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

I20-1 Thank you for the opportunity to comment on the Alpine Park Project's ("Project") Draft Environmental Impact Report (DEIR). My husband and I just moved to Alpine in January of this year and we love it here. The wild, untouched open space is what brought us here from San Diego.

I20-2 We oppose the proposed Alpine Park as written in the DEIR. A small, nature-based passive park is what we and the majority of the Alpine community wants. We are very disappointed that this alternative was not analyzed as an alternative. We would like you to produce a Final DEIR that contains this option and to take all of these options to the Board of Supervisors so that they can choose a park that the community wants.

I20-3 We don't want a skate park. We don't want a mega park that requires a ton of water. The proposed park will bring too much traffic to the already dangerous South Grade Road.

I20-4 Thank you for taking our input. Please send all notices relating to this project to christinahanson66@yahoo.com.

Sincerely,

Christina and Aaron Furasek
(805)252-6050

15 November 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov
RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

I21-1 This letter is submitted as public comment to the Draft Environmental Impact Report (DEIR) regarding the proposed Alpine County Park at 2480 South Grade Road in Alpine, CA. Thank you for the opportunity to comment on this proposal. For background, I worked for the Back Country Land Trust of San Diego County (BCLT) for the last 10 years, since 2011 serving as the full-time land manager of the 245-acre ecological preserve owned and managed by BCLT known as Wright's Field MSCP Preserve. This acreage was saved from development by a local group of citizen activists in the 1990's due to the high ecological and cultural value of this land, and the discovery of threatened and endangered species on this property, many of which remain on site and thriving today thanks to this land being preserved in perpetuity by the founders of BCLT. At that time, and for many subsequent years afterward, including as recently as 2009, the County of San Diego was an active advocate for the preservation of this property, stating in a letter:

"Due to the significant and not mitigable impacts to biological resources for Alternative B (Wright's Field) and the direct implications to the County's Multiple Species Conservation Plan, the County cannot recommend that this site be chosen for such an intensive land use. Study Area B is located within the County's Wright's Field Pre-Approved Mitigation Area (PAMA) and adjacent to Wright's Field Preserve, an integral part of the County of San Diego's South County Multiple Species Conservation Program (MSCP) Subarea Plan.") - DPLU/ DPW/ DPR, dated 2/20/2009"

I21-2 This all begs the question - what has changed? Certainly not the biological importance of this ecologically rich area. Not the critical nature of preserving land for wildlife habitat, outdoor recreation, and ecosystem services. Not the community's enjoyment or appreciation of this beautiful open-space land in the center of town. If anything these values have all increased in a world where climate change and drought are now dominating factors; in a state where the governor has set a goal of conserving 30 percent of our land area by 2030; and in a county where climate-neutral planning is the order of the day and where increasing development in the rural areas makes open-space lands even more valuable for residents and wildlife both. Unfortunately, the current proposal for the Alpine County park is simply business as usual - a 20th century park design, based on policies and regulations that are increasingly out-of-date and out-of touch with the realities of the 21st century.

I21-3 It is completely unthinkable that in the year 2021, with the effects of climate change on the rise, a prolonged drought with no end in sight, and historic wildfires happening year after year all over the state, that this current park alternative would simply ignore many, if not all, of those stark realities. It is unimaginable to many of us who live in Alpine that the County staff and supervisors would propose such a large, resource-intensive parkland at such an enormous cost to County taxpayers for the construction, and long-term operations and maintenance, of an already outdated park design.

I21-4 This is made substantially worse by the location and proposal to build over such unique habitats as the threatened and increasingly rare valley needle grass habitats and Engelmann Oak woodlands. Impacts to wildlife, both flora and fauna, will be significant and unmitigable. Impacts to residents, both human and non-human, will be significant and unmitigable. Please consider an alternative to the current park design and modify the footprint and amenities proposed in the project.

Continued on Page 2

I21-5 ***"I cannot think of a more tasteless undertaking than to plant trees in a naturally treeless area, and to impose an interpretation of natural beauty on a great landscape that is charged with beauty and wonder, and the excellence of eternity."*** *- Ansel Adams, in an open letter addressed to a Boy Scouts of America proposal to plant trees on Point Reyes National Seashore.*

Preferred Alternative(s)

I21-6 In the absence of a project alternative vocally requested by the community residents and visitors to this property of a smaller, passive park at this site, and/or a system of smaller parks with the developed portions of Alpine, the remaining alternatives outlined in the DEIR, I must conclude that either Project Alternative 1 or Project Alternative 4 are the preferred alternatives for this project. A small, nature-based park is what the community of Alpine has been asking for throughout the public input process. **Why is there no project alternative included that examines alternative sites? Why was a small, passive-use park not considered as a project alternative at all?**

Of the project alternatives outlined in the DEIR, Alternative 1 and/or Alternative 4 are clearly the preferred alternatives at this ecologically valuable and unique landscape, as a smaller, less resource intensive park will have fewer environmental impacts on the surrounding habitats.

Water Use

I21-7 The current design with hundreds of trees, several acres of irrigated landscape, and several more acres devoted to non-native turf grass will require huge amounts of water, especially in the hot, arid climate of Alpine. If municipal water is provided via Padre Dam, its cost, estimated at over $135,000 dollars per year, will be a significant burden on taxpayers indefinitely - especially with water rates predicted to increase annually in the future. The use of potable water for irrigation is extremely misguided in San Diego County where such water is precious and mostly imported from outside of the region via costly water infrastructure. **Will the County be utilizing reclaimed water (purple pipes) for any irrigation needs of this project? Will the County be considering a downsized area where irrigation is needed?**

I21-8 Should a well be drilled to supply this park with water, the County should drill test wells to establish how much water is available in this area and design the park accordingly. Assuming that wells will perform as needed has proved a poor assumption for many homeowners in Alpine in the past. Water wells throughout Alpine are drying up due to years of prolonged drought and an overdraft on the existing water table, which is lowered each year due to inadequate recharge rates. **Should a water well be drilled for this project, will a full environmental impact study be conducted to examine the potential effects on the surrounding groundwater table? Will a hydrologic assessment be done to analyze the impacts to private homeowners and existing wellheads nearby? What long-term solutions are being proposed for irrigated areas to be sustainable in the future given the current environmental conditions of climate change, drought, and increasing temperatures in the East County?**

Wildfire

I21-9 The DEIR states that there will be no significant impact on wildfire conditions nor an increase to the current threat of wildfire. This is an inadequate assessment of this topic. According to the "Proposed Alpine County Regional Park Fire and Emergency Operational Assessment" prepared by Rhode Associates in 2020: "*The Community of Alpine is situated to arguably pose one of the worst Wildland-Urban Interface conditions in the County of San Diego and is in a known location of*

I21-9 cont.

repetitious major wildfire occurrence. Such locations of repeat occurrence are known as "historical wildfire corridors" **How will the increased use of this property not present a significant increase to wildfire threat, especially given the hot, arid conditions at the project location, it's exposure to Santa Ana wind conditions, and the known historical destructiveness of wildfire in Alpine?**

I21-10

In addition to the increased risk of ignition just by the sheer increase in volume of human activity, there are some other points of negligence in the current project proposal. Water storage for fire-fighting is not included in the current design; no fire access or hydrants are provided at the eastern edge of the parkland to defend against a Santa Ana driven westward flame front pushing into the preserved portions of the grassland; BBQ pit installation is not only completely tone-deaf to the realities of Southern California in the 21st century, but also creates an unnecessary amenity that no one asked for, as well as an unnecessary risk of ignition due to mismanagement of hot coals and/or other type of public behavior risks. The benefits of providing BBQ pits just simply don't outweigh the risks of a wildfire igniting at this location. **What is the basis for including BBQ pits in this park design, i.e. where is the data and/or public input showing a need for this type of amenity? What level of legal liability will the County assume should a wildfire occur from use of the BBQ pits by the public at this project site?**

I21-11

Another serious concern, from an operational standpoint, is that the fire assessment done by Rhode and Associates assumes the emergency response will be a fairly short interval from fire station to the park site to douse any conflagration there. This fast response assumes that emergency responders are available immediately and not delayed en route to the park site. Should there be another simultaneous emergency or first responders are otherwise unavailable to respond immediately, the response time (and thus, the burn time of a wildfire and risk of spreading off site, become much more dangerous than the current assessment predicts in an immediate-response scenario. During the 2018 West Fire cleanup phase, an emergency responder told me, "If this fire had gotten into the grasslands, we couldn't have physically moved our equipment from South Grade Road (the line of defense) to Tavern Road fast enough to get in front of the flames." **How will these significant wildfire risks be mitigated and/or avoided altogether? What is the average response time for emergency response agencies to arrive at the project site in the event of a wildfire? What is the response time for emergency response agencies to arrive at the project site in the event of a wildfire if these agencies are already on scene at another incident?**

I21-12

Given that the vast majority of wildfire events are human-caused, introducing 500 people per day (approx. 10 times the current amount of recreational use of this property), will by sheer volume of use increase the risk of ignition of a human-caused wildfires in this area. Whether that be from cars parking illegally on dried grasses, a carelessly tossed cigarette butt, or a mismanaged BBQ pit, the risk of igniting a wildfire in or near this park will be increased simply through multiplication of human activity, potentially proportionate to the proposed increase of 10 times the current level of use. That means 10 times the current risk of wildfire ignition compared to today's current use of the property. **How can the County seriously mitigate the risk of a wildfire in this area of Alpine while simultaneously increasing use of the property ten-fold? How can providing public BBQ pits in a dry grassland not present a significant increase in the risk of wildfire?**

I21-13

Given that this area is for most of the year a dry grassland, the risk of wildfire spreading from the park site into the adjacent preserved lands is significant. The most likely wildfire scenario is that a Santa Ana wind event from the east catches a spark that then blows westward out of the active park footprint and into the grassland habitat. From the park boundary, that dry grassland area is contiguous all the way to Joan MacQueen Middle School (Alpine's emergency evacuation center), and into dense residential areas along Deland Drive and Tavern Road, where hundreds of homes are built on the WUI at the western edge of the park-preserve complex at Wright's Field. **What specific actions will be taken to prevent a wildfire from spreading onto the preserved portions of the park site? What specific actions will be taken to prevent a wildfire from spreading onto the adjacent MSCP lands where listed endangered species are found?**

Engelmann Oak Avoidance and Minimization Measures

I21-14 According to UC Cooperative Extension, Engelmann Oak woodlands are diminishing statewide, due to inadequate regeneration of these oaks in their native habitat areas. "Three California oak species (blue oak, valley oak and Engelmann oak) have been repeatedly identified as species that have inadequate regeneration to maintain current stand densities." *(UC ANR, oaks.cnr.berkeley.edu).* Despite this fact, the proposed mitigation and monitoring strategies proposed in the DEIR for the Engelmann Oak woodland at this project location are wholly inadequate to protect this habitat. **What monitoring protocol is in place to ensure the health and viability of the Engelmann Oak woodland habitat post-construction, and during ongoing park operation? What measures will be taken to ensure that this portion of the park remains an ecologically functional oak woodland community with associated biodiversity metrics?**

I21-15 Given that no Resource Management Plan (RMP) was appended to this DEIR, it would appear that the avoidance and mitigation measures proposed are currently insufficient to protect this Engelmann Oak woodland as a functional ecological community. Many questions remain unanswered. Specifically - **What mitigation measures are in place should any unforeseen activities (such as root system disturbance, tree impacts, etc.) occur during construction and/or operation of the park lead to dead, dying, or diseased oaks within the project area? What condition will the understory of the oak woodland be in - will it be the ecologically rich and biodiverse community that is the hallmark of a mature oak woodland? What monitoring protocols are in place to ensure the currently high levels of biodiversity with the oak woodland? Which native plants will be associated with the remaining oak woodland during the operation of the park?**

MM-BIO-5: Protect Pallid Bat

I21-16 No specific criteria for successful mitigation are defined within the DEIR. **What mitigation measures will be implemented to ensure that the impacts to pallid bat are minimized?**

APM-1: Establishment of the Open Space Preserve

I21-17 Additional impacts outside of the active park footprint are described as: "activities include long-term monitoring of onsite preservation areas, nonnative and invasive species vegetation management, and habitat restoration in the open space preserve as applicable." The DEIR is proposing a significant amount of human activity outside of the active park footprint, some on the order of 3-5 years of active restoration work. **What level of activity is being proposed within the Open Space Preserve area? Have the impacts of that additional footprint been assessed? Will the impacts outside of the active park footprint be significant? How significant? How will the cumulative impacts of land management actives outside of the active-park footprint be mitigated?**

I21-18 **Why isn't a Draft Resource Management Plan included in the DEIR?** Until an RMP is assembled and approved all biological impacts remain significant and unmitigated. **How will the potentially significant and ongoing biological impacts to the preserved portions of the County property be mitigated? How will the significant biological impacts to the adjacent MSCP lands be mitigated? Without an RMP in place for biological resource avoidance and mitigation measures, how can the County ensure that the impacts will not be deleterious or unmitigable?**

Land Use Adjacency Guidelines within the MSCP

I21-19 It is assumed that recreational trail users will simply traverse the privately-owned trail system within Wright's Field Preserve to access the Alpine County Park site. Therefore, the impacts of the project on the full park-preserve complex of Wright's Field have to be analyzed and mitigated, not only the impacts to the County-owned property, but to the whole landscape scale ecosystem and recreational

I21-19 cont.

network. **What environmental impact studies have been conducted on adjacent MSCP-designated lands? When were those surveys conducted and which species were surveyed? What avoidance and mitigation measures are being proposed to minimize the impacts of increased active recreation on adjacent MSCP-designated lands?**

I21-20

The overall project design, and public talking points espoused by the County, assume that nearby Alpine residents will use existing private and public road access to trailheads at Wright's Field in order to access the County Park project site. **How have the off-site impacts to adjacent MSCP-designated lands been examined and assessed? What are the potential long-term impacts to threatened and endangered species found on adjacent MSCP lands?** Impacts to Wright's Field MSCP Preserve have the potential to be significant, and the direct, indirect, and cumulative impacts to BCLT-owned lands at Wright's Field have not been analyzed or mitigated within the DEIR. **How will off-site impacts to adjacent MSCP-designated lands be minimized and/or mitigated?**

Cumulative Impacts

I21-21

The cumulative impacts of community-wide development plans and simultaneous proposals for development in and around the Greater Alpine area are inadequately described in the DEIR. Only two "present and reasonably foreseeable cumulative projects" are listed and analyzed in the DEIR. However, several large-scale housing developments are proposed for the community of Alpine, including several nearby to the project site that are not included in the DEIR. One example is the new active sports field renovations planned for Joan MacQueen Middle School, less than one mile from the park project location. This project is already well underway, has received some level of funding, and will provide redundant amenities for active sports that are simultaneously being proposed in this park project. **Why aren't the current active sports field renovations at Joan MacQueen Middle School included in the DEIR for analysis of cumulative impacts?**

I21-22

Another example of inadequate analysis within the DEIR is the Sunset View Estates development, currently being proposed within a mile of the park project location near Eltinge and Marshall Rds. The failure of the DEIR to analyze other, known development proposals currently in progress nearby the project location shows that the impact analysis provided in Chapter 5, Cumulative Impacts is short-sighted and inadequate to the task of assessing the full significance of cumulative impacts to the community of Alpine from several proposed and previously approved developments happening simultaneously within just a few miles of the proposed park project location. **Why is the full list of planned and proposed development projects within Alpine not included for analysis within the cumulative impacts section? Why wasn't a full assessment of the adverse effects of several simultaneous development projects and proposals included for consideration in the cumulative impacts section of the DEIR?**

I21-23

In conclusion, given the significant and unmitigable impacts of this proposed project, I encourage the County to adopt Project Alternative 1 (No Project), or Project Alternative 4 (Reduced Project), as the only environmentally responsible alternatives for parkland at this site.

Thank you for the opportunity to provide public comment through this process. I sincerely hope that the County staff and supervisors will listen to the concerns of the majority of Alpine residents and scale-down this active parkland proposal at this site while increasing the mitigation and monitoring measures to offset the significant impacts of this project proposal.

Sincerely,
Jon Green
10-year Alpine resident, and former BCLT land manager for Wright's Field Ecological Preserve

Jonah Gula
PO Box 2303
Alpine CA, 91903

12 November 2021

via email:
Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project Draft Environmental Impact Report (SCH No. 2021030196)

Dear Ms. Prowant,

I22-1 Thank you for the opportunity to comment on the Alpine Park Project's ("Project") Draft Environmental Impact Report ("DEIR"). I was born and raised in Alpine, and I grew up visiting the proposed park site and adjacent Wright's Field Ecological Preserve ("Wright's Field"). In fact, my experiences and observations of wildlife there greatly influenced my decision to pursue a career as an ecologist. I have spent nearly a decade doing research on a diversity of wildlife across the United States and in two African countries and have published in professional journals about some of that work. Therefore, I believe my scientific background gives me a unique perspective on the DEIR as I am both familiar with relevant scientific literature and how ecological management works. My comments, questions, and responses to them should be made part of the public record for the Project

I22-2 Unfortunately, the project alternative I would prefer has not been considered despite the input of many community members since fall 2020. The alternative for a small, natured-based park connected to other local parks with off-site ammenities that I would prefer was detailed in Julie Simper's NOP letter (pg 159 of the DEIR Appendix) yet was completely neglected in the DEIR. Last fall many people shared this idea with Department of Parks and Recreation ("DPR") staff but to no avail. Now it seems San Diego County and the Alpine Community Planning Group are pursuing a network of trails around Alpine that is not discussed in the DEIR but clearly is a form of piecemealing aspects important to the Project, such as accessibility.

I22-3 I am also concerned that points raised in my own NOP letter (pg 213–214 of the DEIR Appendix) were not considered in the biological assessment of the Project and in the DEIR. Most of these have to do with being diligent in the scope of the biological surveys, which should have considered a number of California special status species that are not mentioned once in over 1,000 pages of the DEIR (besides the mention of Western Spadefoot eggs in the Biological

Report). The DEIR is overwhelming unscientific; that is, it does not consider a breadth of scientific literature and evidence related to the impacts and mitigation of the Project. Instead its authors perform unfounded or circular reasoning that comes through as wholly subjective. Ultimately, the DEIR read as a minimalistic effort despite the abundance of important feedback provided in NOP letters.

First, why did biological surveys of the Project site selectively consider special status wildlife species? Why did it not consider the following species, several of which were specifically mentioned in my NOP letter and the letter from David Mayer of California Department of Fish and Wildlife ("CDFW"); those I have personally observed on the site are in **bold**:

- Crotch's Bumblebee (listed as globally endangered, S1S2 state rank, and *proposed for listing on the CA Endangered Species Act*)
- **Western Spadefoot** (CA Species of Special Concern, S3 state rank, and *under review for listing on the US Endangered Species Act*)
- San Diego Legless Lizard (CA Species of Special Concern and S3 state rank)
- **Ferruginous Hawk** (CA Watch List species, S3S4 state rank, and USFWS Bird of Conservation Concern)
- **Northern Harrier** (CA Species of Special Concern and S3 state rank)
- **White-tailed Kite** (CA Fully Protected species and S3S4 state rank)
- **Grasshopper Sparrow** (CA Species of Special Concern and S3 state rank)
- **Oregon Vesper Sparrow** (CA Species of Special Concern, S3 state rank, USWFS Bird of Conservation Concern, and *under review for listing on the US Endangered Species Act*)
- **Lawrence's Goldfinch** (S4 state rank and USFWS Bird of Conservation Concern)

I22-3 cont.

The biological survey only incidentally observed a Red-diamond Rattlesnake (CA Species of Special Concern and S3 state rank) but did not specifically include it in a survey to assess the impact of the Project on the local population. Each of these species has a special status because of habitat loss, which has profound significance in light of the Project and begs the question, why weren't they included in an assessment? Therefore, it is clear comprehensive surveys of different taxa groups are warranted and should be done by an independent party (i.e. not ICF, which did an insufficient job the first time).

I could provide an extensive list of scientific literature on the above species and others that occur on the Project site, but that is not my job. The gross neglect of any literature–besides the CDFW recreation ecology journal issue directly provided in Frank Landis' NOP letter–demonstrates how unscientific the DEIR is. (I should also add that even the scant references to the CDFW journal issue in the DEIR inappropriately interpreted results or did not go on to discuss how the results relate to the Project.) However, I specifically want to reference some selected literature relevant to the Project impacts. I have attached these specific peer-reviewed articles to this letter. Amburgey et al. (2020) demonstrated that the Western Spadefoot was sensitive to habitat patch size in southern California, meaning that decreased patch size negatively affects them. This finding is consistent with a large volume of literature that has shown decreased habitat patch size in already fragmented habitat is related to population extinction risk. Trail maintenance from the Project must also not infill trailside puddles because these small depressions are where Spadefoots breed on the site (personal observation). Table 1 in Ribic et al. (2009) shows a

I22-4

I22-4 cont. similar relationship between grassland patch area and several of the birds listed above (Northern Harrier, Vesper Sparrow, and Grasshopper Sparrow; Savannah Sparrow and Western Meadowlark are also located on the Project site but not designated a special status). These two examples of literature demonstrate the negative impact that the loss of habitat from the Project will have on special species that were not considered in DPR's biological assessment.

I22-5 Additionally, the design of any surveys must consider the seasonal and interannual variation in these species. Several only occur during the winter yet from the DEIR Appendix it appears the only winter fieldwork conducted on the Project site was for fairy shrimp. Interannual rainfall varies greatly in San Diego County and this affects breeding of Spadefoots (which is when they are most easily surveyed). Thus, surveys done in a dry year may lead to inappropriate conclusions. Ultimately, surveys must be grounded in reasonable sample sizes and sampling intervals.

I22-6 Why does the DEIR frequently discuss impacts to foraging habitat of Cooper's Hawk and Red-shouldered Hawk when the loss of so much grassland will actually have a greater impact on the

I22-7 raptors listed above (Ferruginous Hawk, Northern Harrier, White-tailed Kite)? And how will the permanent loss of grassland foraging habitat be mitigated? It is an unmitigable impact. And why

I22-8 does pg 6-1 of the Appendix suggest the Project will not prevent wildlife access to foraging or breeding habitat yet elsewhere in the DEIR the impact on and loss of raptor foraging habitat is acknowledged? This is a common kind of inconsistency throughout the DEIR in which the significance of impacts are discussed very briefly and then essentially ignored or downplayed elsewhere.

I22-9 Why were several species considered as 'potentially occurring' on the Project site yet no specific surveys were conducted for them? It is useless to speculate about potential occurrence of a species like the federally endangered Pacific Pocket Mouse if surveys are not actually going to look for them. Considering the status of the potentially occurring species, I find it highly irresponsible to leave the possibility of occurrence without doing due diligence to confirm presence or not.

I22-10 On pg 1-4 of the Appendix it is stated that during the course of vegetation mapping, biologists 'assessed the need for any additional protocol wildlife surveys to be conducted.' Why was such a subjective approach taken? Did these biologists have sufficient knowledge of the Project site to make such subjective decisions? This methodology is antithetical to a scientific environmental assessment, and likely explains the lack of consideration of the species I listed above. And this is in spite of my NOP comments expressly mentioning some of those species. After all, how can you know if a species occurs there without having done surveys for them?

I22-11 Why did DPR limit its search for records of plants and animals to the agency databases listed on pg 1-2 of the Appendix? Citizen science databases are widely available and their utility in research is widely acknowledged in scientific literature. In fact, I myself have used databases such as eBird and iNaturalist in my own research to fill significant knowledge gaps about species distribution. The neglect of these valuable sources of information is inappropriate because it limits detectability of species to sporadic surveys done by agencies over random timespans.

I22-12 Also, even in the sources used, were species like the Western Spadefoot not recorded on the Project site? I find it difficult to believe there were not records of them in the databases. For

I22-12 cont. transparency sake for an ecologist like me, I request the raw data located in these databases to be included in some way publicly.

I22-13 On pg 4.4-15 it is stated that special status wildlife species will be assessed for impacts from implementation of the Project. How will they be assessed? This seems like a deferral of analysis and mitigation. It needs to be explicitly explained how impacts to them will be monitored, especially given that the raptors and reptiles mentioned were not even surveyed in a systematic way so as to actually measure post-construction impacts.

I22-14 Why does the DEIR describe the high conservation value of the valley needlegrass grassland community under the Project footprint and its uniqueness in the area yet not address that the Project will permanently destroy over half of the needlegrass area on the property? This is an unmitigable impact that is glossed over. In the County's Multiple Species Conservation Program it is acknowledged that any loss of native grassland will impact function and viability of the habitat. The DEIR focuses much on the scrub habitat that will be conserved on the property when really the predominant issue is the loss of the grassland. How is the Project justified as is considering the level of threat to this grassland community?

I22-15 Why does the DEIR conflate protection of individual Engelmann oaks to conservation of an Engelmann oak woodland community? This is ecologically incomprehensible. The development that will take place around the individual oak trees will by definition destroy the community, which includes the grassland around it. Mitigation that involves not cutting down individual trees while still building around and among them does not actually address the ecological impact that is the issue. Consequently, the DEIR does not actually provide a reasonable assessment and mitigation for the impacts on the Engelmann oaks on site. Additionally, the high human (and horse) activity around the oaks will likely render them useless for bird nesting, which is an example of the community-level impact to which I refer. Such an impact is not addressed in the DEIR.

I22-16 Why does the DEIR continually acknowledge (some of) the impacts of the Project but primarily provide mitigation measures that address impacts during the construction process? And why does the DEIR acknowledge in multiple places (e.g. pg 2-7) the impact from (significantly) increased visitation but not mitigate that in any meaningful way. The anticipated *average* daily use of the park by 500 people (pg 3-5) has not been reasonably factored into any analysis of impact on biological resources. This volume of visitation is significantly higher than what the site receives now and will undoubtedly have direct and indirect impacts that are mostly glossed over in the DEIR. One example of this is on pg 4.4-20 to 4.4-21: the impact of increased use of an area on

I22-17 butterflies (referencing Quino checkerspot) is acknowledged but is illogically argued that current trail use has not prevented the Quino checkerspot from persisting on the site. The current trail use cannot be equated to that anticipated during operation of the park, so it renders the weak assessment of increased visitation useless as is. Then on pg 4.4-20 it is stated "there is a possibility for increased foot traffic, mountain bike traffic, and horse traffic…" This is highly misleading and, frankly, deceptive language because the DEIR already stated the anticipated average of 500 people using the park daily; also, increased visitation (by magnitudes of what it is now) is the purpose of the park.

I22-18 Why has the DEIR entirely neglected the inevitable impacts on adjacent Wright's Field? David Mayer (CDFW) specifically requested an assessment of how DPR will manage permanent indirect impacts but this was done very poorly. Scientific literature, including articles in the CDFW recreation ecology journal issue, exists demonstrating that even undeveloped open space preserves with public access may have reduced capacity to conserve some populations of reptiles and small mammals. The anticipated volume of visitors to the proposed park will have bleed-over effects on Wright's Field, including but not limited to: litter, erosion, vandalism (already regular on boulders at Wright's Field), negative impacts on biological resources, and habitat degradation. The DEIR acknowledges some of these impacts but limits its scarce discussions of them to the Project site only. The DEIR *must* include how the Project will impact Wright's Field as an ecological preserve (i.e., the same factors considered for the Project site itself). On pg 3-5 of the Appendix it states the indirect impacts on sensitive species are unlikely to be harmful, citing no nocturnal lighting or formal trails as reasons. However, such indirect impacts (like on Wright's Field) have not been meaningfully assessed, if discussed at all. So the language there is dishonest and inconsistent with the recognized impacts of the Project.

I22-19 Why does the DEIR take a mammal-centric view of habitat connectivity by assuming that connectivity is only related to movement on the ground (e.g. via drainages, ridgelines, etc.)? Birds do not need drainages to move across a fragmented landscape–they need stepping stones of habitat. Isolated habitat islands like the Project site are critical as stepping stones for grassland-dependent birds (including Burrowing Owls and others listed above) in a region where grasslands have been greatly reduced in size and abundance. Bolger (2002) demonstrated that increased fragmentation causes local extinctions and limits dispersal of birds. Reducing the size of an available habitat patch like the Project site not only has implications for the birds that already exist there but it has an impact on population recovery of many species in the region, such as the Burrowing Owl. Just because the Burrowing Owl does not currently occur on the site as a breeding species does not mean it cannot in the future. Reducing the size of the habitat patch on the Project site might actually preclude that from happening. The same goes for other species with reduced populations in San Diego County. Indeed, grassland birds are more abundant in larger habitat patches (Rao et al. 2008) and decreasing the size of such habitat patches will reduce the capacity for regionally sensitive species to recover.

I22-20 How does DPR intend to enforce dog leash rules? I find it highly unlikely a volunteer park attendant will be able to reasonably enforce the requirement for dogs to be on a leash. Already the site and adjacent Wright's Field experience a high volume of dogs and despite the rule for leashes, it is ignored, even when people like myself request others to leash their dogs. This is one of the most unenforced rules at any park and disregard for this rule is pervasive. On pg 4.4-21 the empirical evidence of the effect of even leashed dogs on birds is acknowledged but the DEIR fails to address this in any impact assessment of mitigation strategy. The intention of having a dog park as part of the Project will obviously lead to increased numbers of dogs on the site and must consider this from a social (leash rules protecting other visitors from strange dogs) and a biological perspective. This is also probably the most inappropriate location in all of Alpine to have a dog park given the ecological impacts of increased dog use.

I22-21 What will DPR do in the future if water requirements cannot be met, as indicated in the short-sighted assessment of water availability and use on pg 4.19-17 to 4.19-18? This Project will

require significant water use despite water shortages in the state and county and the regular drought state of emergencies that California governors have issued in recent years. The amount of water to be used on the Project site is not in alignment with the site's character, which is naturally a dry habitat. Additionally, the idea that water removed from a reservoir for use at the park in times of drought is irresponsible because this could have implications for residents in the county. Why was the increased moisture availability on the Project site not considered? Water availability is uncharacteristic of the site and an increase may promote the increase of invasive Argentine ants (Menke and Holway 2006). Also, the water study mentioned on pg 4.19-4 needs to actually happen and not just be a thought experiment. The statement about a study being required in the future is an inappropriate deferral of analysis.

I22-21 cont.

Why does the DEIR's geological section focus so much on paleontology without considering the unique geological features of the site? The Project will directly impact the unique geology of the mesa and may be in violation of CEQA Appendix G guideline 6, which specifically addresses impacts to such a unique site. The failure of the DEIR to mention the site's unique geology represents a significant neglect.

I22-22

On pg 4.16-2, why are parks owned by other entities or without a joint exercise of powers agreement with the County not included? By excluding these parks in Alpine and the surrounding area, it skews the statistics in a dishonest way that makes it seem as though there are next to no parks for Alpiners. As someone who grew up in Alpine, I can honestly say there was never a shortage of parks for various activities.

I22-23

The mitigation measures related to nocturnal lighting are not consistent: outdoor lighting will be turned off except some for safety. So actually outdoor lighting will not be turned off? This language seems like a bait and switch. Where will the safety lighting be located and how much of it will there be? Also, why did the DEIR not consider the impact of nocturnal lighting on insects? Scientific evidence is mounting regarding the negative impact of artificial lighting on insect populations, which are declining due to light-related mortality in many areas (Owens et al. 2020, Boyes et al. 2021).

I22-24

Why were a number of topics requested by David Mayer (CDFW) in his NOP letter wholly unaddressed? For example, he requested a range of alternative locations for the Project but this cannot be found in the DEIR. This is especially significant given the County Parks Master Plan identified 70 vacant parcels that "may be suitable for park development" if purchased. As I mentioned above, he asked DPR to consider seasonal variation in the ecology of the project site yet the only surveys that were done in winter were for fairy shrimp. He addressed the need for a complete discussion of the purpose and *need* for the Project, specifically amenities like an equestrian area. This is nowhere in the DEIR.

I22-25

I22-26

I22-27 Finally, here are a number of other unaddressed questions I have. How will DPR ensure the park

I22-28 is not used for organized sports, as explicitly stated by DPR staff and in the DEIR? How will horse traffic impact wildlife and habitat degradation, especially with manure on trails? How does

I22-29 DPR justify planting so many trees (regardless of if they are native) as aesthetics mitigation on a site that is naturally marked by its lack of trees? Are these trees factored into the water

I22-30 requirements of the Project? How will DPR prevent mountain bike users from creating

I22-30 cont. unauthorized trails, both on the Project site and adjacent Wright's Field? This is a pervasive issue in the County and must be considered, especially considering its impacts on the neighboring ecological preserve.

I22-31 Is not the Project inconsistent with the Alpine Community Plan elements 6, 9, and 10? Referring to the goals of these specific elements in the plan is self-explanatory.

I22-32 Why will the park be open from sunrise to sunset yet quiet hours do not begin until 10:00 pm?

I22-33 Why are residents adjacent to the Project site not considered a principal viewing group in the visual assessment? They are the ones who will be primary impacted.

I22-34 The Executive Summary of the DEIR mentions potential overflow parking onto South Grade Road. Does DPR anticipate filling more than 250 parking spots? If so, how will overflow parking onto nearby residential streets be managed?

I22-35 How does DPR justify the impacts of this project in light of the past proposed development on this site was considered unmitigable? I referenced the need to consider findings in the Stagecoach Ranch development DEIR in my NOP letter but nowhere is this history mentioned in this DEIR. Similarly, when a high school was proposed on the site it was determined the biological impacts could not be mitigated. So what makes them mitigable now?

I also make the following recommendation:

I22-36
- Given the uniqueness and sensitivity of the habitat and the species occurring there, DPR should design pre- and post-construction biological surveys that allow for proper scientific assessment of Project impacts after construction. This is not only relevant for the Project at hand but also future projects. Such exemplary research are lacking from DPR's project plans and considerations.

I22-37 I thank you for the opportunity to provide this meaningful input as it addresses significant holes in the DEIR and Project plan. I would like to receive all notices relating to this project at Jonah.gula@yahoo.com

Sincerely,



Jonah Gula

Check for updates

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RESEARCH ARTICLE

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The influence of species life history and distribution characteristics on species responses to habitat fragmentation in an urban landscape

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Abstract

1. Fragmentation within urbanized environments often leads to a loss of native species diversity; however, variation exists in responses among-species and among-populations within species.
2. We aimed to identify patterns in species biogeography in an urbanized landscape to understand anthropogenic effects on vertebrate communities and identify species that are more sensitive or resilient to landscape change.
3. We investigated patterns in species richness and species responses to fragmentation in southern Californian small vertebrate communities using multispecies occupancy models and determined factors associated with overall commonness and sensitivity to patch size for 45 small vertebrate species both among and within remaining non-developed patches.
4. In general, smaller patches had fewer species, with amphibian species richness being particularly sensitive to patch size effects. Mammals were generally more common, occurring both in a greater proportion of patches and a higher proportion of the sites within occupied patches. Alternatively, amphibians were generally restricted to larger patches but were more ubiquitous within smaller patches when occupied. Species range size was positively correlated with how common a species was across and within patches, even when controlling for only patches that fell within a species' range. We found sensitivity to patch size was greater for more fecund species and depended on where the patch occurred within a species' range. While all taxa were more likely to occur in patches in the warmer portions of their ranges, amphibians and mammals were more sensitive to fragmentation in these warmer areas as compared to the rest of their ranges. Similarly, amphibians occurred at a smaller proportion of sites within patches in drier portions of their ranges. Mammals occurred at a higher proportion of sites that were also in drier portions of their range while reptiles did not differ in their sensitivity to patch size by range position.
5. We demonstrate that taxonomy, life history, range size and range position can predict commonness and sensitivity of species across this highly fragmented yet biodiverse landscape. The impacts of fragmentation on species communities

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within an urban landscape depend on scale, with differences emerging among and within species and populations.

KEYWORDS
amphibian, climate change, density compensation, mammal, multispecies occupancy model, reptile, urbanization

1 | INTRODUCTION

Fragmentation due to urbanization is a multifaceted global conservation threat, altering the composition of species communities directly and indirectly (Fahrig, 2003; McKinney, 2008). Urbanization can lead to, among other changes, the fragmentation of contiguous habitat that can alter the suitability of habitat for species. Fragmentation disrupts historic dispersal corridors, creating 'islands' of potentially suitable habitat with limited movement in between (Davis & Glick, 1978; Olejniczak et al., 2018). These remaining habitat patches may have increased prevalence of invasive species (McKinney, 2006), changes in predation pressure and altered microclimates associated with edge effects (Fahrig, 2003; Forman & Alexander, 1998). Post fragmentation, disturbance-sensitive species may become locally extinct in remaining patches while resilient species may occur at higher densities if they are able to capitalize on emptied niches (e.g. excess density compensation; Case, 1975; Rodda & Dean-Bradley, 2002). To better understand and forecast changes to fragmented urban wildlife communities, research is needed to understand species-specific responses to disturbed landscapes (Brehme et al., 2018; Grant et al., 2011; Henle et al., 2004; Rytwinski & Fahrig, 2013).

Life-history traits and phylogenetic constraints may help explain differences in the sensitivity or resiliency of some species to fragmentation (Table 1; Grant et al., 2011; McKinney, 2008; McKinney & Lockwood, 1999) and may allow for better predictions of species' responses to fragmentation (e.g. Brehme et al., 2018). For example, many amphibians have complex life cycles that require moving between overwintering and breeding habitats, making them more vulnerable to losses in connectivity and at higher risk of road mortality (Andrews et al., 2008; Brehme et al., 2018). Alternatively, within taxonomic groups, life-history traits can determine sensitivity to

I22-38 cont.

TABLE 1 Multispecies occupancy models for patch occupancy (Ω_{sj}). Average site within patch occupancy (ψ_{sj}) models were similar and therefore not shown. The base model contained patch size and taxonomic group to account for phylogenetic differences between mean occupancy and sensitivity to patch size by each species. This model was further modified with the inclusion of the terms listed under Additional Models

Base Model	Prediction
$\text{logit}\left(\Omega_{sj}\right) = \delta_{0s} + \delta_{1s} * \text{Patch Size}_j + \omega_1[\text{Taxa}_s\left[+ \omega_2[\text{Taxa}_s\right] * \text{Patch size}_j$	Phylogenetic differences may explain variation in mean occupancy and sensitivity to patch size
Additional Models	**Prediction**
$= \ldots + \alpha_1 * \text{Body Size}_s + \alpha_2 * \text{Body Size}_s * \text{Patch Size}_j$	Smaller-bodied amphibians may be more sensitive to fragmentation while larger-bodied snakes and mammals may be more negatively impacted (Rytwinski & Fahrig, 2013)
$= \ldots + \alpha_1 * \text{Fecundity/Year}_s + \alpha_2 * \text{Fecundity/Year}_s * \text{Patch Size}_j$	Lower fecundity species are more susceptible to negative impacts of fragmentation (Brehme et al., 2018; Rytwinski & Fahrig, 2013)
$= \ldots + \alpha_1 * \text{Age at Maturity}_s + \alpha_2 * \text{Age at Maturity}_s * \text{Patch Size}_j$	Slower sexual maturation correlates to slower life history that is more sensitive to fragmentation effects (Purvis et al., 2000; Rytwinski & Fahrig, 2013)
$= \ldots + \alpha_1 * \text{Range Size}_s + \alpha_2 * \text{Range Size}_s * \text{Patch Size}_j$	Species with smaller geographic extents should be more sensitive to fragmentation (Purvis et al., 2000)
$= \ldots + \alpha_1[\text{Taxa}_s\left[* \text{Dry}_{sa} + \alpha_2[\text{Taxa}_s\right] * \text{Dry}_{sa} * \text{Patch Size}_j$	Total winter precipitation will influence the ability of species to occur at smaller patches based on altered microclimate caused by urbanization (Shochat et al., 2006) and will particularly influence the occupancy of sensitive amphibian species
$= \ldots + \alpha_1[\text{Taxa}_s\left[* \text{Heat}_{sa} + \alpha_2[\text{Taxa}_s\right] * \text{Heat}_{sa} * \text{Patch Size}_j$	Maximum summer temperature will influence the ability of species to occur at smaller fragments as temperatures increase in urban settings (Shochat et al., 2006) and species have a limited number of microhabitat refuges
$= \ldots + \alpha_1[\text{Taxa}_s\left[* \text{Cons}_{sa} + \alpha_2[\text{Taxa}_s\right] * \text{Cons}_{sa} * \text{Patch Size}_j$	Conservation status may influence the commonness or sensitivity of species with imperiled species being rarer or more impacted by patch size

fragmentation that may affect reproductive potential, dispersal rates and potential population growth rates (Henle et al., 2004; Öckinger et al., 2010). Traits such as fecundity, body size and age at sexual maturation (Table 1; Grant et al., 2011; Purvis et al., 2000; Rytwinski & Fahrig, 2013) describe species differences across a slow-fast life continuum as well as general differences in quantity versus quality of offspring (Jones et al., 2013) and may serve as a buffer to decreasing or variable habitat quality or external conditions (Rytwinski & Fahrig, 2013). Increased body size may also indicate species with greater spatial or resource requirements, resulting in unsustainable populations in smaller patches (Henle et al., 2004; Rytwinski & Fahrig, 2013).

Additionally, species' range size and location within that range may determine how sensitive populations are to fragmentation (Table 1; Kendle & Forbes, 1997; Purvis et al., 2000). A species' range size may be positively correlated with the colonization potential for locally extirpated populations (Sexton et al., 2009). Among species, larger range sizes may be associated with a tolerance to a wider spectrum of conditions, contributing to the robustness of the species to disturbance (Purvis et al., 2000). Similarly, location within a species' range may determine species' sensitivity to fragmentation. Populations in the more extreme climate portions of the range may be more sensitive to disturbance (Oliver et al., 2015) due to the existing physiological stress associated with living in, for example, the hottest and driest portions of a species' range. The increased impervious surfaces and solar radiation associated with urbanization (i.e. heat islands; Shochat et al., 2006) may push species beyond their physiological tolerances. This may be especially true for ectothermic species reliant on climate-driven breeding habitats such as waterbodies (Walther et al., 2002). Similarly, increased temperatures and drought from recent climate change may interact with fragmentation to lead to greater species loss at range edges (Rehm et al., 2015). Alternatively, populations at the extreme of a species' climate envelope may be resistant to fragmentation effects as they are adapted to stressful, changing habitat conditions (Rehm et al., 2015).

Broad-scale studies on the effects of fragmentation exist for birds, insects and plants (McKinney, 2008), but less is known about the effects of fragmentation on native reptiles, amphibians and small mammals (but see Bolger et al., 1997; Scheffers & Paszkowski, 2012). Responses of highly motile species or those that benefit from human-assisted colonization likely differ from native terrestrial vertebrate communities. Reptiles and amphibians are among the taxa with the highest risk of extinction, with current rates of extinction higher than background rates (Allroy, 2015). Loss of these small vertebrate communities can alter ecosystem function as they serve as integral prey and predator species within communities (Hocking & Babbitt, 2014; Ims et al., 2008; Ripple et al., 2017).

We investigated how the interplay of life history, species distributions characteristics and habitat fragmentation helped shape communities in a heavily disturbed landscape in southern California. We analysed observations of species in remnant patches across the California Floristic Province (Figure 1a,b), one of the globe's biodiversity hotspots (Myers et al., 2000). The landscape has undergone significant development in the previous eight decades (Bauder & McMillan, 1998; Mattoni & Longcore, 1997), resulting in an altered habitat matrix affecting

I22-38 cont.

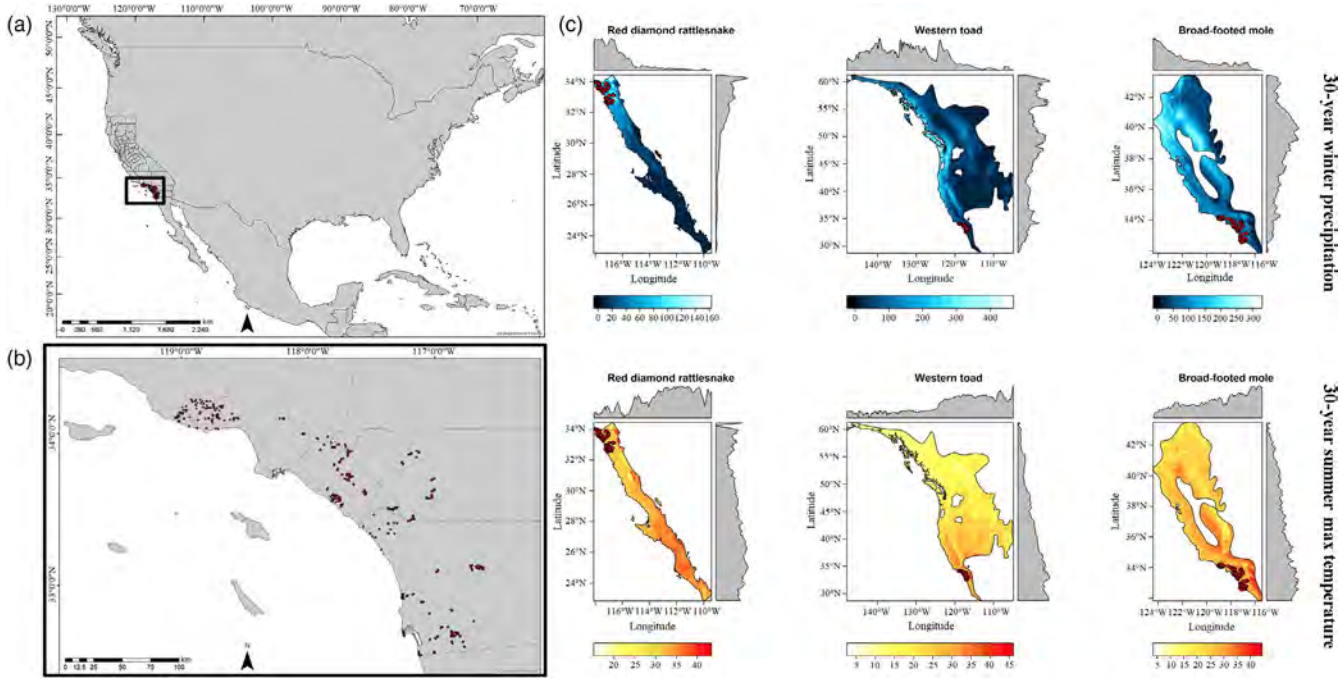

FIGURE 1 The southwest United States (a) where pitfall sampling occurred is one of the world's biodiversity hotspots. Red dots indicate pitfall arrays (i.e. sites) spanning six counties in southern California (b). Species ranges differ in their extent that overlaps with the pitfall sampling area and the long-term (30 year) total winter precipitation and mean summer maximum temperatures experienced (c). Levelplots show the distribution of climate values across the latitude and longitude of representative species ranges

all taxonomic groups (e.g., Barr et al., 2015; Riley et al., 2006). We sought to understand broad taxonomic patterns in species richness–patch size relationships in this system. Additionally, individual species and populations may vary in their response to patch size, and we sought to determine factors related to these differences (Figure 2). Species responses may also differ by spatial scale, prompting us to investigate differences at the overall patch level and at sites within occupied patches. We measured species commonness and sensitivity to patch size at these two scales: the probability a patch was occupied by a species and, given that patch was occupied, the proportion of sites within a patch at which that species was found. We show that differences among taxonomic groups, life-history traits and among and within species range traits (i.e. size and location) have important effects

I22-38 cont.

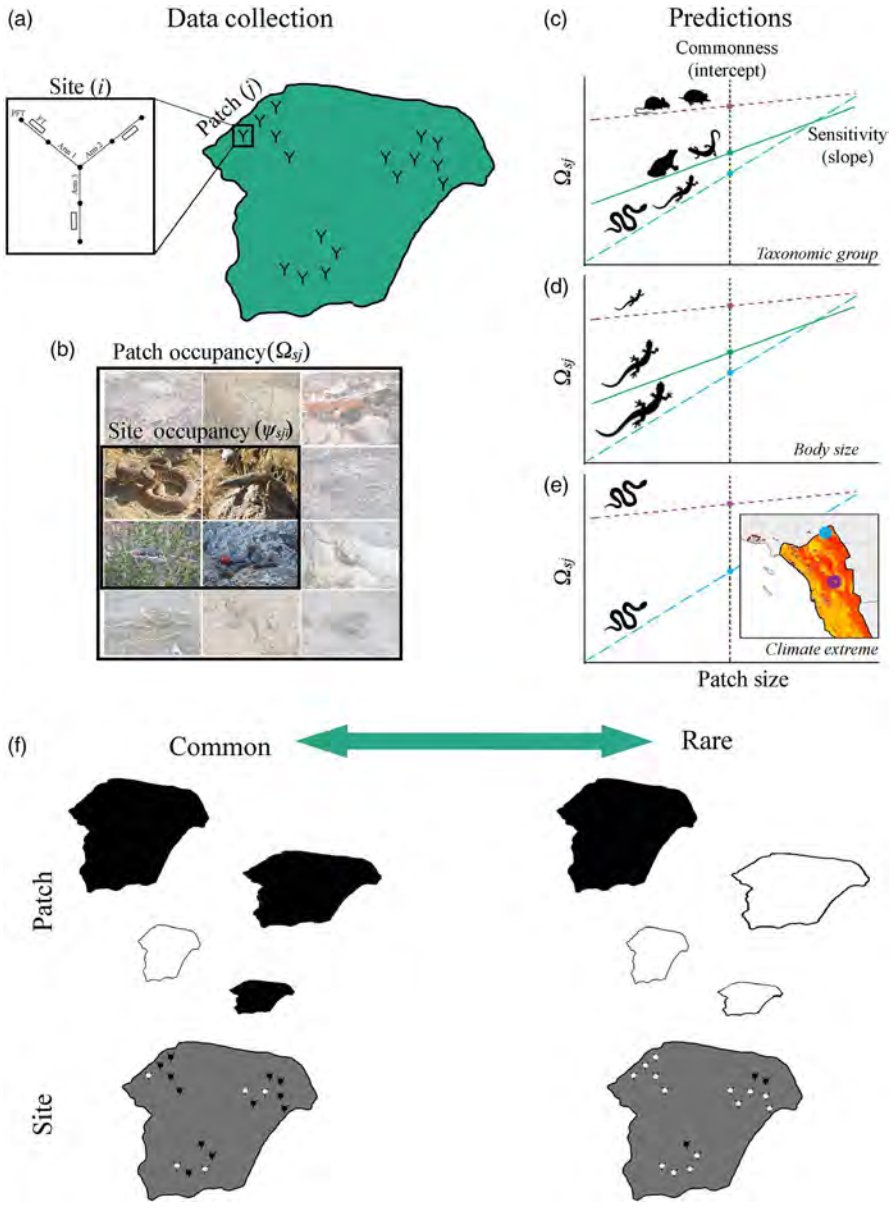

FIGURE 2 Data collection occurred through pitfall array sampling [each array consisting of three arms, seven pitfall traps (PFT) and three funnel traps (FT), a]. Every array (i.e. site *i*) was nested within a patch separated from other habitat by roads or other development (i.e. patch *j*). Multiple arrays in each patch allowed us to sample and estimate patch (Ω_{sj}) and site (ψ_{sji}) occupancy probabilities as part of a hierarchical nested multispecies occupancy model (b). Species that occur at sites are a subset of those that occur at the overall patch. We predicted that variation in species responses to patch size could be associated with taxonomic group (c), where mammalian species might be most robust to changes in patch size based on reproductive and endothermic evolutionary strategies. Species life-history traits within these taxonomic groups might explain additional variation in occupancy, e.g. species with larger body sizes might be more sensitive to the effects of fragmentation (d). Responses to fragmentation might also vary within species, e.g. species might be more sensitive to fragmentation at patches in hotter areas of their range (e). We examined patterns in two variables: relative commonness across the landscape (intercept) as well as sensitivity to patch size (slope) for individual species (c). We measured these variables at two scales: the probability of occupancy at the patch and, given the patch is occupied, the proportion of sites within a patch at which a species can be found (f)

on both commonness and sensitivity to patch size in this highly fragmented landscape.

2 | MATERIALS AND METHODS

2.1 | Pitfall sampling and covariate measuring

We used the existing sampling data for small vertebrate communities across southern California, which were collected for various projects using pitfall arrays led primarily by P.I. Fisher since 1995 and the SAMO sites sampled by the NPS (Figures 1 and 2a). Pitfall arrays provide a lower cost method to detect even cryptic species (Fisher et al., 2008) and were installed in different years as part of multiple projects (Table S1). Depending on the project, crews opened pitfall arrays for multiple days (1–17 days per sampling period) during multiple seasons across multiple years, checking traps daily to catalog captures. We treated each pitfall array as a site in our analysis. We synthesized data across these individual projects and limited our analyses to the earliest two to seven years of sampling to maximize the overlap of years consistently sampled (Table S1). We used only native species in our analysis and simplified counts of species to detected (1) and undetected (0) for all sampling occasions. Certain groups of species are difficult to distinguish in the field, and a composite classification was given (e.g. *Peromyscus* mice were noted as 'Mouse'; Table S2).

I22-38 cont.

We calculated the size (ha) of each patch using urban edges, paved roads and highways as boundaries on available habitat (Appendix S1; Andrews et al., 2008). We quantified patch size using historical, aerial imagery along with geospatial information systems layers on roads, development and land-use classification. We used a single patch size representing the area of available habitat at the beginning of sampling for each site. Overall, subsequent fragmentation was limited during the two to seven years of data used in this analysis (Appendix S1; Table S1). Additional development that did occur frequently eroded habitat edges rather than splitting core habitat. Additionally, we assumed that subsequent fragmentation would not be immediately realized as changes in species occupancy but rather as shifts in abundance. These patches occurred across a gradient of sizes and isolation from the urban matrix (Fisher et al., 2002; Mitrovich et al., 2018).

2.2 | Species life history and range size information

Information was aggregated by Brehme et al. (2018) and supplemented by additional literature search and solicitation of expert opinion (Table S2). Life-history traits included average adult body size (cm; snout-vent-length for amphibians and reptiles and body length for mammals), average annual fecundity and average years to sexual maturity. Other species information included taxonomic group, total range size (ha) and conservation status(es) through the International Union for Conservation of Nature and Natural Resources (IUCN), California Department of Fish and Wildlife [CDFW; California species of special concern (CSSC) and watch list (WL)] and U.S. Fish and Wildlife Service (USFWS). Range maps for each species were found through either the IUCN Red List (IUCN, 2018), Amphibian and Reptile Atlas of Peninsular California (Biodiversity Research Center of the Californias and San Diego Natural History Museum, 2018), field guides (Nafis, 2018; Stebbins, 2003) or modified from one of these sources using expert opinion (Table S2). Composite species (e.g. 'Mice') range maps consisted of a merged version of all included species' geographic extents.

2.3 | Climate covariates

To investigate whether species were less likely to occur in smaller patches at an extreme of their climate envelope, we downloaded 30-year (1970–2000) climate normal data for North America from WorldClim at a ~1 km^2 spatial resolution (Hijmans et al., 2005). We used 30-year winter precipitation (mean total precipitation over January, February and March) and maximum summer temperature (mean maximum temperature over July, August and September) as important climatic conditions. With increasingly frequent and persistent drought associated with changing climate (Westerling et al., 2006), we predicted that reduced winter precipitation (when southern California gets the bulk of its rainfall) and hot summer temperatures (that can exacerbate drought and fire conditions; Westerling et al., 2006) are important for understanding changes in species occupancy. Precipitation and temperature climate data were collected for each species' range and standardized using the mean and standard deviation. For species with skewed distributions of values across their ranges (which occurred only for precipitation), values were $\log_e$ transformed prior to standardization. We defined areas in each climatic extreme as fragments in the driest (≤15th percentile) or warmest (≥85th percentile) portion of each species' range. All other values were considered core climate conditions experienced by each species. We denoted these conditions as either a one (extreme) or zero (core).

2.4 | Data analysis

We first investigated overall patterns in the number of species in each of three taxonomic groups (Amphibia, Mammalia, and Reptilia) to understand broad trends in species richness by patch size. To analyse data, we fit a modified hierarchical multispecies occupancy model (Dorazio & Royle, 2005; Kéry & Royle, 2008) in a Bayesian framework. These models account for imperfect species detection probabilities through repeat surveys while also allowing for simultaneous estimation of individual species occupancy probabilities from a shared community distribution, borrowing strength from more abundant species in the community to allow for better estimates of parameters for rare or harder to detect species.

We then investigated two measures at two spatial scales (patch and site levels): (a) species-specific variation in occupancy at the mean patch size ('commonness'), and (b) the strength of the relationship between patch size and occupancy ('sensitivity'; Figure 2). Our measure of commonness was the proportion of patches and sites within occupied patches in which a species occurred. Our measure of sensitivity was the proportion of patches and sites within occupied patches in which a species occurred relative to changes in patch size. Species could respond to fragmentation at a broader scale, dropping out of an entire patch, or could respond at a smaller scale, with their site prevalence changing within occupied patches. Site-level responses better capture the homogeneity of occurrence within a patch while patch-level responses capture broader trends in presence and absence across the landscape. For example, we might see reductions in the proportion of occupied patches as fragmentation effects result in local patch extinctions. At the same time, the proportion of occupied sites within occupied patches may increase as reduced patch size results in lower species richness or habitat heterogeneity, allowing the remaining species to become more ubiquitous.

Next, we further modified our model to allow species-specific occupancy and detection probabilities to vary as a function of covariates. To control for broad phylogenetic differences that may be correlated with life history strategies or range characteristics, we included taxonomic group in all models (Table 1). Thus, we estimated the effect of traits on variation in occupancy probability within each taxon. Next, we fit models with covariates to include fixed effects for species-specific (e.g. life history or conservation status) or patch-specific (e.g. climate condition) information. Models were fit in JAGS (Plummer, 2003) via the JAGSUI package (Kellner, 2018) in Program R (R Core Team, 2018; see Appendix S2 for a full description of analytical methods and Appendix S3 for JAGS code).

I22-38 cont.

3 | RESULTS

Forty-five species of native small vertebrates consisting of seven mammals, seven amphibians and 31 reptiles (Table S2) at 698 pitfall arrays in 97 patches were considered in our analysis (patch size = 0.42–81,402.48 ha; Table S1). Overall, we utilized 47,156 individual species detections. Species richness–area relationships strongly related to patch size in this system, with vertebrate community size increasing by 3.5 times as many species from smallest to largest patch sizes (Figure 3). In particular, amphibian species richness was most positively correlated with increasing patch size. The species richness of all taxonomic groups was more strongly correlated to patch size at the patch level and less so at the site within patch level. Of the 45 species, the arroyo toad and Pacific pocket mouse (in the composite group 'Pocket Mice') are federally endangered while 12 species are CSSC and two species are WL. Though study arrays were not individually randomly selected, patches were evenly distributed by size and climate regime across the broader landscape of southern California; not all large patches or small patches fell into hotter or drier climate extremes, and a spectrum of patch sizes occurred along the coast of California inland towards the desert (Table S1).

3.1 | Taxonomic differences

We found differences in patch size effects among the three taxonomic groups surveyed. Mammals were the most common, being most likely to occur at patches and, when present at a patch, at the highest proportion of sites within patches (Figure 4a,b; Table S3). On average, mammals occurred at 93%, reptiles at 69% and amphibians at 52% of fragments. Compared to mammals, we found that amphibians and reptiles were less common at an average sized patch (effect size on logit scale: −2.55 [95% credible interval: −4.27, −0.77] and −1.85 [−3.2, −0.70] respectively). Additionally, mammals occurred at 87%, reptiles at 58% and amphibians at 38% of sites within patches. Compared to mammals, amphibians (−2.00 [−3.43, −0.59]) and reptiles (−1.65 [−2.90, −0.44]) were less common at sites within occupied patches. Credible intervals for differences between commonness of amphibians and reptiles overlapped zero at patches and sites. Sensitivity to patch size did not differ among taxonomic groups at the patch or site level in most cases (Figure 4) except amphibians were more sensitive to patch size at the patch level than reptiles [0.59 (0.01, 1.20)]. At the overall patch, all taxonomic group means and 20 of the 45 individual species were estimated to have a positive relationship to patch size. At sites within occupied patches, amphibian and reptile group means had a negative estimated effect with changing patch size while mammals were the only taxonomic group for which the group mean estimated effect included 0. For 34 of the 45 species, there was no change in the proportion of sites at which they occurred as patch size increased. However, the estimated effect was negative for nine species and positive for two species.

The probability that individual species occurred at an average sized patch varied widely (12%–98%; Figure 4a) with only amphibians of conservation concern less likely to occur as compared to unlisted amphibians (Table S3). The three least common species in patches were arroyo toad, Ensatina and the western spadefoot. Arroyo toad is federally listed as endangered and a CSSC. Ensatina is on the CDFW WL. The western spadefoot is a CSSC and has been petitioned for federal listing. The thirteen most commonly found species are all considered least concern and stable by the IUCN. Mammalian and reptilian CSSC occurred along the spectrum of commonness at the patch scale. Mean species commonness at sites within occupied patches also varied widely (18%–98%; Figure 4b). Conservation status did not show a clear relationship to species commonness at sites, though the federally endangered arroyo toad was once again one of the least common species.

Sensitivity to patch size at the patch and sites within patch scales also did not differ predictably by conservation status (Figure 4c,d; Table S3). Approximately 50% of species that were positively associated with increasing patch size at the average patch were species of conservation concern whereas slightly less than 50% of species

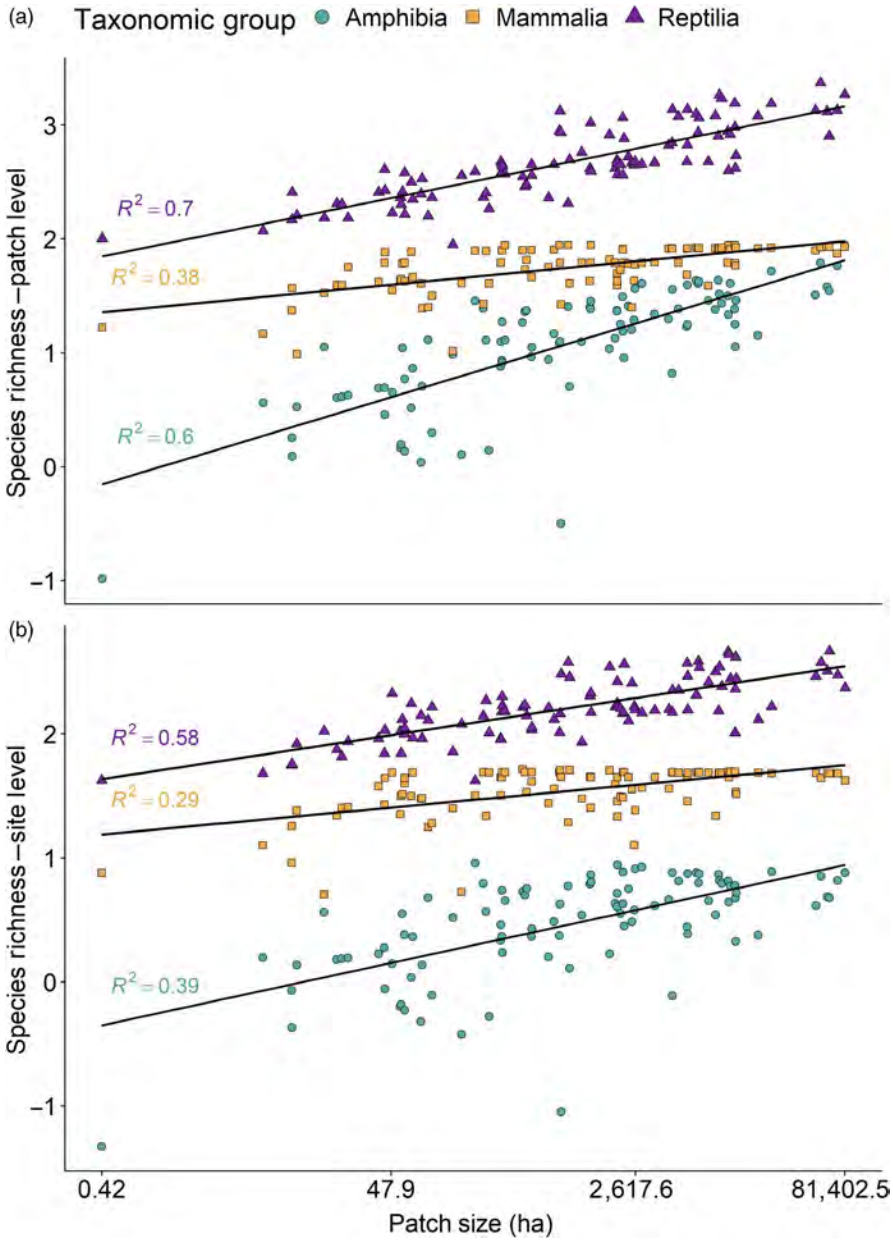

FIGURE 3 The $\log_e$ of taxonomic species richness (total number of species of a taxon present) at the patch (a) and site within patch (b) levels. We plotted species richness against $\log_e$ standardized patch sizes (though unstandardized sizes are shown on the *x*-axis to highlight the spectrum of patch sizes). Included are adjusted R^2 values for the linear regression of the log of species richness for each taxon at each level by the log of patch size

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that were not affected also were of concern. However, arroyo toads (IUCN = endangered) and spadefoot and western toads (IUCN = near threatened) were some of the most sensitive species to patch size. At sites within patches, fewer species were associated significantly with patch size. Five of the nine species that were less sensitive to increasing patch size also were species of conservation concern, as were both species that were more sensitive to increasing patch size.

Commonness at the patch was correlated with commonness at sites within occupied patches (Figure S1a). Species sensitivity at the patch scale was not strongly correlated with species sensitivity at sites within patches, indicating species were not similarly sensitive at both scales (Figure S1b). Amphibians were particularly sensitive to patch size at the patch scale but not at sites within patches. Additionally, many reptile species were sensitive to patch size at the patch scale but not at sites within patches. There was a weak negative correlation between commonness and sensitivity at the patch scale (Figure S1c), with the general trend that rarer species (particularly amphibians) responded more to increasing patch size. Species commonness and sensitivity to patch size at sites within occupied patches were not correlated (Figure S1d), though mammals were some of the most common and least sensitive taxa. Species within and between taxonomic groups still varied greatly in their response to fragmentation at the patch and site within patch levels (e.g. Figure S2), prompting further investigation into whether life history and range covariates could explain additional variation.

3.2 | Life history and range covariates

We tested whether species life history, range size and position in their climate envelope explained additional variation in relative commonness and sensitivity to patch size. In most cases, effect sizes for

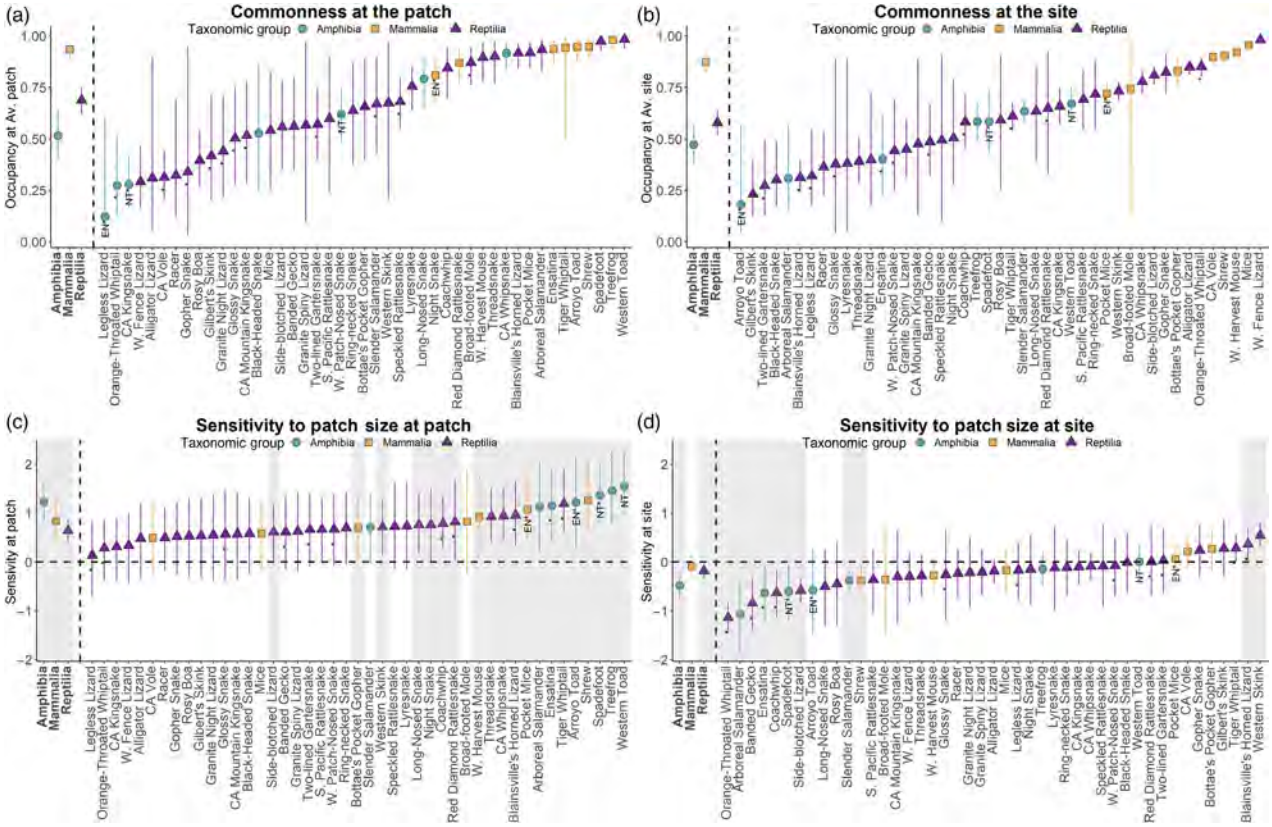

FIGURE 4 Species commonness and sensitivity at the patch (a and c) and site (b and d) levels by taxonomic group. We transformed commonness values from the logit to probability scale to show the occupancy of species at the average patch and site within a patch. Mean taxonomic group values are bolded and indicate that mammals were most common in patches (a) and sites (b) while all groups are more sensitive to patch size at the patch (c) rather than site (d) levels. However, species-specific values vary within taxonomic group, and species that were sensitive to patch size (as judged by whether the 95% credible interval overlapped 0) are highlighted in grey. Species of conservation concern denoted as EN = endangered, NT = near threatened (based on IUCN and/or USFWS) or California species of special concern or watch list (CSSC or WL based on CDFW) are marked with an asterisk

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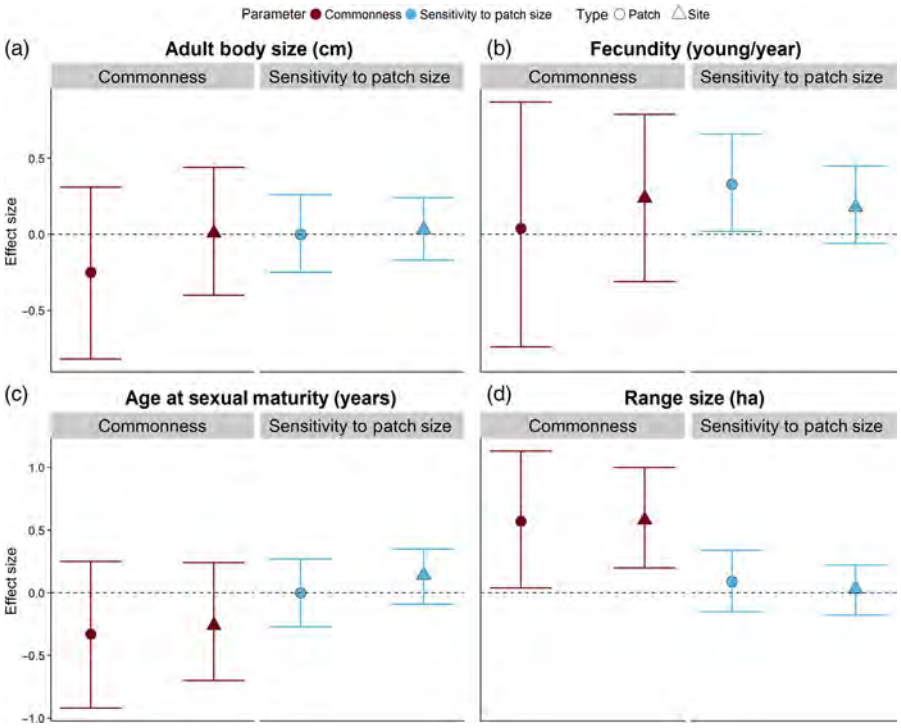

FIGURE 5 Estimated covariate effect sizes from models for (a) body size (cm), (b) fecundity (average young per year), (c) age at sexual maturity (years), and (d) range size (ha). Most covariates did not significantly influence species commonness and sensitivity at either the patch or site levels (as judged by whether 95% credible intervals overlapped 0). However, species sensitivity to patch size was greater for more fecund species at the patch level (b) and species with larger range sizes were more common at both the patch and site levels (d)

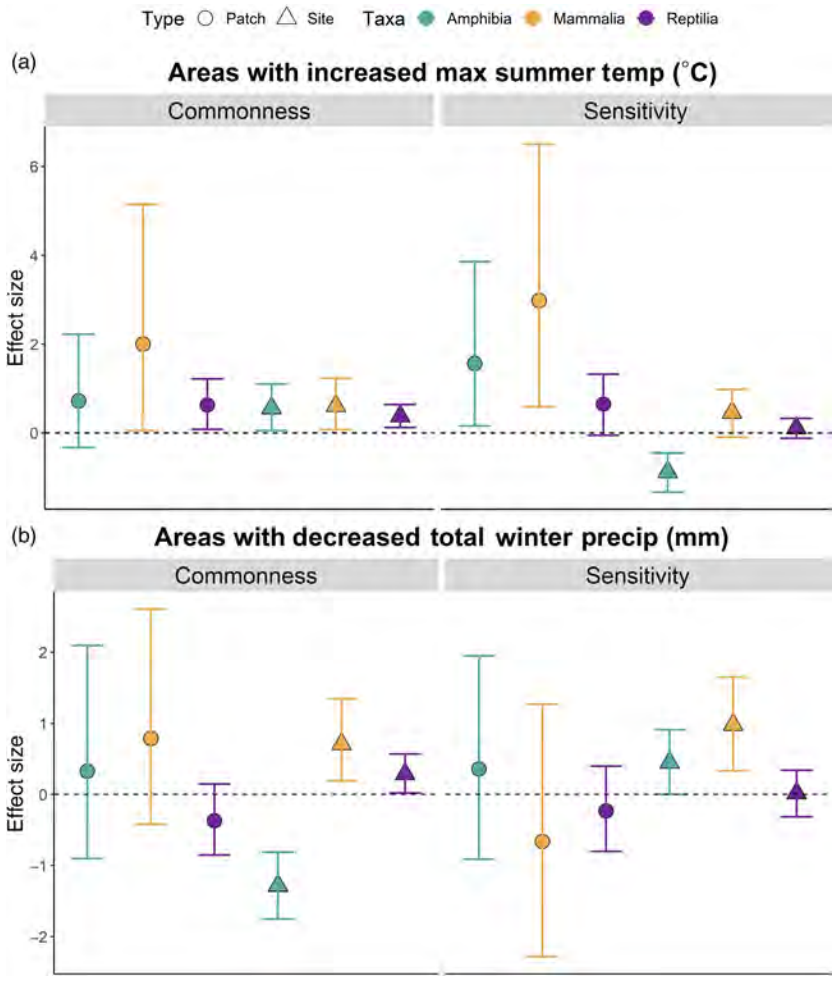

FIGURE 6 Effect sizes for climate model coefficients estimating the effects of (a) maximum summer temperature (°C) and (b) total winter precipitation (mm) on commonness and sensitivity of each taxonomic group by patch size at the patch and site within patch levels. Significance was judged by whether 95% credible intervals overlap 0. Effect sizes for commonness above 0 indicate the taxonomic group occurred more frequently in patches in hotter or drier areas of the range. Effects sizes for sensitivity above 0 indicate the taxonomic group was more sensitive in smaller patches in hotter or drier areas of the range

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life history covariates were small and included 0 in the credible interval (Figure 5; Table S3). However, more fecund species were more sensitive to patch size at the patch scale (Figure 5b), and anuran amphibians (i.e. frogs and toads) and mammals were among the most sensitive (Figure S3). We also found that species with larger range sizes were more common at patches and at sites within occupied patches (Figure 5d), but that range size did not help explain species sensitivity to patch size. Many of the most common and broadly distributed species at the patch and the site levels were not species of conservation concern. Most, but not all, of the least common species with smaller range sizes were those of conservation concern (Figure S4).

Whether a patch occurred at a climate extreme or in the core of a species' range explained patterns of both commonness and sensitivity to fragmentation at the patch and site scales (Table S3). Mammals and reptiles were more common in patches that occurred in the warmest portion of a species' range at both patches and sites within patches while amphibians were positively associated at only the site level (Figure 6a). Despite being more common, we found that both mammals and amphibians were also more sensitive to patch size when the patch occurred in the warmest portion of the species' range. As a result, mammals and amphibians were less likely to occur in small patches if that patch was near the warm extreme of the species' range (Figure 6a). We did not observe the same relationships at the site level, where mammals did not differ in sensitivity to patch size by temperature while amphibians were less sensitive to patch size at sites within occupied patches at the climate extreme (Figure 6a). Reptiles did not differ in sensitivity to patch size by climate at the average patch or sites within occupied patches.

For winter precipitation, commonness did not differ by extreme or core climate across all taxonomic groups (Table S3; Figure 6b). At sites within occupied patches, amphibians were less common when in the drier areas while mammals and reptiles were more common. There were no significant differences in taxonomic group sensitivity to patch size by precipitation at the patch level. At the site level, mammals were the only group more sensitive to patch size in patches at the drier extreme of the climate envelope (though amphibians shared a similar trend with credible intervals barely overlapping zero).

4 | DISCUSSION

Fragmentation often decreases native species richness (Barr et al., 2015; McKinney & Lockwood, 1999), and we similarly observed

decreasing species richness as a function of decreasing patch size at multiple scales. However, identifying species' traits that heighten or lessen their sensitivity to the impacts of urbanization can improve predictions of community change and manage conservation prioritizations (Grant et al., 2011; Henle et al., 2004; Rytwinski & Fahrig, 2013). We found that, while differences in commonness existed across taxonomic groups, all three taxonomic groups were similarly sensitive to changes in patch size across the fragmentation gradient. Among life-history traits, we found that, after accounting for taxonomic differences, only higher fecundity was associated with increased species' sensitivity to patch size at the patch level. We found support for biogeographical patterns of species responses to fragmentation at multiple scales, where species' range size was positively correlated with the probability a patch and sites within a patch were occupied. Additionally, we found species sensitivity to patch size was dependent on where the patch occurred within a species' range. Both amphibians and mammals were more sensitive to patch size in the warmest portions of the species' range—a result with important implications as continued warming trends will interact with fragmentation effects in the future. Additionally, mammals were more sensitive to patch size when the patch occurred in the driest portion of their range.

We observed key differences in how amphibians, reptiles and small mammals respond to fragmentation between and within patches. We found that small mammals in the region were more common than amphibians and reptiles overall, potentially due to their ability to adapt to different environments and benefit from the removal of native predation that may dampen their populations (Fischer et al., 2012). In addition, urban development may not be a hard boundary for many small mammals as compared to other groups (e.g. Parsons et al., 2018 but see Bolger et al., 1997). At the patch level, amphibians were more sensitive to patch size than reptiles, which could be driven by frogs and toads requiring rarer, patchily distributed aquatic or moist breeding habitats in which to lay their eggs. When fragmentation occurs, a larger patch has a higher chance of containing a wider range of specific microhabitats (Ewers & Didham, 2006), including water bodies. In the absence of breeding habitats, amphibians either risk road mortality while moving to patches with breeding habitat (Andrews et al., 2008; Brehme et al., 2018; Gibbs & Shriver, 2005) or are likely to become locally extinct.

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While smaller patches held fewer species overall, we found either reduced sensitivity or a negative effect of patch size in most species as it related to the proportion of sites occupied by that species within an occupied patch. Density compensation, where species resilient to fragmentation expand into empty niches vacated by more sensitive species (Case, 1975; Rodda & Dean-Bradley, 2002), may explain this reduced sensitivity for some species. As the number of species that occur in a patch decreases with patch size, the remaining species may occur at a greater portion of the overall sites within that patch. Several lines of evidence are consistent with this density compensation in our system. First, the relationship of species richness to patch size at the patch level was steeper than at the site level (Figure 3). Second, the lack of correlation between sensitivity to patch size at the average patch and sites within occupied patches supports density compensation within these communities (Figure 4b). Overall, reptiles were less likely to be negatively affected by reduced patch size at both scales, indicating that these species may be the ones filling empty niches vacated by more sensitive species. Reduced sensitivity to patch size at sites within occupied patches may also be due to the distribution of habitat types across and within patches. Smaller patches may be more uniform in their composition while larger patches likely are more varied (Hof et al., 2011), resulting in habitat specialist species having limited suitable habitat in smaller fragments. Amphibians and species of conservation concern had the strongest positive relationship to patch size and their likelihood of occurring within a patch. However, once present in a patch, the proportion of sites within a patch that were occupied by these species decreased as patch size increased (Figure 4b), perhaps due to this habitat specificity (Figure 4d).

We hypothesized that species that produce more offspring would be buffered against increased mortality rates associated with fragmentation and altered predation (Brehme et al., 2018; Rytwinski & Fahrig, 2013). Instead, highly fecund species were more sensitive to patch size as it related to occurrence within a patch. We hypothesize that this could be due to high variability in reproductive success of these species (e.g. frogs and toads; Alford & Richards, 1999). With the added risk of the effects of fragmentation, species living a high risk–high reward lifestyle may be limited in their opportunities to recover from poor reproductive years. We also found that species that had a wider geographic range were also most common at patches and sites within occupied patches. Through metapopulation dynamics or due to an increased breadth of conditions tolerated by these species, geographic spread can help predict species commonness and patterns in biogeography. While we saw that only amphibians of conservation concern were less likely to occur in smaller patches as compared to all at-risk taxa, southern California does have a high concentration of endangered, rare and endemic species that are generally associated with more restricted ranges (Dobson et al., 1997; Myers et al., 2000).

For medium to large sized patches, amphibians and mammals were more likely to occur in patches located in the warmest portion of the species' range. In larger patches, the abundance of microhabitats that can serve as refugia in extreme climate conditions is likely higher (e.g. Hof et al., 2011), potentially buffering species in these large patches to the effects of climate and fragmentation. However, species were less likely to occur in small patches located in the warmest part of their range. As patch size decreases, increased solar radiation and impervious surfaces in urban landscapes (i.e. heat islands; Shochat et al., 2006) can compound negative effects when species occur at the extremes of their climate niche. Smaller patches also likely do not possess the heterogeneity in habitat types to provide climate refugia necessary for species to persist. For amphibians, temperature is positively related to the rate of desiccation (Köhler et al., 2011), which may make this group particularly sensitive to this interaction at multiple scales (Figure 6). Reptilian occupancy did not differ by location within the species' range, potentially due to behavioural temperature regulation that reduces their exposure to extreme conditions (Kearney et al., 2009). Mammals and reptiles were

more likely to occur at sites within patches located in the driest portion of the species' range. This may be due to a reduced need for wet microhabitats, allowing these groups to be more widespread within patches even when located in the driest portions of their ranges. In contrast, amphibians were less likely to occur at sites within patches in the driest portion of their range. Mammals were more sensitive to patch size at sites within occupied patches located in the drier portion of their ranges. The effects of climate change may compound climate–patch relationships, with warming temperatures and more frequent and prolonged drought interacting with the effects of fragmentation to threaten at-risk species in smaller patches (Oliver et al., 2015). Even in larger patches that do have higher habitat heterogeneity, species may be able to persist but ultimately unable to shift their distributions as climate continues to change and even microhabitats become islands of decreasing suitability within the overall patch (Hof et al., 2011).

We present the results of broad-scale surveying from across multiple studies in southern Californian small vertebrate communities. Habitats were selected to answer a variety of conservation questions but were those that would allow for the continued monitoring of pitfall arrays on generally conserved lands, resulting in species communities and habitats that were likely more buffered than average locations from the direct effects of landscape development. As we see species responding to fragmentation even in these locations, species communities in other portions of the remaining habitat matrix in southern California are likely to be even more impacted. While this study focused on understanding the way fragmentation has changed species occupancy, this does not provide information on species that may yet drop out of communities due to declining growth rates (i.e. extinction debt; Kuussaari et al., 2009). Further research should focus on estimating demographic rates of remaining species within patches that set population trajectories on the path of local extinction or persistence.

Our analyses identify species and locations that are especially vulnerable to fragmentation and that could receive conservation prioritization. Some currently secure species are both less common and more sensitive to fragmentation and may become imperilled as development continues (Figure 4, e.g. arboreal salamander, threadsnake). Our results also corroborate the threat facing several current species of conservation concern. For example, arroyo toads, spadefoots and Ensatina are rarer across sites and very sensitive to fragmentation, highlighting these species as those with a high potential of local extinction. While large patches appear to buffer species to some extent from the negative impacts associated with habitat destruction (Fahrig, 2003; McKinney, 2008) or altered climate (Shochat et al., 2006), as development continues and climate change becomes more pronounced, species may be unable to shift their distributions in this urban matrix to respond (Hof et al., 2011; Oliver et al., 2015). Our improved understanding of the influence of fragmentation in an urban landscape and its interaction with climate on community composition allows for targeted research on at-risk species and the conservation of remaining habitat patches.

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AUTHORS' CONTRIBUTIONS

R.N.F., S.A.H., C.J.R., C.S.B., S.P.D.R. and K.S.D. created the sampling methodology and collected the data; C.S.B. and S.M.A. compiled the life history data; S.M.A., D.A.W.M., R.N.F. and C.J.R. conceived of the idea behind this analysis; S.M.A. and D.A.W.M. performed the analysis; S.M.A. led writing of the manuscript with all authors contributing to the interpretation of results and writing and editing of the manuscript. All authors gave final approval for publication.

DATA AVAILABILITY STATEMENT

Climate data are available at WorldClim (https://www.worldclim.org/). Pitfall capture data, species pool data and GIS layers for patches are archived at ScienceBase at https://doi.org/10.5066/P9MTFKFZ (Amburgey et al., 2021). A complete list of sites and species used in this study along with specific life history measures and resources for these measures are available in Supporting Information (Tables S1 and S2 respectively).

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REFERENCES

Alford, R. A., & Richards, S. J. (1999). Global amphibian declines: A problem in applied ecology. *Annual Reviews in Ecology and Systematics*, *30*, 133–165. https://doi.org/10.1146/annurev.ecolsys.30.1.133

Allroy, J. (2015). Current extinction rates of reptiles and amphibians. *Proceedings of the National Academy of the Sciences of the United States of America*, *112*, 13003–13008. https://doi.org/10.1073/pnas.1508681112

Amburgey, S. M., Miller, D. A. W., Rochester, C. J., Delaney, K. S., Riley, S. P. D., Brehme, C. S., Hathaway, S. A., & Fisher, R. N. (2021). Species observation from pitfall trap arrays, species pool matrices, and patch locations in southern California. *ScienceBase*, https://doi.org/10.5066/P9MTFKFZ

Andrews, K. M., Gibbons, J. W., & Jochimsen, D. M. (2008). Ecological effects of roads on amphibians and reptiles: A literature review. In J. C. Mitchell, R. E. Jung Brown, & B. Bartholomew (Eds.), *Urban herpetology, herpetological conservation*, (121–143). Society for the Study of Amphibians and Reptiles.

Barr, K. R., Kus, B. E., Preston, K. L., Howell, S., Perkins, E., & Vandergast, A. G. (2015). Habitat fragmentation in coastal southern California disrupts genetic connectivity in the cactus wren (*Campylorhynchus brunneicapillus*). *Molecular Ecology*, *24*, 2349–2363.

Bauder, E. T., & McMillan, S. (1998). Current distribution and historical extent of vernal pools in southern California and northern Baja California, Mexico. In C. W. Witham, E. T. Bauder, D. Belk, W. R. Ferren, & R. Ornduff (Eds.), *Ecology, conservation and management of vernal pool ecosystems* (pp. 56–70). California Native Plant Society.

Biodiversity Research Center of the Californias and San Diego Natural History Museum. (2018). *Amphibian and Reptile Atlas of Peninsular California*. Retrieved from http://herpatlas.sdnhm.org/

Bolger, D. T., Alberts, A. C., Sauvajot, R. M., Potenza, P., McCalvin, C., Tran, D., Mazzoni, S., & Soulé, M. E. (1997). Response of rodents to habitat fragmentation in coastal southern California. *Ecological Applications*, *7*, 552–563.

Brehme, C. S., Hathaway, S. A., & Fisher, R. N. (2018). An objective road risk assessment method for multiple species: Ranking 166 reptiles and amphibians in California. *Landscape Ecology*, *33*, 911–935. https://doi.org/10.1007/s10980-018-0640-1

Case, T. J. (1975). Species numbers, density compensation, and colonizing ability of lizards on Islands in the Gulf of California. *Ecology*, *56*, 3–18. https://doi.org/10.2307/1935296

Davis, A. M., & Glick, T. F. (1978). Urban ecosystems and island biogeography. *Environmental Conservation*, *5*, 299–304. https://doi.org/10.1017/S037689290000638X

Dobson, A. P., Rodriguez, J. P., Roberts, W. M., & Wilcove, D. S. (1997). Geographic distribution of endangered species in the United States. *Science*, *275*, 550–553.

Dorazio, R. M., & Royle, J. A. (2005). Estimating size and composition of biological communities by modeling the occurrence of species. *Journal of American Statistical Association*, *100*, 389–398.

Ewers, R. M., & Didham, R. K. (2006). Confounding factors in the detection of species responses to habitat fragmentation. *Biological Reviews*, *81*, 117–142.

Fahrig, L. (2003). Effects of habitat fragmentation on biodiversity. *Annual Review of Ecology, Evolution, and Systematics*, *34*, 487–515.

Fischer, J. D., Cleeton, S. H., Lyons, T. P., & Miller, J. R. (2012). Urbanization and the predation paradox: The role of trophic dynamics in structuring vertebrate communities. *BioScience*, *62*, 809–818.

Fisher, R., Stokes, D., Rochester, C., Brehme, C., Hathaway, S., & Case, T. (2008). Herpetological monitoring using a pitfall trapping design in southern California. In *U.S. geological survey techniques and methods*, Book 2, Section A, Chapter 5. U.S. Geological Survey.

Fisher, R. N., Suarez, A. V., & Case, T. J. (2002). Spatial patterns in abundance of the coastal horned lizard. *Conservation Biology*, *16*, 205–215.

Forman, R. T. T., & Alexander, L. E. (1998). Roads and their major ecological effects. *Annual Reviews of Ecology and Systematics*, *29*, 207–231.

Gibbs, J. P., & Shriver, W. G. (2005). Can road mortality limit populations of pond-breeding amphibians? *Wetlands Ecology and Management*, *13*, 281–289.

Grant, B. W., Middendorf, G., Colgan, M. J., Ahmad, H., & Vogel, M. B. (2011). Ecology of urban amphibians and reptiles: Urbanophiles, urbanophobes, and the urbanoblivious. In J. Niemelä (Ed.), *Urban ecology: Patterns, processes, and applications*. Oxford University Press Inc.

Henle, K., Davies, K. F., Kleyer, M., Margules, C., & Settele, J. (2004). Predictors of species sensitivity to fragmentation. *Biodiversity and Conservation*, *13*, 207–251.

Hijmans, R. J., Cameron, S. E., Parra, J. L., Jones, P. G., & Jarvis, A. (2005). Very high resolution interpolated climate surfaces for global land areas. *International Journal of Climatology*, *25*, 1965–1978. https://doi.org/10.1002/joc.1276

Hocking, D. J., & Babbitt, K. J. (2014). Amphibian contributions to ecosystem services. *Herpetological Conservation and Biology*, *9*, 1–17.

Hof, C., Levinsky, I., Araújo, M. B., & Rahbek, C. (2011). Rethinking species' ability to cope with rapid climate change. *Global Change Biology*, *17*, 2987–2990. https://doi.org/10.1111/j.1365-2486.2011.02418.x

Ims, R. A., Henden, J., & Killengreen, S. T. (2008). Collapsing population cycles. *Trends in Ecology & Evolution*, *23*, 79–86. https://doi.org/10.1016/j.tree.2007.10.010

IUCN. (2018). *The IUCN red list of threatened species*. Version 2018. Retrieved from https://www.iucnredlist.org

Jones, O. R., Scheuerlein, A., Salguero-Gómez, R., Camarda, C. G., Schaible, R., Casper, B. B., Dahlgren, J. P., Ehrlén, J., García, M. B., Menges, E. S., Quintana-Ascencio, P. F., Caswell, H., Baudisch, A., & Vaupel, J. W. (2013). Diversity of ageing across the tree of life. *Nature*, *505*, 169–173. https://doi.org/10.1038/nature12789

Kearney, M., Shrine, R., & Porter, W. P. (2009). The potential for behavioral thermoregulation to buffer 'cold-blooded' animals against climate warming. *Proceedings for the National Academy of the Sciences of the United State of America*, *106*, 3835–3840. https://doi.org/10.1073/pnas.0808913106

Kellner, K. (2018). *jagsUI: A wrapper around 'rjags' to streamline 'JAGS' analyses (version 1.5.0)*. R package. https://CRAN.R-project.org/package=jagsUI

Kendle, T., & Forbes, S. (1997). *Urban nature conservation*. Chapman and Hall.

Kéry, M., & Royle, J. A. (2008). Hierarchical Bayes estimation of species richness and occupancy in spatially replicated surveys. *Journal of Applied Ecology*, *45*, 589–598. https://doi.org/10.1111/j.1365-2664.2007.01441.x

Köhler, A., Sadowska, J., Olszewska, J., Trzeciak, P., Berger-Tal, O., & Tracy, C. R. (2011). Staying warm or moist? Operative temperature and thermal preferences of common frogs (*Rana temporaria*), and effects on locomotion. *Herpetological Journal*, *21*, 17–26.

Kuussaari, M., Bommarco, R., Heikkinen, R. K., Helm, A., Krauss, J., Lindborg, R., Öckinger, E., Pärtel, M., Pino, J., Rodà, F., Stefanescu, C., Teder, T., Zobel, M., & Steffan-Dewenter, I. (2009). Extinction debt: A challenge for biodiversity conservation. *Trends in Ecology & Evolution*, *24*, 564–571. https://doi.org/10.1016/j.tree.2009.04.011

Mattoni, R., & Longcore, T. (1997). The Los Angeles coastal prairie, a vanished community. *Crossosoma*, *23*, 71–102.

McKinney, M. L. (2006). Urbanization as a major cause of biotic homogenization. *Biological Conservation*, *127*, 247–260. https://doi.org/10.1016/j.biocon.2005.09.005

McKinney, M. L. (2008). Effects of urbanization on species richness: A review of plants and animals. *Urban Ecosystems*, *11*, 161–176. https://doi.org/10.1007/s11252-007-0045-4

McKinney, M. L., & Lockwood, J. L. (1999). Biotic homogenization: A few winners replacing many losers in the next mass extinction. *Trends in Ecology & Evolution*, *14*, 450–453. https://doi.org/10.1016/S0169-5347(99)01679-1

Mitrovich, M. J., Diffendorfer, J. E., Brehme, C. S., & Fisher, R. N. (2018). Effects of urbanization and habitat composition on site occupancy of two snakes using regional monitoring data from southern California. *Global Ecology and Conservation*, *15*, e00427.

I22-38 cont.

Myers, N., Mittermeier, R. A., Mittermeier, C. G., da Fonseca, G. A. B., & Kent, J. (2000). Biodiversity hotspots for conservation priorities. *Nature*, *403*, 853–858. https://doi.org/10.1038/35002501

Nafis, G. (2018). *California Herps: A Guide to Amphibians and Reptiles of California*. Retrieved from http://www.californiaherps.com/index.html

Öckinger, E., Schweiger, O., Crist, T. O., Debinski, D. M., Krauss, J., Kuussaari, M., Petersen, J. D., Pöyry, J., Settele, J., Summerville, K. S., & Bommarco, R. (2010). Life history traits predict species responses to habitat area and isolation: A cross-continental synthesis. *Ecology Letters*, *13*, 969–979. https://doi.org/10.1111/j.1461-0248.2010.01487.x

Olejniczak, M. J., Spiering, D. J., Potts, D. L., & Warren, R. J. II (2018). Urban forests form isolated archipelagos. *Journal of Urban Ecology*, *4*, 1–8. https://doi.org/10.1093/jue/juy007

Oliver, T. H., Marshall, H. H., Morecroft, M. D., Brereton, T., Prudhomme, C., & Huntingford, C. (2015). Interacting effects of climate change and habitat fragmentation on drought-sensitive butterflies. *Nature Climate Change*, *5*, 941–945. https://doi.org/10.1038/nclimate2746

Parsons, A. W., Forrester, T., Baker-Whatton, M. C., McShea, W. J., Rota, C. T., Schuttler, S. G., Millspaugh, J. J., & Kays, R. (2018). Mammal communities are larger and more diverse in moderately developed areas. *eLife*, *7*, e38012.

Plummer, M. (2003). JAGS: A program for analysis of Bayesian graphical models using Gibbs sampling. *Proceedings of the 3rd International Workshop on Distributed Statistical Computing*. Vienna, Austria.

Purvis, A., Gittleman, J. L., Cowlishaw, G., & Mace, G. M. (2000). Predicting extinction risk in declining species. *Proceedings of the Royal Society of London B: Biological Sciences*, *267*, 1947–1952. https://doi.org/10.1098/rspb.2000.1234

R Core Team. (2018). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. Retrieved from http://www.R-project.org

Rehm, E. M., Olivas, P., Stroud, J., & Feeley, K. J. (2015). Losing your edge: Climate change and the conservation value of range-edge populations. *Ecology and Evolution*, *5*, 4315–4326. https://doi.org/10.1002/ece3.1645

Riley, S. P. D., Pollinger, J. P., Sauvajot, R. M., York, E. C., Bromley, C., Fuller, T. K., & Wayne, R. K. (2006). A southern California freeway is a physical and social barrier to gene flow in carnivores. *Molecular Ecology*, *15*, 1733–1741. https://doi.org/10.1111/j.1365-294X.2006.02907.x

Ripple, W. J., Wolf, C., Newsome, T. M., Hoffmann, M., Wirsing, A. J., & McCauley, D. J. (2017). Extinction risk is most acute for the world's largest and smallest vertebrates. *Proceedings of the National Academy of the Sciences of the United States of America*, *114*, 10678–10683. https://doi.org/10.1073/pnas.1702078114

Rodda, G. H., & Dean-Bradley, K. (2002). Excess density compensation of island herpetofaunal assemblages. *Journal of Biogeography*, *29*, 623–632. https://doi.org/10.1046/j.1365-2699.2002.00711.x

Rytwinski, T., & Fahrig, L. (2013). Why are some animal populations unaffected or positively affected by roads? *Oecologia*, *173*, 1143–1156. https://doi.org/10.1007/s00442-013-2684-x

Scheffers, B. R., & Paszkowski, C. A. (2012). The effects of urbanization on North American amphibian species: Identifying new directions for urban conservation. *Urban Ecosystems*, *15*, 133–147. https://doi.org/10.1007/s11252-011-0199-y

Sexton, J. P., McIntyre, P. J., Angert, A. L., & Rice, K. J. (2009). Evolution and ecology of species range limits. *Annual Review of Ecology, Evolution, and Systematics*, *40*, 415–436. https://doi.org/10.1146/annurev.ecolsys.110308.120317

Shochat, E., Warren, P. S., Faeth, S. H., McIntyre, N. E., & Hope, D. (2006). From patterns to emerging processes in mechanistic urban ecology. *Trends in Ecology & Evolution*, *21*, 186–191. https://doi.org/10.1016/j.tree.2005.11.019

Stebbins, R. C. (2003). *A Peterson Field Guide to Western Reptiles and Amphibians* (3rd ed.). Houghton Mifflin Harcourt.

Walther, G.-R., Post, E., Convey, P., Menzel, A., Parmesan, C., Beebee, T. J. C., Fromentin, J.-M., Hoegh-Guldberg, O., & Bairlein, F. (2002). Ecological responses to recent climate change. *Nature*, *416*, 389–395. https://doi.org/10.1038/416389a

Westerling, A. L., Hidalgo, H. G., Cayan, D. R., & Swetnam, T. W. (2006). Warming and earlier spring increase western U.S. forest wildfire activity. *Science*, *313*, 940–943.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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PERSPECTIVES IN ORNITHOLOGY

AREA SENSITIVITY IN NORTH AMERICAN GRASSLAND BIRDS: PATTERNS AND PROCESSES

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I22-39

GRASSLAND BIRDS HAVE declined more than other bird groups in North America in the past 35–40 years (Vickery and Herkert 2001, Sauer et al. 2008), prompting a wide variety of research aimed at understanding these declines, as well as conservation programs trying to reverse the declines (Askins et al. 2007). Area sensitivity, whereby the pattern of a species' occurrence and density increases with patch area (Robbins et al. 1989), has been invoked as an important issue in grassland-bird conservation, and understanding the processes that drive area sensitivity in grassland birds is a major conservation need (Vickery and Herkert 2001). Here, we review the literature on North American grassland bird species that is relevant to the following questions. (1) What is the evidence for area sensitivity in grassland birds? (2) What are the historical explanations for area sensitivity? (3) What ecological processes could produce area sensitivity? (4) How does landscape composition affect our ability to detect area sensitivity? And (5) what are the conservation implications of knowing the processes behind area sensitivity? Because of space limitations, we could not cite every paper we reviewed; the cited papers are given as examples of the literature in this field.

"Area sensitivity has been invoked as an important issue in grassland-bird conservation, and understanding the processes . . . is a major conservation need. . . . [W]e are interested in aspects of breeding ecology that affect the settling of birds and their use of patches of different sizes . . . these include territoriality, social information, philopatry, and predation."

Grassland ecosystems originally dominated central North America. Tallgrass prairie in the east graded into mixed-grass prairie and, finally, shortgrass prairie in the west (Samson et al. 1998, Askins et al. 2007). Prairies, in particular the tallgrass prairie,

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are among the most extensively altered systems in North America, owing to Native American management practices and subsequent settlement and development of agriculture by Europeans (Houston and Schmutz 1999, Higgins et al. 2002, Askins et al. 2007). Currently, smaller and more fragmented patches of planted grasslands dominate the remaining eastern grassland systems (Warner 1994, Askins et al. 2007). These surrogate grasslands are composed of Eurasian grass and forb species, are typically associated with agriculture, and include hay fields, pastures, and fallow and old fields (Sample et al. 2003). In the Great Plains, woody encroachment and agriculture are reducing the area of grasslands, reducing patch size, and increasing edge (Coppedge et al. 2001a, Grant et al. 2004). More recently, even these surrogate grasslands are disappearing (Askins et al. 2007). In the United States, between 1982 and 2003, ~6 million ha of pasture and ~4 million ha of rangeland were lost (Natural Resources Conservation Service 2007). Biofuel development that results in the loss of undisturbed grassland is an emerging conservation issue (e.g., Fargione et al. 2008).

AN EVALUATION OF AREA SENSITIVITY IN GRASSLAND BIRDS

Area sensitivity is a concept originally introduced by Robbins et al. (1989) for forest birds in the eastern United States, and many researchers have since identified this pattern in other systems, such as shrubsteppe (e.g., Knick and Rotenberry 2002) and grasslands (e.g., Herkert 1994). Clearly, density and frequency of occurrence are closely intertwined: as the density of a species in a habitat patch varies, the frequency of occurrence of that species in sample plots within that patch will covary with it. Because of the close relation between these metrics, area sensitivity can be defined as a positive relationship between either probability of occurrence or species density and area.

Johnson (2001) surveyed the literature on grassland birds to evaluate the evidence for area sensitivity; he tabulated those studies that did not have passive-sampling issues and accounted for habitat differences between survey units. Using those two criteria (i.e., no passive-sampling issues, adjustment for habitat differences), we updated Johnson (2001), focusing on the 32 temperate grassland-obligate birds of North America (Vickery et al. 1999). We considered only studies that entailed collection of bird data (i.e., meta-analyses and those using Breeding Bird Survey data were not included). We also excluded species results for which no effect was found, because a nonsignificant result does not demonstrate a lack of effect. We note that some studies (e.g., Johnson and Igl 2001) were done across large geographic areas, so number of studies for a species does not equate to geographic coverage. Of the 32 species, half have been demonstrated to exhibit area sensitivity in occurrence or density in at least one geographic area (Table 1). Three species (Vesper

TABLE 1. Area-sensitivity status of North American grassland-obligate birds documented by studies that accounted for passive sampling (updating Johnson 2001). Positive = increased occurrence or density with patch area, negative = decreased occurrence or density with patch area, and variable = both positive and negative relationships of occurrence or density with patch area. Results for which no effect was found are not reported; nonsignificance does not demonstrate a lack of effect.

I22-39 cont.

	Area sensitive (occurrence)		Area sensitive (density)	
Species	Sign of relationship	Reference	Sign of relationship	References[a]
Northern Harrier (*Circus cyaneus*)			Positive	7, 12
Greater Prairie-Chicken (*Tympanuchus cupido*)	Positive	6	Positive	17
Upland Sandpiper (*Bartramia longicauda*)	Positive	2	Positive	3
Horned Lark (*Eremophila alpestris*)	Positive	13	Positive	13
Sedge Wren (*Cistothorus platensis*)	Positive	7, 8	Variable	7
Sprague's Pipit (*Anthus spragueii*)	Positive	14	Positive	12, 14, 15
Vesper Sparrow (*Pooecetes gramineus*)	Positive	2		
Savannah Sparrow (*Passerculus sandwichensis*)	Positive	1, 2	Positive	3, 7, 18
	Variable	8	Variable	16
	Negative	7		
Grasshopper Sparrow (*Ammodramus savannarum*)	Positive	1, 2, 9, 10, 14	Positive	3, 8, 9, 11, 13, 18
	Variable	7	Variable	7
Baird's Sparrow (*A. bairdii*)	Positive	7, 14	Positive	7, 14
Henslow's Sparrow (*A. henslowii*)	Positive	1, 5	Positive	3, 6
Le Conte's Sparrow (*A. leconteii*)	Positive	7		
Chestnut-collared Longspur (*Calcarius ornatus*)	Positive	14	Positive	12, 14
Dickcissel (*Spiza americana*)	Positive	5, 8		
Bobolink (*Dolichonyx oryzivorus*)	Positive	1, 2, 7, 10	Positive	3, 7, 11, 12, 18
	Negative	13	Variable	16
Eastern Meadowlark (*Sturnella magna*)	Positive	1, 2, 10	Positive	18
Western Meadowlark (*S. neglecta*)			Positive	4, 7, 8
			Negative	15
Brown-headed Cowbird (*Molothrus ater*)[b]	Negative	7, 9	Negative	13

[a](1) Herkert (1994), (2) Vickery et al. (1994, fig. 2), (3) Bollinger (1995), (4) Bolger et al. (1997), (5) Winter (1998), (6) Winter and Faaborg (1999), (7) Johnson and Igl (2001), (8) Bakker et al. (2002), (9) Horn et al. (2002), (10) Renfrew (2002), (11) Renfrew and Ribic (2002), (12) Skinner (2004), (13) DeJong et al. (2006), (14) Davis (2004), (15) Davis et al. (2006), (16) Winter et al. (2006b), (17) Winter et al. (2006a), (18) Renfrew and Ribic (2008).

[b]Considered a facultative grassland bird by Vickery et al. (1999) but included in the survey.

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Sparrow, Le Conte's Sparrow, and Dickcissel; scientific names are given in Table 1) exhibited area sensitivity only in terms of their occurrence, and all showed a positive effect. Two species exhibited area sensitivity only in terms of density; positive area sensitivity was reported for Northern Harrier, whereas variable results were found for Western Meadowlark (Table 1). For the 13 species with both occurrence and density information, positive area sensitivity was consistently reported for both variables for eight species, and negative area sensitivity for one (Brown-headed Cowbird); variable results (for occurrence, density, or both) were found for the other four (Sedge Wren, Savannah Sparrow, Grasshopper Sparrow, and Bobolink) (Table 1).

Two points are worthy of note. First, the most recent literature focuses more on species' density relationships with area than on occurrence patterns. This may be attributable to a relatively recent shift in the conservation paradigm from island biogeography to metapopulation theory, with a consequent focus on population size (Hanski and Simberloff 1997). Second, some of the most widely studied species have shown variable responses to area (Table 1). This may suggest that the "consistent" relationships found for some lesser-studied species may not hold up once they are studied in additional geographic areas.

Historical Explanations for Area Sensitivity

When researchers started noticing area sensitivity (e.g., Faaborg et al. 1995), they typically inferred the causal mechanism from island biogeography theory (MacArthur and Wilson 1967). Island biogeography theory was focused on explaining increasing species richness with island size and was based on the idea of a colonization–extirpation balance (i.e., area-per-se; Connor and McCoy 1979). Connor and McCoy (1979) discussed two additional hypotheses to explain the species richness–area relationship: passive sampling and habitat diversity. For each hypothesis, we briefly discuss the background development of the idea and then review the application of the idea to area sensitivity in grassland birds.

I22-39 cont.

Passive Sampling

Background

Passive sampling was proposed by Connor and McCoy (1979) as the null hypothesis for the species richness–area relationship; Connor and McCoy (1979:792–793) proposed that "species number is controlled by passive sampling from the species pool, large areas receiving effectively larger samples than small ones, and ultimately containing more species." This logic can also be applied to individual species: large patches are more likely to be occupied by a species, by chance, than small patches.

Few studies have assessed the plausibility of the passive-sampling hypothesis. Connor and McCoy (1979) suggested that a direct proportionality between immigration rates and area would support the passive-sampling hypothesis, though we know of no study that has looked for this relationship. Instead, studies have focused on species occurrence and resulting species richness based on random sampling from the regional species pool (Haila et al. 1993). See Askins et al. (1990) for passive sampling applied to Neotropical migratory bird communities.

Passive Sampling and Grassland Birds

Grassland patches are inhabited by species whose occupancy must be estimated; therefore, the idea of passive sampling is applicable to the issue of assessing area sensitivity in patches when variable sampling effort per patch is used to estimate occurrence (Johnson 2001). When investigators survey large patches with more survey units than small patches (e.g., sampling proportional to size) and do not take that into account in a patch-level analysis, they can find a positive relationship between probability of occurrence within a patch and patch size simply because of the larger area sampled within large patches (Horn et al. 2000, Johnson 2001). Failing to account properly for this problem can lead to species being misidentified as area sensitive (Johnson 2001) regardless of how they are actually distributed within the patches. This misidentification is more likely to occur when working with species at low density (i.e., rare species; Horn et al. 2000).

In studies of grassland birds, passive sampling is commonly controlled for in the study design (e.g., by surveying equal-sized areas on all patches regardless of patch size) or in the analysis phase (e.g., surveys of equal-sized areas are randomly chosen for analysis or density is used as the response variable of interest). More sophisticated analysis approaches, such as adjusting for correlation in occurrence among multiple survey units within a patch (Johnson and Igl 2001, Davis 2004), are possible.

Habitat Diversity

Background

Williams (1964; cited in Connor and McCoy 1979) proposed that, as the amount of area sampled increased, new habitats were encountered (as a result of gradients or natural habitat variation) along with the associated species and, hence, species number should increase with area because of an increase in the number or types of habitats included in the sample. Hanski (1999) applied the habitat-diversity hypothesis in a metapopulation framework, calling it the "changing environment scenario," whereby large areas are spatially more heterogeneous than small areas and, thus, may include habitats not found on small areas. There would be more species in the large areas because their habitat is more likely to occur there.

Habitat Diversity and Grassland Birds

Many studies of habitat selection in grassland birds (e.g., Cody 1985, Wilson and Belcher 1989, Davis and Duncan 1999, McCoy et al. 2001) have shown that the birds cue into specific structural features of vegetation. Cody (1985) suggested that habitat selection by birds in grasslands is based primarily on vegetation height and density. This has led to categorization of grassland birds on the basis of their height preferences, with the idea that maximizing species on a patch means having a diversity of vegetation structure (e.g., Knopf 1996, Sample and Mossman 1997). To produce a pattern of area sensitivity under the habitat-diversity hypothesis, then, large grasslands would have a greater variety of vegetation structures than small patches and, therefore, would be more likely to meet species' habitat structural requirements. This within-patch variability is related to variation in several factors,

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including moisture, aspect, topography, soil type, and disturbance patterns.

Habitat as a driver for area sensitivity has rarely been considered in studies of grassland birds. Instead, researchers control for habitat diversity either by design or during analysis. Typically, vegetative habitat metrics are collected on the survey unit and are then included in an analysis that includes patch area (e.g., Herkert 1994, Bakker et al. 2002, Winter et al. 2005, Renfrew and Ribic 2008). However, this approach does not directly assess whether large patches have more vegetative habitat diversity than small patches or, more importantly, whether a species' required habitat is more often found on large patches.

To test for habitat diversity at the patch level, vegetative habitat metrics such as the coefficient of variation of plant heights would need to be compared among different-sized patches. Alternatively, Connor and McCoy (1979) suggested studying areas of equal size but with different numbers of habitats. An experiment could be designed in which same-sized blocks of similar vegetation are manipulated to have different vegetative features. We know of no grassland-bird study that has explicitly tested the habitat-diversity hypothesis as an explanation for patterns of area sensitivity. However, Herkert (1994) showed that vegetation structure may play some role in limiting area-sensitive bird species' distributions within small fragments.

AREA-PER-SE

Background

I22-39 cont.

The "area-per-se" hypothesis (also termed the "area effect" by Haila [1988]) states that an increase of species richness with area is attributable to differing colonization and extirpation rates of species in patches of various sizes (Connor and McCoy 1979). Both island biogeography and metapopulation theory (Hanski 1999) assume that larger patches contain larger populations, considering patch size alone, and so are less likely to go extinct by chance. Colonization rate depends on the ability of species to move across a matrix of non-habitat and the distance between patches (i.e., isolation). Extirpation of a species from a patch results from mortality or emigration of all individuals that occupied the patch, coupled with a lack of immigration from other patches. The idea that stochastic effects lead to higher extirpation rates on small patches, which is supported by work on island bird faunas (e.g., Pimm et al. 1988), is integral to these theories. Early work on forest-interior birds showed that patches that exhibited turnover between years tended to be smaller and more isolated from occupied patches than patches that did not exhibit turnover (Villard et al. 1995).

Area-per-se and Grassland Birds

Connor and McCoy (1979) noted that to distinguish the area-per-se hypothesis from passive sampling, decreased extirpation rates for large islands (usually taken as an assumption) must be demonstrated. Little work has been done on grassland birds to determine turnover rates. In the only study to date, Balent and Norment (2003), using marked Grasshopper Sparrows, found that populations in small fields had higher probabilities of extirpation than populations in large fields.

SUMMARY OF HISTORICAL EXPLANATIONS

Passive sampling should be considered a null model that must be accounted for, before claims of area sensitivity are made. Researchers are becoming aware of the need to account for passive sampling, though some studies have not adequately addressed this issue, as noted by Johnson (2001). Little work has been done on how habitat diversity varies with patch size. That increased patch size leads to increased population size is a tenet of both island biogeography and metapopulation theories; under neither theory will area-per-se lead to increased density of a given species with increased patch size (Connor et al. 2000).

WHAT ECOLOGICAL PROCESSES COULD PRODUCE AREA SENSITIVITY?

Here, we develop some of the ideas about ecological processes that affect settling of grassland birds and their use of patches of different sizes, which could lead to higher density on large patches. Researchers (e.g., Connor et al. 2000) have discussed focusing on ecological processes to understand density–area relationships from a taxa-independent viewpoint, and Fletcher et al. (2007) recently argued for a focus on processes to understand area and edge effects in fragmented systems. We also pulled ideas from discussion sections of grassland-bird papers that were used as potential explanations for observed area-sensitivity patterns and put them into general categories (e.g., variations on the reproductive-success hypothesis are common; Helzer and Jelinski 1999, Bollinger and Gavin 2004). Some processes, such as competition (e.g., Bollinger and Gavin 2004), were not included because information was lacking (e.g., interspecific competition in grassland bird species is often undocumented or thought not to occur; see Martin and Gavin 1995, Houston and Bowen 2001, Temple 2002). We focus on ecological processes that may influence patch colonization and extirpation through species' breeding behavior and reproductive success. We briefly summarize background information and then discuss the processes in relation to area sensitivity in grassland birds.

BREEDING BEHAVIOR

Background

Typically, colonization is modeled as random arrival of individuals at a site. It is assumed that once individuals reach a suitable site of adequate size, they will attempt to settle there unless prevented from doing so by conspecific competition (Fretwell and Lucas 1970, Hanski 1999). In breeding birds, territoriality likely sets the minimum patch size, because individuals require some minimum area in which to find essential limited resources (e.g., food, cover, nest sites; Sutherland 1996, Adams 2001). Patches below the minimum area are unlikely to contain a breeding pair. Haila (1988) demonstrated how not understanding territory size can result in erroneous density measurements, leading to flawed conclusions regarding the relationship of density and patch area. However, territoriality, if it merely sets a minimum patch size, is not a sufficient explanation for area sensitivity (Johnson 2001).

Habitat quality (e.g., food resources, microclimate) is an important aspect of breeding ecology in birds (Newton 1998). Under

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various theories (e.g., territoriality theories of Fretwell and Lucas [1970]; source–sink dynamics of Pulliam [1988]), breeding birds settle first in higher-quality (or source) habitats. To produce a pattern of area sensitivity, habitat quality should be related to patch size. Estades (2001) used a modeling approach to investigate how the location of food resources in relation to the nesting habitat patch affected the population density of birds in the patch, and the scenario of food resources being located only in the nesting patch explained the greater density in large patches than in small patches. There is some evidence that food resources for forest-interior passerines are scarcer in smaller patches (Burke and Nol 1998, Zanette et al. 2000).

Breeding-site selection can be affected by the use of social information (behavioral factors such as social attraction and public information; Danchin et al. 2001, Stamps 2001, Valone and Templeton 2002); social information is just starting to be investigated in grassland birds (Ahlering et al. 2006, Nocera et al. 2006). In particular, Ahlering and Faaborg (2006) recently reviewed social attraction (the presence of conspecifics in a patch increasing the probability that other individuals will settle in the same patch) and concluded that it was potentially an important factor affecting settlement patterns. Using a modeling approach, Ray et al. (1991) found that social attraction has the potential to decrease the number of occupied patches in a metapopulation consisting of equal-sized subpopulations. However, multiple behaviors are likely used, but discriminating between social information behaviors in field experiments is difficult (Danchin et al. 2001, Valone and Templeton 2002). For example, both social attraction and public information have been found to affect settlement in the cavity-nesting Collared Flycatcher (*Ficedula albicollis*; Doligez et al. 2004). Social information in general has great potential for explaining area-sensitivity patterns (Fletcher 2006).

I22-39 cont.

Breeding Behavior of Grassland Birds and Area Sensitivity

Territory size and quality.—How territory is defined (e.g., nesting site only, nesting and feeding sites, multipurpose) will affect measurement of patch size and conclusions about area sensitivity. However, there is limited information about territories in grassland birds. Of the 17 species in Table 1 (excluding Brown-headed Cowbird), seven have multipurpose or nesting and feeding territories: Dickcissel (Temple 2002), Sedge Wren (Herkert et al. 2001), Vesper Sparrow (Jones and Cornely 2002), Horned Lark (Beason 1995), Eastern Meadowlark (Lanyon 1995), Bobolink (Martin and Gavin 1995), and Western Meadowlark (Davis and Lanyon 2008). For the other species, use of the territory varies from nest defense to not even being territorial; five species accounts completely lacked information on the type of territory.

If birds have feeding areas separate from nesting areas (e.g., Savannah Sparrow, [Wheelwright and Rising 2008], Upland Sandpiper [Houston and Bowen 2001]), the size of the nesting site will be less than the area used for breeding. Because the nesting site is typically sampled during density surveys, there will be a downward bias in the patch size assumed to be used by the species; errors in this basic measurement could lead to erroneous conclusions about area sensitivity. For example, Northern Harriers have a median breeding home range of 260 ha (range: 170–15,000 ha; MacWhirter and Bildstein 1996), but in Illinois (Herkert et al. 1999), this species twice nested on a patch of only 8 ha. In this situation, the birds used nearby fields as additional foraging sites (Herkert et al. 1999). Estimation of area of use (i.e., breeding home range) would better reflect minimum area requirements for species that use more than a single patch for breeding. We know of no grassland-bird study that has investigated this aspect of territoriality in relation to area sensitivity.

Information on habitat quality for grassland birds is limited. Bollinger and Gavin (2004) suggested that microclimate may lead to a pattern of area sensitivity in Bobolinks. In this case, the microclimate near edges may not be as suitable as near the center of the patch and birds may avoid nesting near edges. Smaller patches, with proportionately more edge, would have lower-quality nesting habitat, and birds would avoid breeding in them, resulting in decreased bird densities in small patches. We know of no grassland-bird study that has investigated how habitat quality varies with patch size.

Social information.—There are hints that social facilitation may occur in grassland birds. Some grassland bird species nest in loose colonies or assemblages; these include Upland Sandpiper, Northern Harrier, Henslow's Sparrow, and Chestnut-collared Longspur (e.g., MacWhirter and Bildstein 1996, Hill and Gould 1997, Houston and Bowen 2001, Herkert et al. 2002). Bobolinks have high return rates to breeding patches, and individuals are thought to use social information to make settling decisions (Bollinger and Gavin 1989). For example, Bobolinks defended territories in low-quality habitats after being exposed to decoys and playbacks in those habitats during the dispersal period of the previous year (Nocera et al. 2006). Focusing on a different species, Ahlering et al. (2006) induced Baird's Sparrows to occupy previously vacant grassland patches through the use of call broadcasts. We know of no grassland-bird study that has investigated how social information might affect area-sensitivity patterns.

Reproductive Success

Background

Given the importance of nest predation (and cowbird parasitism) as an environmental pressure shaping avian life-history traits (Martin 1995), birds may tend to avoid small patches because of a greater perceived predation risk in small patches overall. Reduced reproductive success near edges where increased nest-predation rates have led to reduced use of small patches could translate to patch-size effects (e.g., Wilcove 1985, Temple and Cary 1988, Paton 1994, Keyser et al. 1998). Over time, individuals that avoided small patches may have been more successful than individuals that settled on small patches, and, if habitat selection while settling is heritable, selection could then favor individuals that avoid small patches. Avoidance of small patches, then, may be an evolutionary (or innate) response, and grassland birds may seek out large grasslands or something correlated with largeness (e.g., low topography, few anthropogenic features, treeless horizons). In addition, birds may have a proximate response to a (perceived or actual) higher risk of predation or parasitism associated with edges (Lima and Valone 1991). That reproductive success of forest birds near edges is lower than that away from edges has been well documented (Faaborg et al. 1995).

Another aspect of reproductive success is natal and breeding philopatry. If first-time-breeding songbirds return to their

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natal patches and more birds hatch in large patches because nest success is higher there, the resulting density will be higher in large patches, other factors being equal. This result is expected for any frequency of homing, although the pattern will develop more slowly with a low frequency of homing than it would with a high frequency. In a similar way, breeding philopatry could lead to a population buildup if philopatry among successful breeders is higher than that for failed breeders.

Reproductive Success, Grassland Birds, and Area Sensitivity

Predation.—Usually, predation is lower on nests in large grassland patches for both artificial (Burger et al. 1994, Winter et al. 2000) and natural nests (Johnson and Temple 1990, Winter and Faaborg 1999, Winter et al. 2000, Herkert et al. 2003, Bollinger and Gavin 2004; but see Skagen et al. 2005, Davis et al. 2006). However, whether differences in nest survival translate into lower densities in small patches for grassland bird species has not been established (e.g., Winter and Faaborg [1999] found that nesting success of Dickcissels was related to patch size, but this did not result in lower densities in small patches).

Predation on grassland bird nests is not solely attributable to predators (e.g., Raccoon [*Procyon lotor*]) and the brood parasite, Brown-headed Cowbird, associated with woody edges but is also a function of predators that live in the grassland interior (e.g., Thirteen-lined Ground Squirrel [*Spermophilus tridecemlineatus*], snakes; Thompson et al. 1999, Pietz and Granfors 2000, Renfrew and Ribic 2003). Therefore, the relative importance of edge effects in grassland birds is likely an interplay between the type of edge surrounding the focal patch, the habitat of the focal patch, and the species composition, abundance, and activity of grassland predators versus woody-edge predators. For example, in a grassland where the main predators were Thirteen-lined Ground Squirrels, which were more common away from woodland edges, nest survival in Clay-colored Sparrows (*Spizella pallida*) and Vesper Sparrows was higher for nests located near woodland edges than for those in field interiors (Grant et al. 2006). By contrast, in pasture habitat with some woody edges, grassland birds' nest survival was not affected by placement near edges because nest predation by both edge predators and grassland predators was common (Renfrew et al. 2005).

I22-39 cont.

We are just now beginning to investigate predators and their activity around or within grassland patches of different sizes. In some areas, the predator community may differ between small and large patches (Skagen et al. 2005). In addition, predator activity may vary in patches of differing size. Sovada et al. (2000) found that Red Fox (*Vulpes vulpes*) activity was greater in small grassland patches. However, Raccoon activity did not increase around small pastures in Wisconsin; Raccoons moved throughout the pastures regardless of their size (Renfrew and Ribic 2003, Renfrew et al. 2005). Little is known about what would draw predators into small patches; for example, we lack information on potential prey bases in patches of differing sizes. Compounding the problem is that potential prey (e.g., small mammals) of large predators may themselves be predators of grassland bird nests.

Natal and breeding philopatry.—Information on natal and breeding philopatry is limited because of the necessity of banding and following the movements and fates of individuals. In general, natal philopatry has been found to be low in passerines, particularly migratory species (Weatherhead and Forbes 1994; Savannah Sparrow and Bobolink were the two grassland species included in the review). Jones et al. (2007) found low return rates for territorial males and nestlings of Sprague's Pipit, Savannah Sparrow, Grasshopper Sparrow, and Baird's Sparrow. By contrast, Bollinger and Gavin (1989) documented substantial breeding philopatry in both male and female Bobolinks. Savannah Sparrows (Wheelwright and Rising 2008) and Eastern Meadowlarks (Lanyon 1995) also have shown high breeding-site fidelity, with most surviving adults returning to the same territory each year.

Breeding philopatry appears to be related to individual reproductive success. This has been documented in a few grassland bird species. Gavin and Bollinger (1988) found that 76% of male Bobolinks that returned had been reproductively successful in the previous year, compared with only 35% success for the males that did not return. Zimmerman and Finck (1989) reported that return rates of male Dickcissels were highest if the previous year's nest attempts were successful. We know of no information regarding natal and breeding philopatry in relation to patch size.

SUMMARY OF ECOLOGICAL PROCESSES

Until now, the ecological processes discussed here have not been formally developed as explanations of area sensitivity in grassland birds. New research will be needed to evaluate these ideas; it may be possible to design field experiments to investigate some aspects of them.

THE LANDSCAPE AS A MODIFIER FOR AREA SENSITIVITY

A patch-centered view of grassland bird populations has provided a wealth of information. Several factors may confound inferences that can be made from patch-level studies, however, including the landscape surrounding patches. As with Neotropical migratory birds (Freemark et al. 1995), a landscape-level perspective is necessary to set the context for patch-level work, as well as to understand how large-scale factors affect patterns detected at the patch level (Turner et al. 2001, Bissonette and Storch 2003). A landscape perspective, including its potential modification of area-sensitivity patterns, became a focus of grassland bird research in the present century. We briefly discuss landscape-scale concepts with a focus on application to area sensitivity in grassland birds.

Key to incorporating a landscape perspective into area sensitivity hypotheses is to select an ecological neighborhood (Addicott et al. 1987) that appropriately characterizes the way in which a grassland bird views its habitat. Most work has viewed the landscape level as an extension of habitat selection in grassland birds. Habitat selection is viewed as a hierarchical process in which birds consider regional or landscape conditions before selecting habitats at a finer scale (Johnson 1980, Hutto 1985). A major question is whether human perceptions of what constitutes habitat are consistent with the ways in which grassland birds perceive habitat (Sample et al. 2003). For example, birds may perceive continuous areas of grassland habitat of different structures as a single patch, whereas researchers would distinguish multiple patches; researchers typically define the patch as an area of relatively similar habitat structure under common management.

Because information on the appropriate scale of sampling for grassland birds is lacking, multiscale analyses are commonly used

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to quantify the importance of the patch as compared with the landscape. A typical approach is to calculate metrics that quantify composition and configuration of the surrounding landscape within multiple buffers (i.e., scales) that radiate from the survey point (e.g., Niemuth 2000, Bakker et al. 2002) or from the boundaries of a patch (e.g., Ribic and Sample 2001, Renfrew and Ribic 2008). Although there is no guarantee that results of multiscale analyses will provide complete insight, such analyses may explain the data better than analyses based on a single spatial scale. For example, both Cunningham and Johnson (2006) and Renfrew and Ribic (2008) found that models incorporating patch and landscape information were best in explaining density patterns for most grassland bird species that they studied. Landscape context may modify how breeding species use patches and, thus, affect how aspects of the breeding system could produce patterns of area sensitivity.

Evidence is accumulating that grassland birds respond, albeit at times inconsistently (Winter et al. 2006b), to features surrounding their focal patch. Presence of woody vegetation (even solitary trees) in the surrounding landscape appears to be associated with lower occurrences and densities of grassland birds in the focal patch (Coppedge et al. 2001b; Ribic and Sample 2001; Bakker et al. 2002; Fletcher and Koford 2003; Grant et al. 2004; Cunningham and Johnson 2006; Winter et al. 2006a, b; Renfrew and Ribic 2008). The amount of grassland habitat in the landscape may also be important for grassland birds; fragmentation (*sensu* Fahrig 2003) does not appear to be the primary landscape issue for grassland birds. Some grassland bird species thought to require large patches will use small patches that are within a larger grassland complex (Northern Harrier [Herkert et al. 1999], Greater Prairie-Chicken [Niemuth 2000], Short-eared Owl [*Asio flammeus*; Herkert et al. 1999], Western Meadowlark [Frawley and Best 1991], Burrowing Owl [*Speotyto cunicularia*; Warnock and James 1997]).

I22-39 cont.

There is some evidence that there can be an interaction of landscape-level features and occupancy rates or density of grassland bird species within the focal patch. Bakker et al. (2002) found that occupancy rates of Sedge Wrens (in both tallgrass and mixed-grass prairie regions) and Clay-colored Sparrows (tallgrass region only) were higher in suitable small patches when there was a large percentage of grassland habitat in the surrounding landscape compared with occupancy rates in large, isolated patches with less grassland habitat surrounding them. Renfrew and Ribic (2008) found no evidence of a density–area relationship for Bobolink and Savannah Sparrow in pastures when the pastures were embedded in a landscape with a large percentage of grassland habitat, but they found a positive relationship when the pastures were in landscapes with a large percentage of woods. In general, habitat-selection studies on grassland birds have found that area sensitivity is less apparent in landscapes composed of a high proportion of grassland (Bajema and Lima 2001, Bakker et al. 2002, Horn and Koford 2006, Renfrew and Ribic 2008).

Even though landscape variables may explain some variation in the occurrence and density of some species, mechanistic explanations for landscape effects have rarely been proposed for grassland birds (Ryan et al. 1998, Johnson 2001; but see Reynolds et al. 2001). For our focus on area sensitivity, landscape context may affect the ecological processes we discussed previously. For example, although social attraction may affect how species use the landscape (Lima and Zollner 1996), it may also be affected by landscape context (Fletcher 2006). Landscape-level features such as patch isolation could confound effects of social attraction on settling patterns. For example, grassland patches, regardless of size, that are surrounded by woody habitat may be less likely to be occupied (Bakker 2003); an individual may be less likely to find such an isolated patch, and social attraction may be less likely to occur. Occupied sites themselves can be clustered; proximity to neighboring populations was a predictor of habitat occupancy for Greater Prairie-Chickens (Niemuth 2000), Burrowing Owls (Warnock and James 1997), and Henslow's Sparrows (Mazur 1996).

For predation, given the suite of woody- and grassland-based predators found to affect grassland birds' reproductive success, a landscape component may be necessary to understand how some species affect grassland birds in the focal patch. For example, because the large home ranges of woody- and grassland-based mesopredators typically encompass multiple patches, composition of predator communities can be strongly influenced by landscape characteristics (Dijak and Thompson 2000, Heske et al. 2001, Gehring and Swihart 2003). Little is known about how landscape context influences smaller-sized grassland-based predators. However, regional processes affecting small-sized predator populations may be important for understanding their influence at the patch level. For example, Davis (2003) found the lowest nest success for grassland birds in prairie patches in a year when populations of the Meadow Vole (*Microtus pennsylvanicus*) were regionally at a peak.

Understanding area sensitivity of grassland birds in a landscape context will be a continuing area of research for some time to come (see Knick and Rotenberry [2002] for a related discussion of these issues for shrubsteppe birds). The key will be to incorporate landscape considerations in the study design to either control for the effect (e.g., consider dynamics in similar landscapes) or to include it as an explanatory variable in analysis (e.g., contrasting grassland patches in highly wooded landscapes vs. patches embedded in open grassland landscapes; also see Ries et al. [2004] for a generalized approach to understanding edge and patch area effects).

Area Sensitivity and Conservation

The conservation of grassland birds is tied to management of specific parcels of land; therefore, investigations using a patch-based model will continue to be relevant. Patch-based area sensitivity is an important concept underlying current grassland-bird conservation planning efforts (Fitzgerald et al. 1998, Knutson et al. 2001). What is changing is how landscape considerations will influence patch-based recommendations. For example, patch-based area-sensitivity ideas were used to develop the Bird Conservation Area (BCA) model for grassland bird management in some Midwestern states (Sample and Mossman 1997, Sample et al. 2003). Under the BCA model, a large core of contiguous undisturbed grassland is embedded in a large (>4,000-ha) matrix of agricultural land uses, coupled with additional patches of suitable grassland scattered within the matrix, most of which are privately owned. However, this model was designed as a tool for allowing large-scale management of grassland birds in working agricultural landscapes. Because landscape composition and land use vary greatly across the

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Great Plains and Midwest—for example, in the amount and distribution of grasslands and "hostile" habitats such as row crops and woodlots—testing the BCA model across regions will be important, particularly in discovering how it may need to be tailored for different landscapes. Winter et al. (2006b) specifically tested the BCA model using tallgrass-prairie patches in eastern North Dakota and western Minnesota. Although Winter et al. (2006b) agreed that conserving large continuous areas of tallgrass prairie was best, they also concluded that the Midwestern model may not be the best approach in the open landscapes they studied. This result is not surprising, given that patterns of area sensitivity in grassland birds are influenced by the surrounding landscape. The results of Winter et al.'s (2006b) study indicate the need for flexibility when applying management actions based on assumptions about area sensitivity in different landscapes.

The potential interplay between area sensitivity in a patch and the landscape also points to a potential drawback in conservation plans that rely too heavily on the concept of area sensitivity: the idea that geographic areas with patches of habitat that are considered "too small" for grassland birds are "not important" for conservation planning. A stringent conservation focus on only large habitat patches may neglect small patches worthy of protection. Small grassland patches embedded in treeless landscapes may offer good conservation opportunities for grassland birds (e.g., Bakker et al. 2002, Davis 2004, Winter et al. 2006a). In addition, small patches of native prairie sod can be important for rare plants or remnant-dependent prairie invertebrates, as well as for biodiversity in general.

I22-39 cont.

Some physical drivers and processes are important for successful management of grassland birds (Askins et al. 2007). However, focusing on ecological processes also may be important for understanding regional variation in bird response to management. For example, knowing whether edge predators are indeed more important than interior grassland predators in affecting grassland birds' productivity in small patches would be particularly important, because management strategies for reducing the effect of edge predators could be quite different from those for grassland predators (e.g., landscape-scale removal strategies for edge predators proposed by Winter et al. [2000]). Understanding aspects of breeding ecology in relation to patch area can help managers as well. How many species are like the Northern Harrier and can use small patches of habitat for breeding in a larger, grass-dominated landscape? Are these species breeding successfully in small patches? Knowing this would inform conservation actions such as what properties to purchase or restore, how conservation properties should be located with respect to one another, or how to manage neighboring lands. It would be of conservation value to understand more about how playbacks or other aspects of social information can be used to lure grassland birds into settling in restored areas. In particular, it would be important to know that birds are being lured from poor habitat to good habitat (and not vice versa).

Grassland ecosystems throughout the world have been greatly affected by humans, and this continues at an increasing pace. Conservation issues, such as loss of native and surrogate grasslands and accelerated land-use changes, are likely similar across these systems (Vickery et al. 1999, Newton 2004). In an increasing number of regions and landscapes, development (residential, commercial, industrial, and governmental, and the attendant infrastructure of pavement, trees, etc.) associated with an increasing human population is of particular concern. Development permanently alters the structure of grassland and agricultural landscapes and, as a result, permanently limits our options for managing grassland birds at large landscape scales. Development patterns vary and may hinder conservation efforts at smaller scales as well. By improving our understanding of the ecological needs of grassland bird species, including area requirements and the relationship between these requirements and human alteration of landscapes, we will be able to more effectively contribute to the management and conservation of these species.

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Literature Cited

Adams, E. S. 2001. Approaches to the study of territory size and shape. Annual Review of Ecology and Systematics 32:277–303.

Addicott, J. F., J. M. Aho, M. F. Antolin, D. K. Padilla, J. S. Richardson, and D. A. Soluk. 1987. Ecological neighborhoods: Scaling environmental patterns. Oikos 49:340–346.

Ahlering, M. A., and J. Faaborg. 2006. Avian habitat management meets conspecific attraction: If you build it, will they come? Auk 123:301–312.

Ahlering, M. A., D. H. Johnson, and J. Faaborg. 2006. Conspecific attraction in a grassland bird, the Baird's Sparrow. Journal of Field Ornithology 77:365–371.

Askins, R. A., F. Chávez-Ramírez, B. C. Dale, C. A. Haas, J. R. Herkert, F. L. Knopf, and P. D. Vickery. 2007. Conservation of grassland birds in North America: Understanding ecological processes in different regions. Ornithological Monographs, no. 64.

Askins, R. A., J. F. Lynch, and R. Greenberg. 1990. Population declines in migratory birds in eastern North America. Pages 1–57 *in* Current Ornithology, vol. 7 (D. M. Power, Ed.). Plenum Press, New York.

Bajema, R. A., and S. L. Lima. 2001. Landscape-level analyses of Henslow's Sparrow (*Ammodramus henslowii*) abundance in reclaimed coal mine grasslands. American Midland Naturalist 145:288–298.

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Bakker, K. K. 2003. The effect of woody vegetation on grassland nesting birds: An annotated bibliography. Proceedings of the South Dakota Academy of Science 82:119–141.

Bakker, K. K., D. E. Naugle, and K. F. Higgins. 2002. Incorporating landscape attributes into models for migratory grassland bird conservation. Conservation Biology 16:1638–1646.

Balent, K. L., and C. J. Norment. 2003. Demographic characteristics of a Grasshopper Sparrow population in a highly fragmented landscape of western New York state. Journal of Field Ornithology 74:341–348.

Beason, R. C. 1995. Horned Lark (*Eremophila alpestris*). *In* The Birds of North America, no. 195 (A. Poole and F. Gill, Eds.). Academy of Natural Sciences, Philadelphia, and American Ornithologists' Union, Washington, D.C.

Bissonette, J. A., and I. Storch, Eds. 2003. Landscape Ecology and Resource Management: Linking Theory with Practice. Island Press, Washington, D.C.

Bolger, D. T., T. A. Scott, and J. T. Rotenberry. 1997. Breeding bird abundance in an urbanizing landscape in coastal southern California. Conservation Biology 11:406–421.

Bollinger, E. K. 1995. Successional changes and habitat selection in hayfield bird communities. Auk 112:720–730.

Bollinger, E. K., and T. A. Gavin. 1989. The effects of site quality on breeding-site fidelity in Bobolinks. Auk 106:584–594.

Bollinger, E. K., and T. A. Gavin. 2004. Responses of nesting Bobolinks (*Dolichonyx oryzivorus*) to habitat edges. Auk 121:767–776.

Burger, L. D., L. W. Burger, Jr., and J. Faaborg. 1994. Effects of prairie fragmentation on predation on artificial nests. Journal of Wildlife Management 58:249–254.

I22-39 cont.

Burke, D. M., and E. Nol. 1998. Influence of food abundance, nest-site habitat, and forest fragmentation on breeding Ovenbirds. Auk 115:96–104.

Cody, M. L. 1985. Habitat selection in grassland and open-country birds. Pages 191–226 *in* Habitat Selection in Birds (M. L. Cody, Ed.). Academic Press, New York.

Connor, E. F., A. C. Courtney, and J. M. Yoder. 2000. Individuals–area relationships: The relationship between animal population density and area. Ecology 81:734–748.

Connor, E. F., and E. D. McCoy. 1979. The statistics and biology of the species–area relationship. American Naturalist 113:791–833.

Coppedge, B. R., D. M. Engle, S. D. Fuhlendorf, R. E. Masters, and M. S. Gregory. 2001a. Landscape cover type and pattern dynamics in fragmented southern Great Plains grasslands, USA. Landscape Ecology 16:677–690.

Coppedge, B. R., D. M. Engle, R. E. Masters, and M. S. Gregory. 2001b. Avian response to landscape change in fragmented southern Great Plains grasslands. Ecological Applications 11: 47–59.

Cunningham, M. A., and D. H. Johnson. 2006. Proximate and landscape factors influence grassland bird distributions. Ecological Applications 16:1062–1075.

Danchin, É., D. Heg, and B. Doligez. 2001. Public information and breeding habitat selection. Pages 243–258 *in* Dispersal (J. Clobert, É. Danchin, A. A. Dhondt, and J. D. Nichols, Eds.). Oxford University Press, New York.

Davis, S. K. 2003. Nesting ecology of mixed-grass prairie songbirds in southern Saskatchewan. Wilson Bulletin 115:119–130.

Davis, S. K. 2004. Area sensitivity in grassland passerines: Effects of patch size, patch shape, and vegetation structure on bird abundance and occurrence in southern Saskatchewan. Auk 121:1130–1145.

Davis, S. K., R. M. Brigham, T. L. Shaffer, and P. C. James. 2006. Mixed-grass prairie passerines exhibit weak and variable responses to patch size. Auk 123:807–821.

Davis, S. K., and D. C. Duncan. 1999. Grassland songbird occurrence in native and crested wheatgrass pastures of southern Saskatchewan. Pages 211–218 *in* Ecology and Conservation of Grassland Birds of the Western Hemisphere (P. D. Vickery and J. R. Herkert, Eds.). Studies in Avian Biology, no. 19.

Davis, S. K., and W. E. Lanyon. 2008. Western Meadowlark (*Sturnella neglecta*). *In* The Birds of North America Online (A. Poole and F. Gill, Eds.). Cornell Lab of Ornithology, Ithaca, New York. [Online.] Available at bna.birds.cornell.edu/bna/species/104.

DeJong, J. R., D. E. Naugle, K. K. Bakker, F. R. Quamen, and K. F. Higgins. 2006. Impacts of agricultural tillage on grassland birds in western South Dakota. Proceedings of the 19th North American Prairie Conference:76–80.

Dijak, W. D., and F. R. Thompson III. 2000. Landscape and edge effects on the distribution of mammalian predators in Missouri. Journal of Wildlife Management 64:209–216.

Doligez, B., T. Pärt, É. Danchin, J. Clobert, and L. Gustafsson. 2004. Availability and use of public information and conspecific density for settlement decisions in the Collared Flycatcher. Journal of Animal Ecology 73:75–87.

Estades, C. F. 2001. The effect of breeding-habitat patch size on bird population density. Landscape Ecology 16:161–173.

Faaborg, J., M. Brittingham, T. Donovan, and J. Blake. 1995. Habitat fragmentation in the temperate zone. Pages 357–380 *in* Ecology and Management of Neotropical Migratory Birds (T. E. Martin and D. M. Finch, Eds.). Oxford University Press, New York.

Fahrig, L. 2003. Effects of habitat fragmentation on biodiversity. Annual Review of Ecology, Evolution, and Systematics 34:487–515.

Fargione, J., J. Hill, D. Tilman, S. Polasky, and P. Hawthorne. 2008. Land clearing and the biofuel carbon debt. Science 319:1235–1238.

Fitzgerald, J. A., D. N. Pashley, S. J. Lewis, and B. Pardo. 1998. Partners in Flight Bird Conservation Plan for the Northern Tallgrass Prairie (Physiographic Area 40). American Bird Conservancy, The Plains, Virginia. [Online.] Available at www.partnersinflight.org/bcps/plan/pl_40all.pdf.

Fletcher, R. J., Jr. 2006. Emergent properties of conspecific attraction in fragmented landscapes. American Naturalist 168:207–219.

Fletcher, R. J., Jr., and R. R. Koford. 2003. Spatial responses of Bobolinks (*Dolichonyx oryzivorus*) near different types of edges in northern Iowa. Auk 120:799–810.

Fletcher, R. J., Jr., L. Ries, J. Battin, and A. D. Chalfoun. 2007. The role of habitat area and edge in fragmented landscapes: Definitively distinct or inevitably intertwined? Canadian Journal of Zoology 85:1017–1030.

Frawley, B. J., and L. B. Best. 1991. Effects of mowing on breeding bird abundance and species composition in alfalfa fields. Wildlife Society Bulletin 19:135–142.

Freemark, K. E., J. B. Dunning, S. J. Hejl, and J. R. Probst. 1995. A landscape ecology perspective for research, conservation, and

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management. Pages 381–427 *in* Ecology and Management of Neotropical Birds (T. E. Martin and D. M. Finch, Eds.). Oxford University Press, New York.

FRETWELL, S. D., AND H. L. LUCAS, JR. 1970. On territorial behavior and other factors influencing habitat distribution in birds. I. Theoretical development. Acta Biotheoretica 19:16–36.

GAVIN, T. A., AND E. K. BOLLINGER. 1988. Reproductive correlates of breeding-site fidelity in Bobolinks (*Dolichonyx oryzivorus*). Ecology 69:96–103.

GEHRING, T. M., AND R. K. SWIHART. 2003. Body size, niche breadth, and ecologically scaled responses to habitat fragmentation: Mammalian predators in an agricultural landscape. Biological Conservation 109:283–295.

GRANT, T. A., E. [M.] MADDEN, AND G. B. BERKEY. 2004. Tree and shrub invasion in northern mixed-grass prairie: Implications for breeding grassland birds. Wildlife Society Bulletin 32:807–818.

GRANT, T. A., E. [M.] MADDEN, T. L. SHAFFER, P. J. PIETZ, G. B. BERKLEY, AND N. J. KADRMAS. 2006. Nest survival of Clay-colored and Vesper sparrows in relation to woodland edge in mixed-grass prairies. Journal of Wildlife Management 70:691–701.

HAILA, Y. 1988. Calculating and miscalculating density: The role of habitat geometry. Ornis Scandinavica 19:88–92.

HAILA, Y., I. K. HANSKI, AND S. RAIVIO. 1993. Turnover of breeding birds in small forest fragments: The "sampling" colonization hypothesis corroborated. Ecology 74:714–725.

HANSKI, I. 1999. Metapopulation Ecology. Oxford University Press, New York.

HANSKI, I., AND D. SIMBERLOFF. 1997. The metapopulation approach, its history, conceptual domain, and application to conservation. Pages 5–26 *in* Metapopulation Biology (I. A. Hanski and M. E. Gilpin, Eds.). Academic Press, San Diego, California.

I22-39 cont.

HELZER, C. J., AND D. E. JELINSKI. 1999. The relative importance of patch area and perimeter–area ratio to grassland breeding birds. Ecological Applications 9:1448–1458.

HERKERT, J. R. 1994. The effects of habitat fragmentation on Midwestern grassland bird communities. Ecological Applications 4:461–471.

HERKERT, J. R., D. E. KROODSMA, AND J. P. GIBBS. 2001. Sedge Wren (*Cistothorus platensis*). *In* The Birds of North America Online (A. Poole, Ed.). Cornell Lab of Ornithology, Ithaca, New York. [Online.] Available at bna.birds.cornell.edu/bna/species/582.

HERKERT, J. R., D. L. REINKING, D. A. WIEDENFELD, M. WINTER, J. L. ZIMMERMAN, W. E. JENSEN, E. J. FINCK, R. R. KOFORD, D. H. WOLFE, S. K. SHERROD, AND OTHERS. 2003. Effects of prairie fragmentation on the nesting success of breeding birds in the midcontinental United States. Conservation Biology 17:587–594.

HERKERT, J. R., S. A. SIMPSON, R. L. WESTMEIER, T. L. ESKER, AND J. W. WALK. 1999. Response of Northern Harriers and Short-eared Owls to grassland management in Illinois. Journal of Wildlife Management 63:517–523.

HERKERT, J. R., P. D. VICKERY, AND D. E. KROODSMA. 2002. Henslow's Sparrow (*Ammodramus henslowii*). *In* The Birds of North America Online (A. Poole, Ed.). Cornell Lab of Ornithology, Ithaca, New York. [Online.] Available at bna.birds.cornell.edu/bna/species/672.

HESKE, E. J., S. K. ROBINSON, AND J. D. BRAWN. 2001. Nest predation and Neotropical migrant songbirds: Piecing together the fragments. Wildlife Society Bulletin 29:52–61.

HIGGINS, K. F., D. F. NAUGLE, AND K. J. FORMAN. 2002. A case study of changing land use practices in the northern Great Plains, U.S.A: An uncertain future for waterbird conservation. Waterbirds 25 (Special Publication 2):42–50.

HILL, D. P., AND L. K. GOULD. 1997. Chestnut-collared Longspur (*Calcarius ornatus*). *In* The Birds of North America, no. 288 (A. Poole and F. Gill, Eds.). Academy of Natural Sciences, Philadelphia, and American Ornithologists' Union, Washington, D.C.

HORN, D. J., R. F. FLETCHER, JR., AND R. R. KOFORD. 2000. Detecting area sensitivity: A comment on previous studies. American Midland Naturalist 144:28–35.

HORN, D. J., AND R. R. KOFORD. 2006. Could the area sensitivity of some grassland birds be affected by landscape composition? Proceedings of the 19th North American Prairie Conference:109–116.

HORN, D. J., R. R. KOFORD, AND M. L. BRALAND. 2002. Effects of field size and landscape composition on grassland birds in south-central Iowa. Journal of the Iowa Academy of Science 109:1–7.

HOUSTON, C. S., AND D. E. BOWEN, JR. 2001. Upland Sandpiper (*Bartramia longicauda*). *In* The Birds of North America Online (A. Poole, Ed.). Cornell Lab of Ornithology, Ithaca, New York. [Online.] Available at bna.birds.cornell.edu/bna/species/580.

HOUSTON, C. S., AND J. K. SCHMUTZ. 1999. Changes in bird populations on Canadian grasslands. Pages 87–94 *in* Ecology and Conservation of Grassland Birds of the Western Hemisphere (P. D. Vickery and J. R. Herkert, Eds.). Studies in Avian Biology, no. 19.

HUTTO, R. L. 1985. Habitat selection in nonbreeding, migratory landbirds. Pages 455–476 *in* Habitat Selection in Birds (M. L. Cody, Ed.). Academic Press, New York.

JOHNSON, D. H. 1980. The comparison of usage and availability measurements for evaluating resource preference. Ecology 61:65–71.

JOHNSON, D. H. 2001. Habitat fragmentation effects on birds in grassland and wetlands: A critique of our knowledge. Great Plains Research 11:211–231.

JOHNSON, D. H., AND L. D. IGL. 2001. Area requirements of grassland birds: A regional perspective. Auk 118:24–34.

JOHNSON, R. G., AND S. A. TEMPLE. 1990. Nest predation and brood parasitism of tallgrass prairie birds. Journal of Wildlife Management 54:106–111.

JONES, S. L., AND J. E. CORNELY. 2002. Vesper Sparrow (*Pooecetes gramineus*). *In* The Birds of North America Online (A. Poole, Ed.). Cornell Lab of Ornithology, Ithaca, New York. [Online.] Available at bna.birds.cornell.edu/bna/species/624.

JONES, S. L., J. S. DIENI, M. T. GREEN, AND P. J. GOUSE. 2007. Annual return rates of breeding grassland songbirds. Wilson Journal of Ornithology 119:89–94.

KEYSER, A. J., G. E. HILL, AND E. C. SOEHREN. 1998. Effects of forest fragment size, nest density, and proximity to edge on the risk of predation to ground-nesting passerine birds. Conservation Biology 12:986–994.

KNICK, S. T., AND J. T. ROTENBERRY. 2002. Effects of habitat fragmentation on passerine birds breeding in intermountain shrubsteppe. Pages 130–140 *in* Effects of Habitat Fragmentation on Birds in Western Landscapes: Contrasts with Paradigms from the Eastern U.S. (T. L. George and D. S. Dobkin, Eds.). Studies in Avian Biology, no. 25.

KNOPF, F. L. 1996. Prairie legacies: Birds. Pages 135–148 *in* Prairie Conservation: Preserving North America's Most Endangered

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Ecosystem (F. B. Samson and F. L. Knopf, Eds.). Island Press, Covelo, California.

Knutson, M. G., G. Butcher, J. Fitzgerald, and J. Shieldcastle. 2001. Partners in Flight Bird Conservation Plan for the Upper Great Lakes Plain (Physiographic Area 16). American Bird Conservancy, The Plains, Virginia. [Online.] Available at www.partnersinflight.org/bcps/plan/pl_16_10.pdf.

Lanyon, W. E. 1995. Eastern Meadowlark (*Sturnella magna*). *In* The Birds of North America, no. 160 (A. Poole and F. Gill, Eds.). Academy of Natural Sciences, Philadelphia, and American Ornithologists' Union, Washington, D.C.

Lima, S. L., and T. J. Valone. 1991. Predators and avian community organization: An experiment in a semi-desert grassland. Oecologia 86:105–112.

Lima, S. L., and P. A. Zollner. 1996. Towards a behavioral ecology of ecological landscapes. Trends in Ecology and Evolution 11:131–135.

MacArthur, R. H., and E. O. Wilson. 1967. The Theory of Island Biogeography. Princeton University Press, Princeton, New Jersey.

MacWhirter, R. B., and K. L. Bildstein. 1996. Northern Harrier (*Circus cyaneus*). *In* The Birds of North America, no. 210 (A. Poole and F. Gill, Eds.). Academy of Natural Sciences, Philadelphia, and American Ornithologists' Union, Washington, D.C.

Martin, S. G., and T. A. Gavin. 1995. Bobolink (*Dolichonyx oryzivorus*). *In* The Birds of North America, no. 176 (A. Poole and F. Gill, Eds.). Academy of Natural Sciences, Philadelphia, and American Ornithologists' Union, Washington, D.C.

Martin, T. E. 1995. Avian life history evolution in relation to nest sites, nest predation, and food. Ecological Monographs 65:101–127.

I22-39 cont.

Mazur, R. 1996. Implications of field management for Henslow's Sparrow habitat at Saratoga National Historic Park, New York. M.S. thesis, State University of New York, Syracuse.

McCoy, T. D., M. R. Ryan, L. W. Burger, Jr., and E. W. Kurzejeski. 2001. Grassland bird conservation: CP1 vs CP2 plantings in Conservation Reserve Program fields in Missouri. American Midland Naturalist 145:1–17.

Natural Resources Conservation Service. 2007. National Resources Inventory 2003 Annual NRI. [Online.] Available at www.nrcs.usda.gov/technical/NRI.

Newton, I. 1998. Population Limitation in Birds. Academic Press, London.

Newton, I. 2004. The recent declines of farmland bird populations in Britain: An appraisal of causal factor and conservation actions. Ibis 146:579–600.

Niemuth, N. D. 2000. Land use and vegetation associated with Greater Prairie-chicken leks in an agricultural landscape. Journal of Wildlife Management 64:278–286.

Nocera, J. J., G. J. Forbes, and L.-A. Giraldeau. 2006. Inadvertent social information in breeding site selection of natal dispersing birds. Proceedings of the Royal Society of London, Series B 273:349–355.

Paton, P. W. C. 1994. The effect of edge on avian nest success: How strong is the evidence? Conservation Biology 8:17–26.

Pietz, P. J., and D. A. Granfors. 2000. Identifying predators and fates of grassland passerine nests using miniature video cameras. Journal of Wildlife Management 64:71–87.

Pimm, S. L., H. L. Jones, and J. Diamond. 1988. On the risk of extinction. American Naturalist 132:757–785.

Pulliam, H. R. 1988. Sources, sinks, and population regulation. American Naturalist 132:652–661.

Ray, C., M. Gilpin, and A. T. Smith. 1991. The effect of conspecific attraction on metapopulation dynamics. Biological Journal of the Linnean Society 42:123–134.

Renfrew, R. B. 2002. The influence of patch and landscape characteristics on grassland passerine density, nest success, and predators in southwestern Wisconsin pastures. Ph.D. dissertation, University of Wisconsin, Madison.

Renfrew, R. B., and C. A. Ribic. 2002. Influence of topography on density of grassland passerines in pastures. American Midland Naturalist 147:315–325.

Renfrew, R. B., and C. A. Ribic. 2003. Grassland passerine nest predators near pasture edges identified on videotape. Auk 120:371–383.

Renfrew, R. B., and C. A. Ribic. 2008. Multi-scale models of grassland passerine abundance in a fragmented system in Wisconsin. Landscape Ecology 23:181–193.

Renfrew, R. B., C. A. Ribic, and J. L. Nack. 2005. Edge avoidance by nesting grassland birds: A futile strategy in a fragmented landscape. Auk 122:618–636.

Reynolds, R. E., T. L. Shaffer, R. W. Renner, W. E. Newton, and B. D. J. Batt. 2001. Impact of the Conservation Reserve Program on duck recruitment in the U.S. Prairie Pothole Region. Journal of Wildlife Management 65:765–780.

Ribic, C. A., and D. W. Sample. 2001. Associations of grassland birds with landscape factors in southern Wisconsin. American Midland Naturalist 146:105–121.

Ries, L., R. J. Fletcher, Jr., J. Battin, and T. D. Sisk. 2004. Ecological responses to habitat edges: Mechanisms, models, and variability explained. Annual Review of Ecology, Evolution, and Systematics 35:491–522.

Robbins, C. S., D. K. Dawson, and B. A. Dowell. 1989. Habitat area requirements of breeding forest birds of the middle Atlantic states. Wildlife Monographs, no. 103.

Ryan, M. R., L. W. Burger, Jr., D. P. Jones, and A. P. Wywialowski. 1998. Breeding ecology of Greater Prairie-chickens (*Tympanuchus cupido*) in relation to prairie landscape configuration. American Midland Naturalist 140:111–121.

Sample, D. W., and M. J. Mossman. 1997. Managing Habitat for Grassland Birds: A Guide for Wisconsin. Wisconsin Department of Natural Resources, Madison.

Sample, D. W., C. A. Ribic, and R. B. Renfrew. 2003. Linking landscape management with the conservation of grassland birds in Wisconsin. Pages 359–385 *in* Landscape Ecology and Resource Management: Linking Theory with Practice (J. A. Bissonette and I. Storch, Eds.). Island Press, Washington, D.C.

Samson, F. B., F. L. Knopf, and W. R. Ostlie. 1998. Grasslands. Pages 437–472 *in* Status and Trends of the Nation's Biological Resources, vol. 2 (M. J. Mac, P. A. Opler, C. E. Puckett Haecker, and P. D. Doran, Eds.). U.S. Geological Survey, Reston, Virginia.

Sauer, J. R., J. E. Hines, and J. Fallon. 2008. The North American Breeding Bird Survey, Results and Analysis 1966–2007, version 5.15.2008. U.S. Geological Survey Patuxent Wildlife Research Center, Laurel, Maryland.

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Skagen, S. K., A. A. Yackel Adams, and R. D. Adams. 2005. Nest survival relative to patch size in a highly fragmented shortgrass prairie landscape. Wilson Bulletin 117:23–34.

Skinner, S. P. 2004. Linking decision support systems for ducks with relative abundance of other grassland bird species. M.S. thesis, University of Saskatchewan, Saskatoon.

Sovada, M. A., M. C. Zicus, R. J. Greenwood, D. P. Rave, W. E. Newton, R. O. Woodward, and J. A. Beiser. 2000. Relationships of habitat patch size to predator community and survival of duck nests. Journal of Wildlife Management 64:820–831.

Stamps, J. A. 2001. Habitat selection by dispersers: Integrating proximate and ultimate approaches. Pages 230–242 *in* Dispersal (J. Clobert, É. Danchin, A. A. Dhondt, and J. D. Nichols, Eds.). Oxford University Press, New York.

Sutherland, W. J. 1996. From Individual Behaviour to Population Ecology. Oxford University Press, New York.

Temple, S. A. 2002. Dickcissel (*Spiza americana*). *In* The Birds of North America Online (A. Poole, Ed.). Cornell Lab of Ornithology, Ithaca, New York. [Online.] Available at bna.birds.cornell.edu/bna/species/703.

Temple, S. A., and J. R. Cary. 1988. Modeling dynamics of habitat-interior bird populations in fragmented landscapes. Conservation Biology 2:340–347.

Thompson, F. R., III, W. Dijak, and D. E. Burhans. 1999. Video identification of predators at songbird nests in old fields. Auk 116:259–264.

Turner, M. G., R. H. Gardner, and R. V. O'Neill. 2001. Landscape Ecology in Theory and Practice: Pattern and Process. Springer-Verlag, New York.

I22-39 cont.

Valone, T. J., and J. J. Templeton. 2002. Public information for the assessment of quality: A widespread social phenomenon. Philosophical Transactions of the Royal Society of London, Series B 357:1549–1557.

Vickery, P. D., and J. R. Herkert. 2001. Recent advances in grassland bird research: Where do we go from here? Auk 118:11–15.

Vickery, P. D., M. L. Hunter, Jr., and S. M. Melvin. 1994. Effects of habitat area on the distribution of grassland birds in Maine. Conservation Biology 8:1087–1097.

Vickery, P. D., P. L. Tubaro, J. M. Cardosa da Silva, B. G. Peterjohn, J. R. Herkert, and R. B. Cavalcanti. 1999. Conservation of grassland birds in the western hemisphere. Pages 2–26 *in* Ecology and Conservation of Grassland Birds of the Western Hemisphere (P. D. Vickery and J. R. Herkert, Eds.). Studies in Avian Biology, no. 19.

Villard, M.-A., G. Merriam, and B. A. Maurer. 1995. Dynamics in subdivided populations of Neotropical migratory birds in a fragmented temperate forest. Ecology 76:27–40.

Warner, R. E. 1994. Agricultural land use and grassland habitat in Illinois: Future shock for Midwestern birds. Conservation Biology 8:147–156.

Warnock, R. G., and P. C. James. 1997. Habitat fragmentation and Burrowing Owls (*Speotyto cunicularia*) in Saskatchewan. Pages 477–486 *in* Biology and Conservation of Owls of the Northern Hemisphere (J. R. Duncan, D. H. Johnson, and T. H. Nicholls, Eds.). U.S. Department of Agriculture, Forest Service General Technical Report NC-190.

Weatherhead, P. J., and M. R. Forbes. 1994. Natal philopatry in passerine birds: Genetic or ecological influences? Behavioral Ecology 5:426–433.

Wheelwright, N. T., and J. D. Rising. 2008. Savannah Sparrow (*Passerculus sandwichensis*). *In* The Birds of North America Online (A. Poole, Ed.). Cornell Lab of Ornithology, Ithaca, New York. [Online.] Available at bna.birds.cornell.edu/bna/species/045.

Wilcove, D. S. 1985. Nest predation in forest tracts and the decline of migratory songbirds. Ecology 66:1211–1214.

Williams, C. B. 1964. Patterns in the Balance of Nature. Academic Press, London.

Wilson, S. D., and J. W. Belcher. 1989. Plant and bird communities of native prairie and introduced Eurasian vegetation in Manitoba, Canada. Conservation Biology 3:39–44.

Winter, M. 1998. Effects of habitat fragmentation on grassland-nesting birds in southwestern Missouri. Ph.D. dissertation, University of Missouri, Columbia.

Winter, M., and J. Faaborg. 1999. Patterns of area sensitivity in grassland-nesting birds. Conservation Biology 13:1424–1436.

Winter, M., D. H. Johnson, and J. Faaborg. 2000. Evidence for edge effects on multiple levels in tallgrass prairie. Condor 102:256–266.

Winter, M., D. H. Johnson, and J. A. Shaffer. 2005. Variability in vegetation effects on density and nesting success of grassland birds. Journal of Wildlife Management 69:185–197.

Winter, M., D. H. Johnson, and J. A. Shaffer. 2006a. Does body size affect a bird's sensitivity to patch size and landscape structure? Condor 108:808–816.

Winter, M., D. H. Johnson, J. A. Shaffer, T. M. Donovan, and W. D. Svedarsky. 2006b. Patch size and landscape effects on density and nesting success of grassland birds. Journal of Wildlife Management 70:158–172.

Zanette, L., P. Doyle, and S. M. Tremont. 2000. Food shortage in small fragments: Evidence from an area-sensitive passerine. Ecology 81:1654–1666.

Zimmerman, J. L., and E. J. Finck. 1989. Philopatry and correlates of territory fidelity in male Dickcissels. North American Bird Bander 14:83–85.

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HABITAT FRAGMENTATION EFFECTS ON BIRDS IN SOUTHERN CALIFORNIA: CONTRAST TO THE "TOP-DOWN" PARADIGM

DOUGLAS T. BOLGER

Abstract. I review the existing literature on habitat fragmentation and its effects on avian populations in coastal sage scrub and chaparral habitat in coastal southern California. Included in this review is a consideration of the effect of fragmentation on nest predators, brood parasites, food availability, and habitat structure and quality. Fragmentation and the creation of edge are extensive in this region. The primary contemporary fragmenting land-use is residential development. In comparison to forested landscapes in the East and Midwest, fragmentation in this region seems to cause more isolation in bird populations. Local extinctions in isolated habitat fragments are common among some species of the shrub habitat avifauna and colonizations are relatively rare. This difference may be due to more limited dispersal ability in the year-round residents that are characteristic of this region as compared to the long-distance migrants in the East and Midwest. Perhaps due to the semi-arid nature of the region, fragmentation may be accompanied by more habitat degradation than in mesic regions, which could contribute to the lack of successful colonization. In contrast to studies in the East and Midwest, the only demographic study of avian edge effects in this system indicates that nest predation and brood parasitism do not increase near anthropogenically-induced edges. In isolated habitat fragments mammalian mesopredators appear to undergo "mesopredator release" in the absence of coyotes (*Canis latrans*). In habitat fragments the availability of potential arthropod prey is positively related to fragment size and negatively related to fragment age, but does not appear to be a function of distance to edge. In large habitat blocks, however, the abundance of a number of arthropod taxa is lower near edges. A particularly striking edge effect is the invasion of non-native Argentine ants along urban edges. The effect of Argentine ants on native ants is severe but their effect on arthropods that are more important as avian prey is less clear.

Key Words: *Aimophila ruficeps*; Argentine ants; bottom-up; edge effects; habitat fragmentation; *Linepithema humile*; mesopredator release; nest predation; Rufous-crowned Sparrow; southern California; top-down.

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Birds display varying degrees of edge and fragment area sensitivity, with abundance of some species declining sharply with fragment area or proximity to fragment edge (Blake and Karr 1987, Soulé et al. 1988, Robbins et al. 1989a, Herkert 1994). The mechanisms generating these sensitivities are often obscure. Since the principal determinant of avian reproductive success is the rate of nest predation (Ricklefs 1969), most mechanistic studies of the effect of fragmentation and edge on birds have focused on the "top-down" effects of nest predation and brood parasitism. In fragmented forests in the East and Midwest of North America nest predation and brood parasitism on neotropical migrant forest birds has been shown to increase with proximity to forest edge and with the degree of fragmentation in the landscape (Paton 1994, Robinson et al. 1995a, Donovan et al. 1997, Hartley and Hunter 1998). Avian and mammalian predators may increase along ecotones in response to increased density of nesting birds attracted to changes in habitat structure (Gates and Gysel 1978), or to resource subsidies provided by human land-use (Wilcove 1985, Andrén 1992). Because of this, highly fragmented landscapes in the Midwest are apparently population sinks (Pulliam 1988) for some neotropical migrant bird species. Their persistence in those landscapes appears dependent upon immigration from large, unfragmented source areas (Robinson et al. 1995a).

These striking findings have led to the current "top-down" paradigm in temperate zone fragmentation studies. However, generalizations derived from these studies may not apply to other species, ecosystems, and land-use types (Wiens 1997, Tewksbury et al. 1998). One land-use that has become increasingly common is urban development (Berry 1990, Roodman 1996). As the world becomes increasingly urban, edge between urban development and natural habitat increases as does the importance of understanding the ecological changes that occur at these interfaces (Babbitt 1999). Urban/natural edges may be especially ecologically active due to high inputs of materials, water, energy, nutrients, human commensal species, and high human population density (McDonnell et al. 1993). Only recently have "bottom-up" effects of habitat fragmentation on avian food availability received attention (Burke and Nol 1998, Zanette et al. 2000).

In coastal southern California, urban residential development is currently the principal land-use that fragments the native shrub habitats, coastal sage scrub and chaparral. Historically, agriculture and grazing also contributed to the

pattern of fragmentation. There is a conservation planning effort ongoing for this region (Atwood and Noss 1994) and the reserve system that results from this effort will by necessity be set within an urban matrix. So understanding urban edge and fragmentation effects will be vital to the success of this conservation effort.

In this paper I summarize research on the patterns of distribution and abundance of breeding bird species in these fragmented landscapes and the ecological mechanisms that shape these distributions. I first suggest a conceptual framework describing fragmentation effects and the ecological mechanisms that generate these effects. Original data on bird abundance in the edge and interior of large habitat blocks in San Diego County are also presented. Finally, I review the available literature on fragmentation effects in this region and assess the evidence for a number of ecological mechanisms that might generate the effects. This review is limited to a consideration of species, predominantly passerines, that have coastal sage scrub and/or chaparral as one of their principal breeding habitats or occur in mosaic landscapes with these shrub habitats and non-native grassland.

METHODS

Edge and Interior Bird Surveys

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To examine the edge sensitivity of the coastal sage scrub avifauna, variable distance point counts (Ralph et al. 1993) were conducted in the spring of 1997, 1998, and 1999 in edge and interior locations of three large coastal sage scrub habitat blocks in San Diego County, CA. Details of the sites are available in Morrison and Bolger (2002). For the analyses below, only detections within 70m of the point count station were used. Most detections of Common Ravens (see Appendix for scientific names of vertebrate species) were beyond 70m so detections up to 150m were allowed for this species. For most species fly-overs were not included in the analyses. However, for species for which most detections were by fly-over, fly-over data were included if the path of flight intercepted a 70-m circle around the point count station. These included Common Raven, Anna's Hummingbird, Costa's Hummingbird, and Western Scrub-Jay.

Point count locations were a minimum of 150m apart and edge locations were at least 70m from the urban edge. A total of 24 locations were surveyed in 1997, 15 in 1998, and 31 in 1999. Three eight-minute counts were conducted per point per year between March 29 and June 13. To achieve statistical independence, locations that were sampled in more than one year were only used in one year in the analyses, producing the final number of locations in Table 1. The choice of locations included in each year's dataset was made to maximize sample sizes.

For common species, the mean number of detections/station/visit was analyzed with two-way ANOVA with year and treatment (edge vs. interior) as the factors. For uncommon species, parametric methods were not appropriate. Instead, the frequency of presence/absence was analyzed with three-way contingency tables: present/absent × year × treatment. If a species was detected at least once at a location in a given year it was designated present and absent otherwise. The significance of the treatment effect (edge vs. interior) was tested by comparing the chi-square value from the log-linear model that contained all pair-wise interactions to a model that did not contain the treatment × present/absent term. The significance of the treatment × present/absent term was tested by the difference in chi-square value between the models using one degree of freedom.

RESULTS AND DISCUSSION

Southern California Landscapes and Avifauna

There are five primary terrestrial habitats within the coastal zone of southern California: coastal sage scrub, chaparral (mixed and chamise), riparian woodland/scrub, oak woodland, and non-native grassland (Beauchamp 1986). The two shrub habitat types, coastal sage scrub (henceforth CSS) and chaparral, predominate and most research on habitat fragmentation in this region has been conducted in those habitats. The fragmentation studies reviewed below have been conducted in coastal San Diego County (predominantly in CSS habitat), the Palos Verdes Peninsula in Orange County (CSS), and the Santa Monica Mountains in Los Angeles County (chaparral). Most studies cited here were conducted within 20km of the coast, so for the purpose of this review I will define that 20 km band within these three counties as the coastal southern California region.

Coastal sage scrub is a small-statured community of subshrubs and shrubs with average shrub height of 1 m (Mooney 1977) that occurs below 600m elevation in parts of seven southern California counties: San Diego, Riverside, Orange, San Bernardino, Los Angeles, Ventura and Santa Barbara counties (Davis et al. 1995). CSS shrubs are thin-leaved and drought-deciduous. In contrast, chaparral is composed of large, woody sclerophyllous, evergreen shrubs and is geographically more widespread than CSS. It occurs from the coast to the interior Peninsular and Transverse Ranges up to 1500 m elevation.

Coastal sage scrub stands show considerable local (DeSimone and Burk 1992) and regional (Axelrod 1978, Westman 1981) variation in structure and floristics. The most characteristic elements are *Artemisia californica, Eriogonum fasiculatum,* and several *Salvia* species. Regionally, there are at least three recognized subassociations, the southern coastal variety predominantly in San Diego County, the northern coastal variety, and the inland variety primarily in

Riverside County (Axelrod 1978). Local structural variation is due to slope, aspect, substrate, disturbance history, and the influence of non-native grasses.

Undeveloped landscapes in this region are mosaics of patches of the native woody communities and non-native grasslands (Mooney 1977, DeSimone and Burk 1992). Near the coast CSS tends to occur on slopes and generally drier sites, mixed chaparral on steep north-facing slopes, and chamise chaparral on mesa-tops. Disturbance (fire, grazing, and mechanical) contributes to the mosaic because coastal sage scrub is often a successional community following disturbance to chaparral stands. The arrival of widespread non-native grasses and herbs may have exacerbated this patchiness, although there is disagreement over the pre-European extent of native grass and herbaceous stands (Minnich and Dezzani 1998). Frequent or intense fires can type convert CSS and chaparral to non-native grassland (Zedler et al. 1983). CSS in particular is vulnerable to conversion to non-native grassland (Minnich and Dezzani 1998).

There are two gradients of note in this region. First, development, and thus fragmentation, has been most extensive nearest the coast. Consequently, there is an east-west gradient in habitat availability and fragment size in the region (see Figure 2 for an example). There also is a habitat gradient; coastal sage scrub predominates near the coast, and chaparral becomes more common inland and with increasing elevation.

I22-40 cont.

Of the two shrub habitat types, CSS is of greater conservation concern and has been more extensively studied for fragmentation effects. CSS is notable for its restricted range within the U.S. and high diversity of endemic plants and animals (Atwood 1993, Atwood and Noss 1994). CSS is widely reported to have declined to 10–15% of its former range; however, this percentage is based on a disputed assumption of the pre-European cover of coastal sage scrub (Minnich and Dezzani 1998).

There is considerable overlap in the chaparral and coastal sage scrub avifauna (Miller 1951). A number of bird species occur in relatively equal numbers in CSS and chaparral, including Wrentit, Spotted Towhee, California Towhee, Sage Sparrow, Bewick's Wren, California Thrasher, Western Scrub-Jay, Common Bushtit, Lazuli Bunting, and Anna's and Costa's hummingbirds. Several species usually associated with chaparral do breed in CSS, particularly when it is occurs in a mosaic with chaparral, especially Blue-gray Gnatcatcher and Black-chinned Sparrow. Only a few species are restricted to coastal sage scrub. The California Gnatcatcher and Rufous-crowned Sparrow predominantly breed in CSS, occurring only in chaparral that is relatively open or disturbed. Several grassland species occur in open CSS: Western Meadowlark, Grasshopper Sparrow, and Lark Sparrow.

The landscape of coastal southern California consists of four general elements. (1) *The urban matrix.* This land-use is the predominant land-cover in the region and is characterized by high density single-family residential development. Ornamental vegetation ranges from sparse in the higher density neighborhoods to lush in some of the older or more affluent neighborhoods. (2) *Isolated habitat fragments* (ranging from 1 to 1000ha). Fragments occur throughout most of the highly developed portion of the landscape. (3) *The edge of large habitat blocks*; habitat within 250m of the urban edge. (4) *The interior of large habitat blocks*; habitat greater than 250m from the urban edge. These large habitat blocks are either embedded in the urban matrix or are contiguous with the mountainous areas to the east.

Conservation Planning in the Region

Partly in response to petitions at the state and federal levels to list the California Gnatcatcher as an endangered species, the state of California initiated the Natural Communities Conservation Planning Program (NCCP; Atwood and Noss 1994). The state coordinates subregional planning processes that prioritize lands based on conservation value. Private landowners voluntarily participate in the planning process. Putative reserves are identified and funding sought for acquisition of lands not currently publicly owned. The eventual listing of the gnatcatcher as a federally threatened species in 1993 gave further impetus to the program as participation in the program gave landowners an avenue to pursue incidental take permits. Planning occurs in 11 subregions with the purpose of designating an interconnected system of reserves, which should result in no reduction in the ability of the region to maintain viable populations of target species (Atwood and Noss 1994). A Central-Coastal Orange County subregional plan has been approved, including 37,000 acres of reserve, and an MSCP subregional plan in San Diego has been approved that includes 170,000 acres of reserves (see http://ceres.ca.gov/CRA/NCCP/updates.htm).

Conceptual Framework

Landscape patterns that suggest fragmentation effects

Conservation biologists often use phrases such as "the effect of habitat fragmentation on birds"; however, exactly what these effects of

fragmentation are has been hard to define. Some of the confusion results from confounding the patterns of abundance that result from fragmentation with the ecological processes that generate these patterns. Patterns of abundance or demographic rates in the landscape are often presented as evidence of the effects of fragmentation. These patterns fall into the following categories. (1) *Area sensitivity*—density, probability of occurrence, survival, or reproductive success change with fragment size, or there is a significant difference between those rates in isolated fragments and in large, unfragmented habitat areas. (2) *Age sensitivity*—density, probability of occurrence, survival, or reproductive success changes with fragment age (time elapsed since insularization). (3) *Edge sensitivity*—density, probability of occurrence, survival, or reproductive success changes with proximity to the fragment edge. (4) *Distance sensitivity*—density or probability of occurrence changes in habitat fragments with proximity to other fragments or large habitat blocks.

No directionality of change is implied in these definitions to acknowledge that fragmentation can have positive or negative effects on bird species. These are patterns of abundance or demographic rates in space and time that suggest these parameters change as a consequence of fragmentation. Demonstrating a causal relationship between fragmentation and these patterns requires a consideration of the ecological mechanisms that proximally affect rates of birth, death, immigration, and emigration.

I22-40 cont.

Ecological mechanisms that cause fragmentation effects

How are the patterns of fragmentation sensitivity, as defined above, produced in the landscape? The ecological consequences of habitat fragmentation are complex, diverse, and pervasive because fragmentation affects animal and plant populations via a number of interacting pathways (Wilcove et al. 1986, Robinson et al. 1992, Didham 1997). For example, *area effects* are manifest through the initial sampling effect that determines the initial avian community (Bolger et al. 1991), and through the effect of area on population sizes and rates of extinction. *Isolation effects* occur when the intervening human-modified matrix is relatively impermeable to successful dispersal to isolated patches. This may result in faunal relaxation in fragments, or faunal collapse in the extreme of zero recolonization (Brown 1971, Soulé et al. 1979). *Edge effects* are biotic and abiotic effects derived from the adjacent human-modified matrix that cause gradients in light, moisture, and wind velocity, increased exposure to invasive human commensal species, and increased density of "edge species" (Murcia 1995). Island biogeographic treatments of habitat fragmentation focus on the relationship between stochastic extinction and recolonization (MacArthur and Wilson 1967, Brown 1971). However, when fragmentation is due to the intervention of intense human land uses, such as urbanization, habitat degradation due to edge effects and other anthropogenic disturbance are likely to be significant influences on abundance and extinction rates. The intensity of edge effects may also depend on the relative amount of the developed matrix present in the landscape (Donovan et al. 1997). The direct effects of area reduction, isolation, and edge can lead to *secondary effects* (also called cascading, community, or trophic effects), whereby the direct effects of fragmentation on predators, parasites, competitors, resource species, or mutualists in turn affect species with which these interact. Changes in the abundance of the resource, predator, and parasite species that birds interact with can change bird abundance through their effect on birth and death rates. *Local habitat selection* by birds can affect abundance through changes in immigration and emigration rates. Birds may avoid habitat in small fragments or adjacent to edges due to structural and floristic changes in the vegetation and altered food availability and predator and parasite abundance (Kristan et al. in press). *Landscape-scale habitat selection* occurs when birds choose habitat not only on the basis of local habitat conditions but also on the basis of landscape-scale factors such as patch area, isolation, and edge proximity. As with local habitat selection this mechanism would affect abundance through its effect on relative immigration and emigration rates.

Understanding the consequences of fragmentation has been hampered by our inability to isolate the effects of these different phenomena on the biota. These different effects can act in opposition or in concert. For instance, area and edge effects can be difficult to separate because the percentage of edge-affected habitat increases as fragment area decreases.

Fragmentation Patterns in Southern California

Area and age sensitivity

The resident breeding birds of coastal southern California display varying degrees of sensitivity to fragment size and age. Soulé et al. (1988) found that the species richness of a group of eight shrub habitat bird species (Bewick's Wren, Spotted Towhee, California Thrasher, Wrentit, California Quail, Greater Roadrunner,

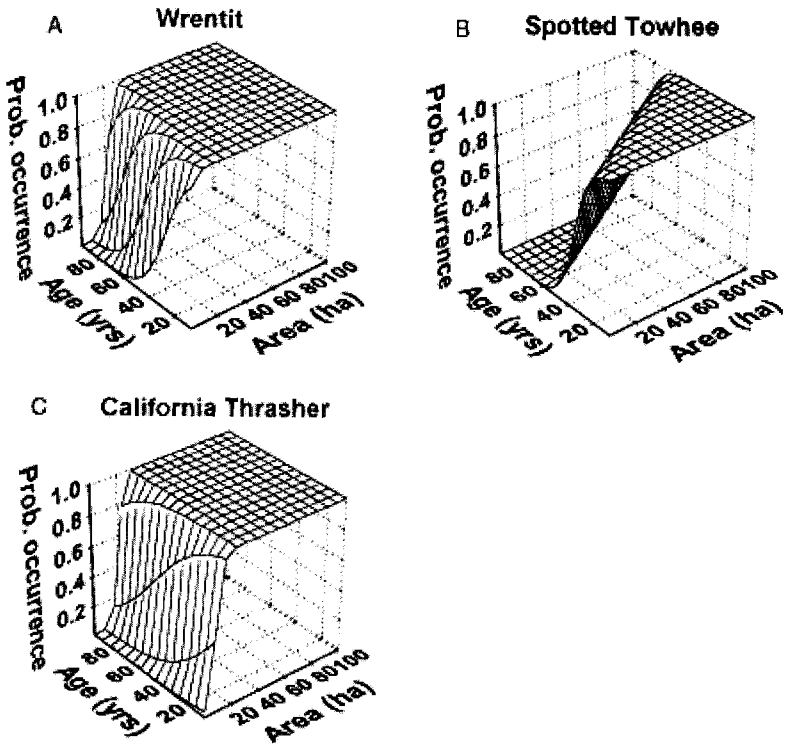
Cactus Wren, and California Gnatcatcher) showed both area and age effects; richness increased with fragment area (range 0.4–103 ha) and declined with fragment age (range 2–86 years). Quite small fragments (1–5 ha), if they were relatively young (<10 years), supported many species from this group. Species not as restricted to shrub habitat did not show similar sensitivity. These fragments range from 1 km to 15 km from the coast and most were predominated by coastal sage scrub. Some of the fragments also contained stands of mixed or chamise chaparral. Although the fragments are predominantly CSS, Soulé et al. (1988) referred to these generically as "chaparral" habitat fragments following the then popular terms of "soft chaparral" for coastal sage scrub and "hard chaparral" for mixed and chamise chaparral.

The observed decline in species richness with fragment age observed by Soulé et al. (1988) implies relaxation or faunal collapse: non-equilibrium dynamics with local extinctions in excess of infrequent recolonizations across the urban matrix (Brown 1971, Soulé et al. 1979). The existence of this extinction-recolonization imbalance is supported by the observation that species richness in the fragments was significantly lower than that in similar-sized plots in continuous blocks of habitat (Bolger et al. 1991). The species richness in unfragmented plots is an estimate of the species richness initially present in fragments of a similar size. In a recent resurvey of the same fragments ten years later, Crooks et al. (2001) tested the inferences drawn from the static patterns. Consistent with the relaxation conclusion, there were approximately twice as many extinctions (30) as colonizations (12) between 1987 and 1997 among the original group of species considered by Soulé et al. (1988).

I22-40 cont.

Bolger et al. (1991) demonstrated that the distribution patterns in these fragments of the five most common of these species (Bewick's Wren, Spotted Towhee, California Thrasher, Wrentit, California Quail) were nested; species in species-poor fragments were a non-random subset of those in species-rich fragments. They concluded that this pattern was generated by a gradient in extinction vulnerability among the species. Nested occurrence patterns are common in real and virtual islands and can be produced by among-species differences in extinction vulnerability (Patterson and Atmar 1986). This pattern suggested that Wrentit was the most resistant of the five to extinction, Bewick's Wren and Spotted Towhee were intermediate, and California Thrasher and California Quail went extinct most quickly. Consistent with this, Crooks et al. (2001) found that populations of the Wrentit were only now going extinct in the smallest/oldest fragments (5 extinctions, no colonizations). California Quail, the most sensitive species (9 extinctions, no colonizations), underwent additional extinctions in several larger fragments (15–64 ha) as well as a number of small/young fragments (having apparently already gone extinct in the smaller/older fragments). California Thrasher exhibited a similar pattern, going extinct in four small/young fragments and colonizing one. The distribution of the Spotted Towhee changed very little in the intervening years (2 colonizations, no extinctions) and appeared to be in quasi-equilibrium. Soulé et al. (1988) had apparently reached the wrong conclusions about Bewick's Wren, which appears able to recolonize across the urban matrix, experiencing 6 colonizations and only 1 extinction between 1987 and 1997. In this group of five easily surveyed species, extinctions outnumbered colonizations 19 to 9. The results of Crooks et al. (2001) also point out that in this system area-sensitivity cannot be defined independently of fragment age; both variables are important predictors of species distributions in this fragmented landscape (Fig. 1).

Lovio (1996) studied fragments in another part of San Diego and found generally higher diversity in the same species group considered by Soulé et al. (1988) in similar-sized fragments. The differing results are probably the result of differing levels of isolation in the two study areas. The Soulé et al. (1988) and Crooks et al. (2001) study area was in the western part of the county and the fragments were generally isolated canyon fragments embedded in highly developed coastal mesas. Lovio's study area was slightly east and south in the Rancho San Diego area and many of the fragments were portions of slopes and ridgetops that formed a fairly dense network of patches (Lovio 1996). The mean interpatch distances were smaller in Lovio's study area (476 vs. 674 m), and the intervening urban matrix was characterized by a higher cover of mature ornamental vegetation (Weser 1996; D. Bolger, pers. obs.). A number of the fragments were connected to other fragments by narrow habitat strips or areas of disturbed and non-native vegetation (Lovio 1996) and the set of fragments was immediately adjacent to a large unfragmented habitat block. So the difference between Lovio's results and those of Soulé et al. (1988) may be indicative of the importance of the degree of fragment isolation and the permeability of the urban matrix. However, Lovio did not ascertain the age of fragments, so differing fragment ages could also be responsible for the differences between the studies.



I22-40 cont.

FIGURE 1. Graphical results of multiple logistic regression of the presence/absence of (A) Wrentit, (B) Spotted Towhee, and (C) California Thrasher on fragment area and age. Area sensitivity is a function of fragment age. Larger fragment area is required for persistence in older fragments. From Crooks et al. (2001).

Edge sensitivity

Bolger et al. (1997) analyzed the patterns of abundance of the 20 most common breeding bird species in a 260 sq. km landscape in coastal San Diego County (Fig. 2). This landscape encompassed a land-use gradient that included the interior of a large unfragmented habitat block, its edge, and isolated fragments in the adjacent urban matrix. For 14 of the 20 species, the fit of logistic regression models to bird abundance was improved by the addition of landscape metrics to models containing variables describing local habitat conditions. These landscape metrics described the percentage of CSS and chaparral habitat versus developed land and the amount of urban area and the amount of urban edge in the larger landscape (250 m to 3 km) around each sample point. Based on these analyses and a canonical correspondence analysis, the 20 species were characterized as edge/fragmentation-insensitive (10 species), edge/fragmentation-reduced (6 species) or edge/fragmentation-enhanced (4 species). The finding that half of the common species appear to respond to larger-scale patterns of edge and fragmentation suggests that landscape structure is a significant determinant of bird abundance in this region.

One surprising result of this study was the elevated abundance of urban-exploiting birds some distance into the non-fragmented habitat block. The abundances of House Finch, Anna's Hummingbird (Fig. 2b), Northern Mockingbird, and Lesser Goldfinch, species common in the urban matrix, were higher in habitat adjacent to the urban edge than further into the patch interior. The region of higher density extended as far as a kilometer in Anna's Hummingbird and House Finch. These results suggest that the urban matrix could be a net source of these species, elevating densities in natural habitat adjacent to the matrix.

In chaparral habitat in the Santa Monica Mountains, Sauvajot et al. (1998) found no correlation between bird abundance and proximity to the urban edge. They also found that bird abundance did not respond to disturbance-induced changes in vegetation structure. In contrast, in inland CSS Kristan et al. (in press) observed strong correlations between bird abundance and edge-proximity that was specifically

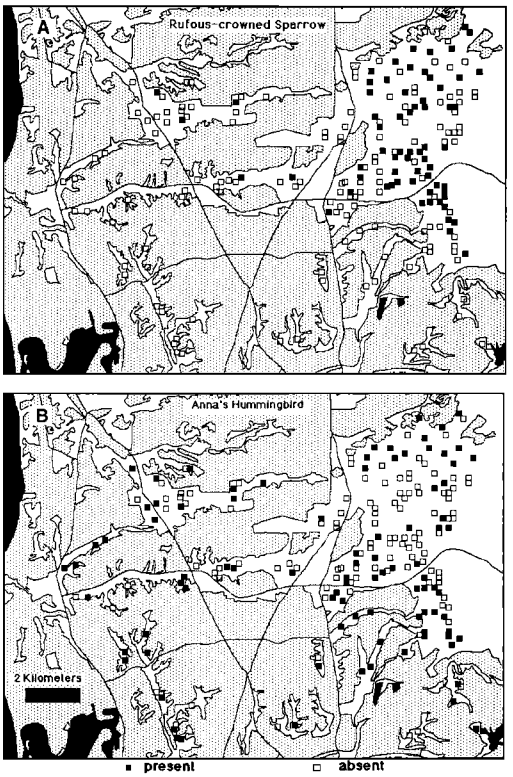


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FIGURE 2. The landscape distribution patterns of (A) Rufous-crowned Sparrow and (B) Anna's Hummingbird within a 260 km^2 study area in coastal San Diego County. Presence/absence denotes either detection or non-detection in a single 8-min point count at each of 202 random locations during the spring of 1993. White areas are the undeveloped habitat mosaic of coastal sage scrub and chaparral. Stippling represents residential and commercial development. From Bolger et al. 1997.

associated with edge-related changes in habitat quality based on known, independent relationships to vegetation composition and structure. The lack of a correlation of disturbance to edge proximity in chaparral may have to do with the differing physical structure of chaparral and CSS vegetation. Dense and robust, chaparral probably rebuffs direct human disturbance along edges better than the smaller statured coastal sage scrub.

In the only demographic study of edge sensitivity in this region I am aware of (Morrison and Bolger 2002), no difference was found in breeding success of Rufous-crowned Sparrows, a ground-nesting year-round resident species, between edge and interior plots. Total reproductive output and daily nest predation rate did not differ between pairs in habitat adjacent to urban development (<200 m from the urban edge) as compared to those a minimum of 500 m from urban edge during the 1997–1999 breeding seasons. P. Mock (pers. comm.) reported similar results with California Gnatcatchers at one site in San Diego.

Edge Sensitivity

Of 21 species common enough for analysis, 11 differed significantly in abundance between edge and interior plots in CSS in 1997–1999 (Table 1). Anna's Hummingbird, House Finch, Northern Mockingbird, and Western Scrub-Jay were significantly more abundant in edge locations. Common Raven showed a trend of higher abundance in edges, but its abundance was highly variable and the treatment effect was non-significant. Black-chinned Sparrow, California Towhee, Common Bushtit, Lazuli Bunting, Rufous-crowned Sparrow, Spotted Towhee, and Wrentit were significantly less abundant along edges. California Thrasher showed a consistent, but non-significant, trend of lower abundance along edges. In a similar study, Kristan et al. (in press) noted significant negative edge relationships for California Towhee, California Thrasher, and Sage Sparrow, and significant positive effects for Northern Mockingbird and European Starling.

Patterns of Landscape Sensitivity in the Coastal Southern California Avifauna

I categorized patterns of landscape sensitivity in the CSS avifauna through a consideration of three factors: (1) area sensitivity, (2) edge sensitivity, and (3) ability to exploit the urban matrix (Table 2). The area sensitivity designations are approximate and not quantitative estimates. Area sensitivity in this system certainly depends on fragment age (Crooks et al. 2001) and possibly on isolation (Lovio 1996), so a simple categorization is not possible. The two categories (10–20 ha and 100–200 ha) represent a qualitative contrast of area sensitivity for patches of CSS between 20 and 60 years old and isolated by at least 500 m of residential development. Species categorized as sensitive to fragmentation at the scale of 10–20 ha are often found in fragments of this size but have been shown to experience local extinction (Soulé et al. 1988, Bolger et al. 1991, Crooks et al. 2001). Species categorized as having 100–200 ha area sensitivity are generally absent or rare in fragments smaller than that size range (Lovio 1996, Bolger et al. 1997; D. Bolger et al., unpubl. data; K. Crooks et al., unpubl. data). Edge sensitivity was derived from a consideration of the relative abundance of species in the interior and near the edge (<250m from urban edge) of large habitat blocks (Fig. 2, Table 1; Bolger et al. 1997). The

TABLE 1. MEAN NUMBER OF DETECTIONS (STANDARD ERROR) WITHIN 70 M OF POINT COUNT STATIONS IN EDGE AND INTERIOR LOCATIONS IN 1997–1999

	1997		1998		1999		F or	
	Edge	Interior	Edge	Interior	Edge	Interior	Chi-square	P
N	10	9	7	7	11	7		
California Quail	0.20	0.11	0.29	0.30	0.48	0.43	0.57	0.45
	(0.11)	(0.11)	(0.17)	(0.14)	(0.15)	(0.25)		
Mourning Dove	0.00	0.00	0.10	0.22	0.15	0.12	2.22	0.15
	(0.00)	(0.00)	(0.10)	(0.08)	(0.09)	(0.08)		
Costa's Hummingbird	0.42	0.17	0.05	0.36	0.61	0.57	0.06	0.82
	(0.13)	(0.09)	(0.03)	(0.11)	(0.18)	(0.26)		
Anna's Hummingbird[a]	1.48	1.00	0.97	0.72	1.52	1.01	5.69	0.021
	(0.17)	(0.17)	(0.28)	(0.24)	(0.17)	(0.15)		
Western Scrub-Jay	0.10	0.09	0.24	0.00	1.00	0.05	4.79	0.03
	(0.07)	(0.06)	(0.17)	(0.00)	(0.32)	(0.05)		
Common Raven	0.48	0.20	0.72	0.25	1.00	0.13	0.93	0.37
	(0.14)	(0.17)	(0.29)	(0.14)	(1.00)	(0.10)		
Common Bushtit[a]	1.20	1.28	0.74	1.34	0.88	0.86	0.99	0.033
	(0.28)	(0.29)	(0.34)	(0.36)	(0.22)	(0.28)		
Bewick's Wren	0.28	0.33	0.07	0.04	0.75	0.42	1.83	0.16
	(0.09)	(0.15)	(0.05)	(0.04)	(0.15)	(0.14)		
Northern Mockingbird	1.00	0.19	0.61	0.03	0.26	0.05	6.82	0.009
	(0.29)	(0.08)	(0.22)	(0.03)	(0.10)	(0.05)		
California Thrasher	0.15	0.24	0.22	0.45	0.08	0.27	1.23	0.30
	(0.06)	(0.11)	(0.09)	(0.14)	(0.04)	(0.17)		
Wrentit[a]	0.55	1.28	0.65	1.40	0.51	0.85	13.23	<0.001
	(0.18)	(0.17)	(0.18)	(0.24)	(0.18)	(0.31)		
California Gnatcatcher	0.08	0.17	0.11	0.08	0.03	0.05	0.36	0.60
	(0.06)	(0.07)	(0.07)	(0.08)	(0.03)	(0.05)		
Lesser Goldfinch	0.30	0.52	1.42	0.77	0.76	1.13	0.84	0.37
	(0.16)	(0.20)	(0.59)	(0.25)	(0.26)	(0.28)		
House Finch	1.90	0.22	1.36	0.14	1.64	0.10	20.91	<0.001
	(0.50)	(0.15)	(0.66)	(0.14)	(0.29)	(0.06)		
Lazuli Bunting	0.00	0.15	0.06	0.92	0.00	0.29	14.36	<0.001
	(0.00)	(0.11)	(0.04)	(0.36)	(0.00)	(0.11)		
Spotted Towhee[a]	0.80	0.74	0.42	0.98	0.36	1.01	6.25	0.016
	(0.20)	(0.20)	(0.13)	(0.24)	(0.12)	(0.21)		
California Towhee[a]	2.32	2.81	2.11	2.32	1.64	1.64	0.65	0.042
	(0.37)	(0.41)	(0.36)	(0.24)	(0.32)	(0.38)		
Rufous-crowned Sparrow[a]	0.78	1.17	1.80	3.08	0.23	1.14	15.86	<0.001
	(0.14)	(0.17)	(0.23)	(0.49)	(0.08)	(0.38)		
Black-chinned Sparrow	0.03	0.15	0.00	0.12	0.00	0.17	7.36	0.008
	(0.03)	(0.08)	(0.00)	(0.07)	(0.00)	(0.11)		
Lark Sparrow	0.00	0.17	0.00	0.08	0.00	0.00		
	(0.00)	(0.09)	(0.00)	(0.06)	(0.00)	(0.00)		
Grasshopper Sparrow	0.10	0.06	0.11	0.03	0.00	0.05	0.46	0.50
	(0.10)	(0.06)	(0.11)	(0.03)	(0.00)	(0.05)		

[a] Data from these species were analyzed with 2-way ANOVA; all others were analyzed with three-way contingency tables (see METHODS).

I22-40 cont.

urban-exploiter category includes species that occur in the urban matrix during the breeding season as determined by Lovio (1996) and K. Crooks et al. (unpubl. data). This list includes the species likely to be found in areas of relatively dense, single-family dwellings that support moderate densities of ornamental vegetation. The list of urban-exploiters would probably differ if higher- or lower-density development were considered (Blair 1996). Based on a consideration of these three factors I placed species into three categories: (1) species that appear strongly negatively affected by fragmentation in the landscape, (2) species that appear moderately negatively affected by fragmentation, and (3) species that appear positively affected or neutral (Table 2).

Species in the first category, strongly negatively affected, are generally found only in the largest habitat blocks remaining in the region. These species do not occur in the urban matrix, generally have reduced abundance near urban edges (Table 1; Bolger et al. 1997), and are extremely rare in smaller fragments (K. Crooks et

TABLE 2. PATTERNS OF LANDSCAPE SENSITIVITY IN THE AVIFAUNA OF COASTAL SOUTHERN CALIFORNIA

Species	Area sensitivity (ha)	Exploits urban matrix	Edge response	Habitat	Migratory status	Nest location
Strongly negative						
Lesser Nighthawk	100–200	No	?	CSS/Chap.	migrant	ground
Blue-gray Gnatcatcher	100–200	No	?	Chap/Woodland	migrant	shrub/tree
Sage Sparrow	100–200	No	negative	CSS/Chap.	resident	shrub
Rufous-crowned Sparrow	100–200	No	negative	CSS	resident	ground
Black-chinned Sparrow	100–200	No	negative	CSS/Chap.	migrant	shrub
Lark Sparrow	100–200	No	negative	Grassland	migrant	ground/shrub
Grasshopper Sparrow	100–200	No	neutral	Grassland	?	ground
Western Meadowlark	100–200	No	negative	Grassland	resident	ground
Moderately negative						
California Quail	10–20	No	neutral	CSS/Chap.	resident	ground
Costa's Hummingbird	10–20	Yes	?	CSS/Chap.	migrant	shrub/tree
Bewick's Wren	10–20	Yes	neutral	CSS/Chap./Rip.	resident	cavity
California Thrasher	10–20	No	negative	CSS/Chap.	resident	shrub
Wrentit	10–20	No	negative	CSS/Chap.	resident	shrub
California Gnatcatcher	10–20	No	neutral	CSS	resident	shrub
Lazuli Bunting	10–20	No	negative	CSS/Chap.	migrant	shrub
Spotted Towhee	10–20	No	negative	CSS/Chap.	resident	ground
Positive or neutral						
Mourning Dove	None	Yes	neutral	Grass/CSS/Chap./Rip.	resident	ground/shrub/tree
Anna's Hummingbird	None	Yes	positive	CSS/Chap.	resident	shrub/tree
Western Scrub-Jay	None	Yes	positive	CSS/Chap.	resident	shrub/tree
American Crow	None	Yes	positive	CSS/Chap./Rip.	resident	tree/cliff
Common Raven	None	Yes	positive	CSS/Chap./Rip.	resident	tree/cliff
Common Bushtit	None	Yes	neutral	CSS/Chap./Rip.	resident	shrub
Northern Mockingbird	None	Yes	positive	CSS/Chap./Rip.	resident	shrub/tree
Lesser Goldfinch	None	Yes	neutral	CSS/Chap.	short dist.	shrub/tree
House Finch	None	Yes	positive	CSS/Chap.	resident	shrub/tree/structure
California Towhee	None	Yes	neutral	CSS/Chap.	resident	shrub

Notes: Classifications of area sensitivity derive from Soulé et al. (1988), Lovio (1996), Bolger et al. (1997), Crooks et al. (2001), and D. Bolger, unpubl. data. Presence in the urban matrix is from Lovio (1996) and Crooks et al. (2001). Edge responses are derived from Bolger et al. (1997) and Table 1. Habitat use is from Bolger et al. (1997) and Unitt (1984). Residency status is from Unitt (1984). Nest locations are from accounts in the *Birds of North America*, Harrison (1979), and D. Bolger, pers. obs.

al., unpubl. data). They are a mixture of resident and migrant species. This is the most problematic category because the fewest data are available and alternative explanations for the landscape patterns of these species need further investigation. Many of these species are primarily grassland or chaparral species that often occur within the coastal habitat mosaic in open CSS habitat and grassland/CSS ecotones or CSS/chaparral ecotones. Their patterns of abundance could reflect the distribution of these less common habitat elements that may be distributed non-randomly with respect to fragment size or edge proximity.

Lark Sparrows, Grasshopper Sparrows, and Western Meadowlarks are primarily associated with grassland but reliably occur in open coastal sage scrub habitat in large habitat blocks. CSS in habitat fragments is generally open, often with a continuous understory of non-native grasses. But these species are rarely present in fragments. Lesser Nighthawks occur in both chaparral and CSS, but require bare ground on mesa tops for breeding and are rare in fragments (Lovio 1996).

Interpretation of the distribution of some of these species, particularly those primarily associated with chaparral, is complicated by historical distribution patterns. The Blue-gray Gnatcatcher and the Black-chinned Sparrow were historically rare in the immediate vicinity of the coast (Unitt 1984), possibly due to an east-west gradient in the cover of chaparral habitat. So their rarity in fragments closest to the coast may not be due to fragmentation sensitivity. Of course, it is possible that those historical patterns already reflected the effects of earlier, agriculturally-induced habitat fragmentation. Lovio (1996) found the Blue-gray Gnatcatcher in his unfragmented control area, but it was absent from all but the largest fragments in the immediately adjacent landscape. The Black-chinned Sparrow does show edge- (Table 2; Bolger et al. 1997) and area-sensitivity (Lovio 1996) within its historical range.

I22-40 cont.

Bolger et al. (1997) found that as a group the Rufous-crowned Sparrow, Lark Sparrow, Black-chinned Sparrow, Sage Sparrow, Western Meadowlark and Costa's Hummingbird displayed an edge-sensitive abundance pattern even when the three habitat types they examined (chamise chaparral, CSS, and mixed chaparral) were considered separately. However, when analyzed individually with regard to habitat, the distribution of Sage Sparrows and Western Meadowlarks suggested their pattern may be driven by the spatial distribution of habitat types. The other four species did display reduced abundance in appropriate habitat near edges. Bolger et al. (1997) found Sage Sparrows to be associated with chamise chaparral in their study area, but they also occur in CSS (Unitt 1984, Lovio 1996). Lovio (1996) found Sage Sparrows only in the two largest CSS fragments (>150 ha) in his study area.

The species in this group whose pattern most compellingly suggests fragmentation-sensitivity is the Rufous-crowned Sparrow. It is abundant and ubiquitous in unfragmented habitat, but less abundant near edges (Table 1) and rare in isolated habitat fragments (Fig. 2; Bolger et al. 1997; K. Crooks et al., unpubl. data).

I suspect that the distribution of most of the species in this category are determined at least in part by patterns of fragmentation and edge. Yet because of their idiosyncratic distributions and habitat affinities it will be difficult to demonstrate this conclusively. Kristan et al. (in press) constructed interior-based habitat association models for a suite of CSS species using data collected from >200 points throughout southern California. They then applied each model to a new set of points surveyed along an explicit edge-to-interior gradient. Habitat quality (as indexed by predicted probability of a species occurrence at a point) varied significantly for the eight species analyzed (Cactus Wren, California Towhee, California Gnatcatcher, California Thrasher, Sage Sparrow, Western Scrub-Jay, Northern Mockingbird, European Starling). Interestingly, Sage Sparrows and California Thrashers were significantly reduced at edges despite the presence of suitable habitat. Clearly the distribution of these species requires closer examination for evidence of processes producing fragmentation sensitivity. Despite the uncertainties, it is prudent at this time to consider these species very sensitive to fragmentation.

The second category is comprised of species that show area sensitivity in the range of 10–20 ha. A number of these species have been shown to undergo local extinction in habitat fragments (Soulé et al. 1988, Bolger et al. 1991, Crooks et al. 2001). They generally occur at lower abundance in habitat fragments than in unfragmented habitat (K. Crooks et al., unpubl. data). Some of the species show edge sensitivity, others are neutral with regard to edge (Table 1; Bolger et al. 1997). These are generally resident species and are among the common and distinctive species of these habitats. They appear to be shrub habitat generalists occurring abundantly in both CSS and chaparral (Bolger et al. 1997). Most of these species are rarely observed in the urban matrix; however, K. Crooks et al. (unpubl. data) found Costa's Hummingbird to be reasonably abundant in the urban matrix and detected Spot-

ted Towhee and Bewick's Wren there at very low abundance.

The species categorized as neutrally or positively affected by fragmentation are all urban exploiters. They reside and breed within developed habitats in San Diego as well as other disturbed habitats (Unitt 1984; D. Bolger, pers. obs.). All display positive or neutral edge responses (Table 1; Bolger et al. 1997). They vary in abundance in unfragmented habitat and none display obvious area sensitivity; in fact most are more abundant in fragments than in unfragmented habitat (K. Crooks et al., unpubl. data).

Mechanisms Causing Fragmentation Effects in Southern California

Isolation and dispersal limitation

There is currently no direct measure of the ability of most of the species listed in Table 2 to disperse through the urban matrix. However, there is a good deal of correlative evidence for some of the fragmentation-sensitive species that suggests their ability to disperse across the urban matrix is constrained relative to fragmentation-tolerant species.

The relative inability of these species to colonize across the urban landscape is supported by the lack of a relationship between degree of fragment isolation and the distribution of these species. Soulé et al. (1988) found no relationship between fragment isolation and species richness. Crooks et al. (2001) analyzed single species distributions and found only Bewick's Wren's occurrence to be significantly positively correlated with proximity to other fragments. This is consistent with its ability to recolonize fragments, and its occasional detection in the urban matrix (Crooks et al. 2001). Lovio (1996) did find an effect of isolation on species richness; this difference is likely due to the factors mentioned earlier, smaller interpatch distances and a more permeable matrix in his study area. Taken together the results of Lovio (1996) and Soulé et al. (1988) suggest a threshold of isolation and matrix permeability below which dispersal is an important influence on distributions. Bolger et al. (2001) demonstrated that a group of fragmentation-sensitive species (category 2 species) occurred much less frequently in narrow, linear habitat features (ca. 60 m wide and 250 m long) than a group of fragmentation-tolerant species (category 3 species), suggesting the sensitive species have more stringent corridor requirements and that their movements through the urban matrix are more constrained.

I22-40 cont.

One of the striking features of Table 2 is the almost complete correlation of fragmentation-sensitivity with the inability to exploit the urban matrix. This is consistent with the urban matrix as a dispersal barrier for the fragmentation-sensitive species. Clearly, the urban matrix does not provide a barrier to the species that are able to reside there, and in general these species do not show fragmentation sensitivity.

The available evidence suggests that at least in part, fragmentation-sensitive patterns of members of the shrub avifauna are due to the isolating effects of the urban matrix. The matrix is not necessarily a complete barrier to dispersal but it appears to reduce colonization rates below extinction rates for a number of species (Crooks et al. 2001). More direct tests of this hypothesis in the form of dispersal studies or experimental introductions to unoccupied patches are needed.

Two studies have documented dispersal of banded California Gnatcatchers through fragmented landscapes. A banded juvenile was detected 1.3 km from its natal patch, having had to cross a lightly developed landscape of large wooded house lots and parkland (Atwood et al. 1995 cited in Bailey and Mock 1998). Bailey and Mock (1998) also document a number of dispersal events in a heterogeneous landscape in San Diego. A number of these apparently occurred from a large block of habitat through an archipelago of fragments separated by blocks of development up to 1 km wide. This study was conducted in the same landscape as Lovio (1996) with dense ornamental vegetation and sufficient relief to often provide line-of-sight between patches of habitat. This probably facilitates inter-patch movement. So although the California gnatcatcher does show area sensitivity, this may be more related to its large territory requirements (Preston et al. 1998) rather than a strict inability to recolonize isolated fragments. However, even though dispersal through the urban matrix is possible, colonization rates could still be in excess of extinction rates for this species.

Edge effects: habitat degradation/local habitat selection

Fragmentation and the creation of urban edge exposes CSS and chaparral habitat to increased levels of human-induced disturbance. The effect of increasing disturbance in the form of mechanical damage, fire, and exotic plant invasion on vegetation and birds in habitat fragments has not been thoroughly described. Alberts et al. (1993) found that fragments lose native shrub cover through time and native plant diversity declines while exotic plant diversity increases. Disturbance opens up the vegetation in fragments by causing internal fragmentation with stands of shrubs becoming separated by non-native grasses and forbs.

The effect of disturbance-induced changes in vegetation structure on bird communities has not been well-studied in this region. Sauvajot et al. (1998) found that chaparral bird species abundance did not respond to disturbance-induced changes in vegetation structure in chaparral, whereas Kristan et al. (in press) observed significant changes in vegetation, as well as "habitat," in CSS. Bird species clearly assort along a gradient of shrub density from grassland to open CSS to dense CSS and chaparral (Cody 1975, Bolger et al. 1997). By decreasing shrub cover, disturbance should move the bird community along this gradient. However, the relationship of this avifauna to disturbance-induced changes in shrub vegetation structure needs further quantification.

The effect of invasive non-native annual plants has been severe on coastal sage scrub and may be exacerbated by fragmentation. Coastal sage scrub has been exposed to several waves of grass and herbaceous invaders from the Mediterranean and Middle East beginning with species introduced by missionaries in the mid to late 1700s (Mooney et al. 1986, Minnich and Dezzani 1998). Most prominent among these invaders are grasses in the genera *Avena* and *Bromus,* and the annual forb *Brassica nigra.* These plants may invade as a consequence of soil disturbance and intense or frequent fires, and can invade undisturbed CSS from nearby disturbed areas (Zink et al. 1996). Once established these annuals resist native shrub recruitment (Eliason and Allen 1997). The increase in annual biomass increases rates of nutrient cycling (Jackson et al. 1988) and these annuals may decrease fire intervals by increasing fine fuel availability (Zedler et al. 1983).

I22-40 cont.

Coastal sage scrub and chaparral are stable with fire intervals of ten years or more, but degrade to non-native grassland under more frequent fires or particular intense fires (Zedler et al. 1983). Both chaparral and CSS shrubs resprout after fire although resprouting is more complete in chaparral species. Germination from seed caches (*Salvia* spp.) or germination of small wind-dispersed seeds (*Eriogonum fasciculatum, Artemisia californica*) is a more important source of recovery in CSS shrubs than in chaparral species. Frequent fires can deplete the seed bank and stored carbohydrates of root-sprouting species and cause a vegetation type-conversion to non-native grassland.

Non-native invasion is among the most serious threats to the conservation of native plant and animal communities in this region. For example, Minnich and Dezzani (1998) compared historical vegetation data (1929–1934) to recent survey data and concluded that loss of shrub cover of coastal sage scrub shrubs has been extensive in the Perris Plain of Riverside County. Modal shrub cover loss at 78 sites was 40%. This was particularly true on north-facing slopes, which supported high densities of non-native grasses (*Bromus* spp.). Loss of shrub cover occurred even in the absence of fire and grazing, suggesting a competitive exclusion by the non-native grasses, perhaps through competition for moisture (Minnich and Dezzani 1998).

A landscape analysis of the effect of fragmentation and edge on disturbance regimes in this region has not been attempted. Fragmentation and the creation of edge should increase the exposure of native plant communities to humans, exotic invaders, fire, and mechanical disturbance. It seems likely that habitat fragmentation has enhanced plant invasions by disturbing the native shrub vegetation and providing colonization sources of the exotic species. For example, Zink et al. (1996) documented the invasion of undisturbed coastal sage scrub by non-native annuals from a disturbed pipeline right-of-way. Although the effects of non-native annual plant invasion on native grasses, shrubs, and nutrient cycling have been examined, their effects on higher trophic levels has received little attention. The alteration of the physical structure of CSS and chaparral habitat, and changes in seed and arthropod food resources, could affect higher trophic levels including birds.

Landscape-scale habitat selection—patch size and isolation

Feasible observations and experiments to test this hypothesis are elusive, so the only support for this mechanism would be lack of evidence for other mechanisms. This mechanism is perhaps most feasible for the migrant species that would not be expected to have difficulty dispersing across the urban matrix (e.g., Lazuli Bunting). However, this hypothesized mechanism remains speculative.

Secondary effects: top-down—predation and brood parasitism

Morrison and Bolger (2002) found no evidence to suggest that the landscape pattern of the Rufous-crowned Sparrow results from top-down effects near edges. Nest predation rates and breeding productivity did not differ between edge and interior areas. The predation result is surprising considering that some putative nest predators (e.g., Western Scrub-Jays and Common Ravens, Table 1; California ground squirrels, D. Bolger, pers. obs.) are more abundant along edges. Video surveillance and direct observation documented ten predation events, nine of which were by snakes (seven by California

kingsnakes, two by gopher snakes), suggesting that snakes are the principal predator on Rufous-crowned Sparrow nests. The rate at which snakes were encountered by field workers was equivalent in edge and interior areas (Morrison and Bolger 2002).

Top-down changes may be important in isolated habitat fragments. Crooks and Soulé (1999) found evidence for mesopredator release in fragments lacking coyotes. They report that the abundance of mesopredators (gray fox, opossum, striped skunk, and domestic cat), as revealed by track stations and scat transects, is negatively correlated with coyote abundance (after accounting for the potential confounding effects of area, age, and isolation). Moreover, mesopredator activity is also higher at times when coyote activity is lower. They found a significant positive correlation between the species richness of shrub-specialist birds and coyote presence and conclude that the presence of coyotes enhances survival and reproduction of these birds through the suppression of mesopredators. Bird species richness showed a non-significant negative trend with increasing mesopredator abundance.

Crooks and Soulé (1999) also presented evidence that the effect of coyotes on domestic cats is particularly marked. Their radio-collared cats often were killed by coyotes, 21% of coyote scat examined contained cat remains, and 46% of cat owners surveyed said they restricted their cats' activities when coyotes were present. The effects of cats can be severe. Based on owner surveys they estimate that a 20-ha fragment would be subject to predation by 35 outdoor cats that together would bring a total of 525 bird prey items to their owners each year. The authors do not report whether the prey items are predominantly common urban species or species residing predominantly in natural habitat.

I22-40 cont.

Brown-headed Cowbirds have been shown to be another important top-down influence in fragmented forest habitat. However, they do not seem to be as significant an influence in fragmented coastal sage scrub vegetation (Ellison 1999). In four years (342 nests, Riverside and San Diego counties) in edge and interior habitat, S. Morrison and D. Bolger (2002; unpubl. data) found no brood parasitism by Brown-headed Cowbirds on Rufous-crowned Sparrows. In two years (same Riverside County site as Morrison and Bolger) Ellison (1999) observed cowbird parasitism in only 3 of 217 nests of Spotted and California towhees and Sage and Rufous-crowned sparrows collectively. Cowbirds were detected in my edge point counts in San Diego, but only infrequently.

In this region, the habitat in which cowbirds are consistently a significant problem is riparian woodland. The endangered Least Bell's Vireo is significantly affected by cowbirds (Kus 1999) as have been other riparian breeding birds. This habitat is naturally patchy, but habitat loss due to development has increased the patchiness as well as patch isolation, and has exposed the habitat to a variety of disturbances. Because breeding habitat for riparian species occurs in relatively small, discrete patches, it has been possible to reduce the local density of cowbirds through trapping programs and reduce parasitism on the Least Bell's Vireo (Kus 1999).

Braden et al. (1997) reported that 32% of California Gnatcatcher nests suffered cowbird parasitism in coastal sage scrub habitat in southwestern Riverside County. Parasitism rates were not analyzed with respect to patch size or distance to edge so it is not possible to interpret these data with regard to fragmentation. However, at least two of Braden's study areas were adjacent to lakes that are fringed by riparian vegetation, which may have attracted the cowbirds (see below). Grishaver et al. (1998) found much lower rates (2%) of parasitism on gnatcatchers at a site in San Diego.

Cowbirds are noted for their large home ranges and the extensive distances they will fly between feeding, roosting, and host nesting areas (Thompson 1994, Robinson et al. 1995a). It is likely then that their abundance in southern California is related to factors distributed at a landscape or regional scale. The effect of urban fragmentation on cowbird abundance is unknown. If cowbirds can exploit resources in the urban matrix, such as seed from feeders, the urban landscape may be highly permeable to them and may enhance cowbird abundance in riparian areas that abut residential development. Further research on the landscape correlates and determinants of cowbird abundance in this region is needed.

Secondary effects: bottom-up

The effect of habitat fragmentation on bird food resources has been relatively understudied (Burke and Nol 1998, Robinson 1998). Bolger et al. (2000) found complex relationships between arthropods and fragment size, age, and edge proximity. Arthropods dwelling on California buckwheat (*Eriogonum fasiculatum*) generally decline in abundance and point diversity with decreasing fragment size and increasing fragment age. Thus food availability for foliage gleaners foraging on buckwheat is potentially lower in smaller and older fragments.

Reponses of the ground-dwelling arthropods are more varied, but are generally similar to the shrub insects. Interestingly, ground spiders in-

crease in abundance and point diversity with decreasing area and increasing age (Bolger et al. 2000). The most abundant ground arthropods in habitat fragments are common non-native species: sowbug (*Armadillidium vulgare*), European earwig (*Forficula auriculatum*), and oriental cockroach (*Blatta orientalis*). There did not seem to be large differences between the edge and interior in the abundance and diversity of ground or shrub arthropods.

In contrast, ground arthropods are generally less abundant in the edge than the interior of large habitat blocks in San Diego (D. Bolger, unpubl. data). Grasshoppers, mites, spiders, jumping bristletails, and native ants were significantly less abundant in edge plots than in interior plots. Beetles, bees and wasps, and flies did not differ between edge and interior plots. No arthropod order was significantly more abundant in edge plots than in interior plots.

The arthropod taxa most vulnerable to fragmentation and edge are the native ants. In San Diego, the non-native Argentine ant (*Linepithema humile*) invades coastal sage scrub habitat from urban edges (Suarez et al. 1998). In isolated habitat fragments (Suarez et al. 1998) and in edge areas of large habitat blocks (D. Bolger, unpubl. data), the abundance and diversity of native ants is strongly negatively correlated with the abundance of the Argentine ant. Argentine ants are invasive human commensals and have become established in Mediterranean climates worldwide (Majer 1994). They have been implicated in the decline of native ants in a number of locations (Erickson 1971, Ward 1987, Majer 1994, Holway 1995, Cammell et al. 1996, Human and Gordon 1996). Argentine ants possess interference and exploitative competitive advantages over native California ants (Human and Gordon 1996, Holway et al. 1998, Holway 1999) and have higher worker densities possibly due to reduced intraspecific competition (Holway et al. 1998).

I22-40 cont.

Several lines of evidence suggest that the availability of water from irrigation and runoff may allow the Argentine ants to invade along edges, and moisture limitation may prevent their invasion of undisturbed interior areas. Tremper (1976) found Argentine ants more vulnerable to desiccation than most native California ants. Also, Argentine ants are able to invade riparian habitat, but only if water flows year-round (Holway 1998a).

Argentine ants are generally smaller than the native ant species they replace, suggesting that they may not be adequate replacements in the diet of ant-eating birds and lizards. Suarez et al. (2000) demonstrated that the ant-specialist coastal horned lizard showed a strong prey preference for native ants over the Argentine ant. Ants frequently appear in lists of prey consumed by ground-foraging birds, but their relative dietary importance is unclear. Several studies have reported negative correlations of Argentine ants, or other exotic ants, with non-ant arthropods (Porter and Savigno 1990, Cole et al. 1992, Human and Gordon 1997, Bolger et al. 2000), while others have found no relationship (Holway 1998 b). Bolger et al. (2000) found significant partial negative correlations between the abundances of Argentine ants and several non-ant arthropod taxa. The magnitude of the correlations, however, were generally small suggesting the effect of Argentine ants on non-ant arthropods is less severe than their effect on native ants.

Taken together these studies demonstrate that arthropod communities change greatly with fragmentation and edge. In general arthropod abundance and diversity declines in isolated fragments and near the edge of large habitat blocks. Unfortunately, at this time we do not know how these changes in arthropod communities affect bird foraging, reproductive success, and habitat selection.

CONCLUSIONS

The studies reviewed indicate that a significant portion of the avifauna of coastal sage scrub and chaparral habitats in coastal southern California display patterns of abundance that suggest sensitivity to edge and fragmentation caused by urban development. Area, age, and edge sensitivity in bird abundance and presence/absence have been demonstrated in a broad spectrum of the avifauna (Table 1; Soulé et al. 1988, Lovio 1996, Bolger et al. 1997, Crooks et al. 2001). However, so little research has been conducted on mechanisms that it is difficult at this time to generalize about the forces shaping these distributions. Area exerts an influence through an initial sampling effect (Bolger et al. 1991). It may also affect extinction rates through its effect on population size; extinction rates are higher in smaller fragments (Crooks et al. 2001). The available evidence suggests that elevated predation and parasitism along edges are not involved (Morrison and Bolger 2002; P. Mock, pers. comm.). Correlational evidence suggests mesopredator release affects bird species persistence in isolated habitat fragments. However, an effect of mesopredator abundance on nest predation rate or adult or juvenile survival has yet to be demonstrated. Arthropod community composition and abundance varies strongly with fragmentation and edge suggesting that food availability could play a role in shaping these abundance patterns (Suarez et al. 1998, Bolger et al. 2000; D. Bolger, unpubl. data).

The characteristics of the urban matrix and bird species responses to it may be very important. Dispersal limitation imposed by the urban matrix may explain area sensitivity in many fragmentation-sensitive species. Extinction rates of fragmentation-sensitive species exceeded colonization rates in fragments (Crooks et al. 2001). These species generally are not observed to occur in the urban matrix (Table 2). Species that are able to exploit the urban matrix do not show fragment area sensitivity or edge sensitivity (Table 2). Clearly, as shown by the California Gnatcatcher's ability to disperse through developed landscapes, this is not the case for all fragmentation-sensitive species.

The relationship between habitat degradation and extinction and colonization rates in habitat fragments needs clarification. Is fragmented habitat sufficiently degraded to lead to local extinction or cause dispersing birds to pass up fragments? Many fragments lacking particular bird species do not differ in gross habitat characteristics from those that do support them (D. Bolger, pers. obs.). Crooks et al. (2001) found no relationship between extinction rates and percent native shrub cover, an index of habitat degradation. I suspect that, except for the most degraded patches, the absence of species in the "moderately sensitive" category (Table 2) from fragments is due in large part to the inability of these species to successfully disperse through the urban matrix and colonize patches frequently enough to counteract extinction processes. However, studies of dispersal in a variety of species are needed, as are demographic studies in habitat fragments and reintroduction experiments to test the suitability of unoccupied fragmented habitat.

I22-40 cont.

Contrasts with Fragmentation Studies in the East and Midwest

Several features of the research reviewed here appear in contrast to the work done in the East and Midwest where top-down effects appear to be the most important consequences of fragmentation. Studies in those regions have often documented strong effects of nest predation and brood parasitism near edges or in more fragmented landscapes (Robinson et al. 1995a, Donovan et al. 1997). The evidence for top-down effects in southern California is mixed. Morrison and Bolger (2002) found that rates of nest predation or parasitism were not elevated along developed edges in the Rufous-crowned Sparrow, although Crooks and Soulé (1999) find evidence for mesopredator release in isolated fragments.

Fragment isolation appears to be a more important influence in southern California. In the Midwest, regional-scale dispersal appears to maintain populations of neotropical migrants in extensive landscape sink areas (Robinson et al. 1995a). In contrast in San Diego, isolation on the scale of 100's of meters appears to prevent rescue of populations of some species in fragments. Either the fragmentation-sensitive species in southern California are poorer dispersers, or they are much better at recognizing and avoiding sink habitat than the neotropical migrants of the Midwest. Of course, it has not been demonstrated that fragments are demographic sinks in southern California as they are for a number of species in the Midwest.

The avifauna in southern California is predominantly composed of year-round resident species as opposed to the neotropical migrant species that dominate the eastern and midwestern avifauna. The generally shorter dispersal distances of residents compared to migrants (Paradis et al. 1998) may help explain the relative importance of isolation. The nature of the intervening urban matrix may also play a role. The urban matrix could be more hostile to dispersal than the agricultural matrix of the Midwest.

Habitat degradation may be a more powerful consequence of fragmentation and edge in the arid West than in the Midwest and East. This degradation may be reflected in changes in physical habitat structure or food availability in habitat fragments. The effect of fragmentation on woody vegetation structure has not been the focus of studies of fragmentation in the East and Midwest, but one study has demonstrated lower food availability in fragments (Burke and Nol 1998).

Information Needs

In addition to those already mentioned there are a number of gaps in our knowledge that limit our ability to understand, predict, and manage the effects of fragmentation on birds in this region. Our understanding of the trophic effects of fragmentation is hindered by the lack of basic autecological data on bird foraging and diet, including adult and nestling food. Nest predation must be investigated on a range of bird species to discover whether the results on the Rufous-crowned Sparrow are generalizable to other species nesting in different strata and with differing landscape sensitivities. We know little about the non-mammalian predator community in fragments. Snakes appear to be quite rare in habitat fragments (D. Bolger, unpubl. data). If this is true what effect does this have on species that are vulnerable to snake predation? Are predation rates lower in fragments or does the effect of increased mammalian mesopredators or other predators compensate for reduced snake predation?

We also need to understand how edge effects

scale with the percentage of the local landscape that is developed (Donovan et al. 1997). Do isolated habitat fragments experience more intense edge effects than larger habitat blocks? Similarly, how does the predation regime in isolated fragments compare with predation in the edge and interior of large habitat blocks? A virtually untouched question is the source status of the urban matrix for bird species that occur in both the urban matrix and natural habitat. Bolger et al. (1997) found elevated densities of some native urban-exploiting birds up to 1km into habitat blocks. The consequences of this density augmentation on avian communities deserves further study.

A landscape perspective on disturbance regimes is urgently needed. How do fragmentation and edge affect non-native plant invasion, fire, and other disturbance regimes. These are among the most severe threats to conservation in this semi-arid region as demonstrated by Minnich and Dezzani's (1998) work. Physical gradients (soil moisture, air temperature, etc.) along edges have not been investigated in this system and may be important. Also the effect of ENSO (El Niño-Southern Oscillation) driven variation in rainfall is essential to understanding avian population fluctuations (Morrison and Bolger in press) that may have important implications for extinction rates in fragments.

I22-40 cont.

Conservation Implications

There is an extensive conservation planning effort ongoing for coastal southern California under the state's Natural Communities Conservation Planning program (NCCP). The reserve system that ultimately results from this effort will by necessity be set within a predominantly urban matrix. A species-by-species evaluation of the conservation implications of the findings reviewed here is beyond the scope of this paper and would require a region-wide evaluation of the abundance and distribution of these species on protected lands (J. Rotenberry et al., unpubl. data). There are, however, a number of general conclusions that can be drawn that are relevant to the management of reserves in these landscapes.

The studies reviewed here suggest that highly isolated shrub habitat patches less than 100 ha provided little conservation value for fragmentation-sensitive species over the long term. However, they do support other members of the regional fauna in abundance (Soulé et al. 1988, Crooks et al. 2001). The limitations of fragmented habitat for conservation are acknowledged in the NCCP reserve selection guidelines that emphasize large, contiguous blocks of habitat (Atwood and Noss 1994). Denser archipelagos of fragments probably would support more interpatch movement and higher abundance of these species as suggested by a comparison of Soulé et al. (1988) and Lovio (1996). However, since we do not know whether fragments are sink or source habitat for most species it seems unwise to design landscape to encourage dispersal to fragments from source habitat.

Edge effects on bird abundance (Table 2; Bolger et al. 1997) and the penetration of Argentine ants along edges (Suarez et al. 1998; D. Bolger, unpubl. data) are of concern even in large reserves. We still do not have an adequate understanding of the variety of ecological mechanisms generating edge effects, the extent of their spatial penetration into blocks of habitat or the time course of these effects. Edge effects such as reduced or enhanced abundance of bird species, Argentine ant invasion, and changes in arthropod communities appear to penetrate reserves on the scale of hundreds of meters. Thus these effects can significantly reduce the effective area of even large reserves.

To effectively conserve the coastal southern California biota, it will be necessary to identify the effects of urban fragmentation and understand their ecological mechanisms. There is an understandable desire among land managers and conservation planners for simple geographic answers from ecologists: prescriptions for minimum area requirements, buffer and edge effect distances. However, easy answers are misleading, for although fragmentation and edge effects have a geographic dimension, that is they can be mapped to some degree of resolution, they are primarily community ecological and population ecological phenomena. As such, they are dynamic processes and their spatial dimension is dependent upon the makeup of the local community as well as time. For example, Crooks et al. (2001) demonstrated that area sensitivity is not static but is a function of time. It is likely that the spatial penetration of edge effects is also not static.

Ecologists will only be able to make robust management prescriptions about fragmentation and edge effects when we have more fully examined the range of ecological mechanisms generating these effects. Even then, they will not be simple answers expressed in meters and hectares, but will be time-dependent and conditional on the composition of the local community. So, minimum area requirements will be expressed in general terms for a given range of fragment age and will depend on the condition of the vegetation in the fragment and the composition of the predator community. These answers will not be easy to map, or to explain to policy-makers, but they will be ecologically valid. Of course geo-

graphic tools such as buffer distances will continue to be important conservation planning tools. But we cannot allow that fact to convince policy-makers, the public, and ourselves, that conserving the native biota of coastal southern California in the face of a large and growing human population will be as simple as creating buffers of a fixed distance around reserves. Instead, it we will require understanding and actively managing populations and processes, and we are a long way from possessing the necessary knowledge and management capabilities to accomplish that.

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APPENDIX. SCIENTIFIC NAME OF ALL VERTEBRATE SPECIES MENTIONED IN TEXT OR TABLES

Birds	
California Quail	*Callipepla californica*
Mourning Dove	*Zenaida macroura*
Lesser Nighthawk	*Chordeiles acutipennis*
Costa's Hummingbird	*Calypte costae*
Anna's Hummingbird	*Calypte anna*
Bell's Vireo	*Vireo bellii*
Western Scrub-jay	*Aphelocoma coerulescens*
Common Raven	*Corvus corax*
American Crow	*Corvus brachyrhynchos*
Common Bushtit	*Psaltriparus minimus*
Bewick's Wren	*Thryomanes bewickii*
Wrentit	*Chamaea fasciata*
Blue-gray Gnatcatcher	*Polioptila caerulea*
California Gnatcatcher	*Polioptila californica*
Northern Mockingbird	*Mimus polyglottos*
California Thrasher	*Toxostoma redivivum*
European Starling	*Sturnus vulgaris*
Lazuli Bunting	*Passerina amoena*
Spotted Towhee	*Pipilo maculatus*
California Towhee	*Pipilo crissalis*
Rufous-crowned Sparrow	*Aimophila ruficeps*
Sage Sparrow	*Amphispiza belli*
Black-chinned Sparrow	*Spizella atrogularis*
Grasshopper Sparrow	*Ammodramus savannarum*
Lark Sparrow	*Chondestes grammacus*
Brown-headed Cowbird	*Molothrus ater*
Western Meadowlark	*Sturnella neglecta*
House Finch	*Carpodacus mexicanus*
Lesser Goldfinch	*Carduelis psaltria*
Reptiles	
coastal horned lizard	*Phrynosoma coronatum*
California kingsnake	*Lampropeltis getula*
gopher snake	*Pituophis melanoleucus*
Mammals	
Virginia oppossum	*Didelphis virginiana*
California ground squirrel	*Spermophilus beechyi*
striped skunk	*Mephitis mephitis*
coyote	*Canis latrans*
grey fox	*Urocyon cinereoargenteus*
domestic cat	*Felis catus*

I22-40 cont.

A Landscape Analysis of Grassland Birds in a Valley Grassland-Oak Woodland Mosaic[1]

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Abstract

While little research has been done on California grassland birds, their populations are thought to be declining due to habitat loss, fragmentation, and degradation. We investigated the association between California grassland birds and their landscape-scale habitat matrix. The habitat is a mosaic of valley grassland with blue oak and coast live oak woodlands. In this study, we used logistic regression to analyze presence of grasshopper sparrows (*Ammodramus savannarum*), horned larks (*Eremophila alpestris*), western meadowlarks (*Sturnella neglecta*), savannah sparrows (*Passerculus sandwichensis*), and the guild as a whole in response to patch size, cover-type richness, and proportion of high-intensity development, low-intensity development, deciduous forest, and evergreen forest in the landscape. These landscape variables were analyzed for the 2004 and 2005 breeding seasons at three spatial scales: 500 m, 1 km, and 2 km buffer zones from the point count center. We found that the grassland bird guild as a whole was positively associated with patch size, proportion of low-intensity development, and proportion of evergreen forest and negatively associated with cover-type richness, proportion of high-intensity development, and proportion of deciduous forest. Patch size and cover-type richness were the most commonly significant variables across spatial scales and across years. Individual species showed similar trends to that of the guild.

I22-41 *Keywords: California, grassland birds, habitat fragmentation, landscape analysis, patch size.*

Introduction

In California, the decline of grassland bird species is thought to be associated with major changes in the grassland ecosystem (California Partners in Flight 2000). Three of the foremost ecosystem alterations in recent California history are the near complete shift from native perennial grasses to European annual species, the large-scale conversion of grassland to farmland, and continued habitat fragmentation, primarily as a result of urbanization (California Partners in Flight 2000). Ecosystem changes have led to the decline of grassland bird species not only in California but throughout the United States. This nationwide decline has been faster and more steady than that of any other guild (Knopf 1994, Peterjohn and Sauer 1999). These large shifts in population dynamics suggest that to conserve grassland birds, land managers need more in-depth and current information on how these species are

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interacting with their environment at the landscape scale. In this paper, we focus on two species known to be decreasing nationwide: grasshopper sparrow (*Ammodramus savannarum*) and western meadowlark (*Sturnella neglecta*) (Herkert 1994).

Although there are no available data on grassland birds prior to the 1800s (California Partners in Flight 2000), a general portrait of the California grassland ecosystem has emerged. Upon arrival of Europeans in North America, the first major transformation in California grasslands was from native perennial plant species to European annuals. This transformation likely began prior to the 1769 establishment of the first Spanish mission in California (Heady and others 1991, Mensing and Byrne 1998). Heady and others (1991) suggest three factors led to the conversion of the grasslands: introduction of livestock, drought, and introduction of exotic annual plant species. It was the combination of these factors working together that allowed exotic annuals to replace the native grassland vegetation. Subsequently, 75 percent of the Central Valley, which originally contained the largest area of grassland in California (Huenneke 1989), was converted to farmland by 1880 (Hewes and Gannett 1883, cited in Huenneke 1989). Today, remaining grasslands are becoming fragmented as suburbs expand, and ranch lands and farm lands are divided into smaller parcels with larger homes (California Department of Forestry and Fire Protection 2003). We propose that these factors are leading to decreasing grassland patch size available for nesting grassland birds. Therefore, managing for fragmentation provides an important opportunity for conservation of grassland bird species.

I22-41 cont.

Although most grassland bird research has been done in the Midwest, researchers in California may gain insight from the results of such studies. For example, numerous publications from research in the Midwest have focused on area sensitivity: grassland birds showing preference for larger grassland patches (Herkert 1994, Vickery and others 1994, Helzer and Jelinski 1999, Winter and Faaborg 1999, Horn and others 2000, Johnson and Igl 2001, Renfrew and Ribic 2002, Bollinger and Gavin 2004, Davis 2004). Questions arising from the area sensitivity studies have led researchers to investigate the influence on grassland birds of other landscape-level factors, such as cover-type diversity, mean patch size of cover types, and amount of grassland edge (Ribic and Sample 2001, Bakker and others 2002, Fletcher and Koford 2002).

Very little research has been done on grassland birds in California. To date, studies have focused on the influence of local vegetation characteristics on grassland bird populations (Collier 1994, Goerrissen 2005, Gennet and others 2006). This paper is the first in a series of publications, in collaboration with the East Bay Regional Park District, that will take a holistic approach to grassland bird systems, looking at both landscape- and community-level factors. While there have been no studies in California to determine the influence of diminishing patch size on grassland birds, grassland fragmentation is probably exacerbating the decrease in California grassland birds (California Partners in Flight 2000). Due to this lack of information, basic data collection is needed before the proposal of any broad-scale conservation recommendations (California Partners in Flight 2000).

We aimed to quantify the effects of landscape variables on four grassland bird species: grasshopper sparrow, savannah sparrow (*Passerculus sanwichensis*), horned lark (*Eremophila alpestris*), and western meadowlark. We did this by investigating the following questions: 1. Is grassland bird presence positively associated with size of grassland patch? 2. Is grassland bird presence negatively associated with cover-

type richness, in other words, number of land cover types within a specific buffer zone? 3. Is grassland bird presence negatively associated with proportion of urban development and oak woodland cover types in the landscape? The six landscape variables we analyzed were: patch size, cover-type richness, and proportion of high-intensity development, low-intensity development, deciduous forest, and evergreen forest.

Methods

Study Sites

Plots were located in seven East Bay Regional Park District properties in Alameda and Contra Costa counties (Brushy Peak, Lake Chabot, Morgan Territory, Pleasanton Ridge, Sycamore Valley, Vasco Caves, and Sunol) and in Camp Parks RFTA military installation in Dublin, California (*fig. 1*). Data were collected from 49 plots in 2004 and 62 plots in 2005. Shared characteristics of the majority of plots were large patches of valley grasslands (areas > 100 m radius) surrounded by oak woodlands and/or developed areas. The valley grassland type is primarily composed of European annual grasses, including annual ryegrass (*Lolium multiflorum*), rip-gut brome (*Bromus diandrus*), and soft chess (*Bromus hordeaceus*). The most common native species found on our plots is purple needle grass (*Nassella pulchra*, 2 percent cover), followed by: tomcat clover (*Trifolium willdenovii*), notchleaf clover (*Trifolium bifidum*), and Johnny jump-up (*Viola pedunculata*) all at 0.4 percent cover. The surrounding mosaic of oak woodland is largely made up of blue oak (*Quercus douglasii*) and coast live oak (*Quercus agrifolia*). In addition to oak woodlands, the study sites, especially Sycamore Valley and Lake Chabot, are surrounded by housing developments of differing intensity.

I22-41 cont.

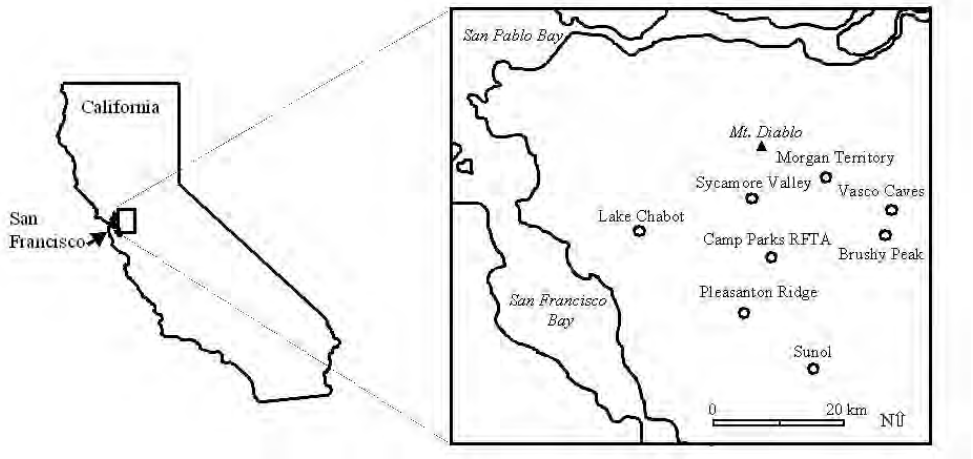

Figure 1—Study area showing East Bay Regional Park District properties and Camp Parks RFTA.

Bird Sampling

California Partners in Flight lists grasshopper sparrow, western meadowlark, and savannah sparrow as focal grassland species of conservation and management concern. We chose to study these three species in addition to the horned lark because they are dependent on grasslands for foraging and breeding.

We applied standard point count methodology for grassland bird surveys (Ralph and others 1995). Three, 10-minute point count surveys were done at each plot at least 10 days apart during the 2004 and 2005 breeding seasons. Surveys took place between March 15 and June 15. Barring high winds or inclement weather, point counts began within 15 minutes of sunrise, and the final point count of the day ended no later than four hours after sunrise. At our 100-m variable circular plots, we recorded each bird detected by sight or sound and its approximate distance to the plot center. To ensure independence among plots, point count stations were at least 200 m apart. Birds flying over the plot or detected > 100 m from the center were recorded but not used in this analysis.

Geographic Information Systems Analysis

We analyzed six landscape-level variables within three buffer zones around the plot center: 500 m, 1 km, and 2 km *(fig. 2)*. At each of these spatial scales we analyzed: 1) patch size, defined here as the total area of the grassland patch in which the point count was taken; 2) cover-type richness, defined as the total number of land cover types; 3) proportion of deciduous forest (deciduous forest is defined as areas dominated by deciduous trees); 4) proportion of evergreen forest (defined as areas with > 67 percent coniferous or broad-leaved evergreen trees); 5) proportion of low-intensity development (defined as having considerable amounts of constructed and vegetated surfaces); and 6) proportion of high-intensity development (defined as areas with high levels of constructed surfaces and little or no vegetation). To quantify these landscape variables, we used the California 2000 Land Cover Data (http://www.csc.noaa.gov/crs/lca/pacificcoast.html, last accessed August 14, 2006) created by National Oceanic and Atmospheric Administration's Coastal Change Analysis Program. This land cover dataset was created in the year 2000, has 30 m resolution, and is projected in Albers Conical Equal Area, North American Datum 1983. We used FRAGSTATS (McGarigal and others 2002) to calculate all of the landscape variables.

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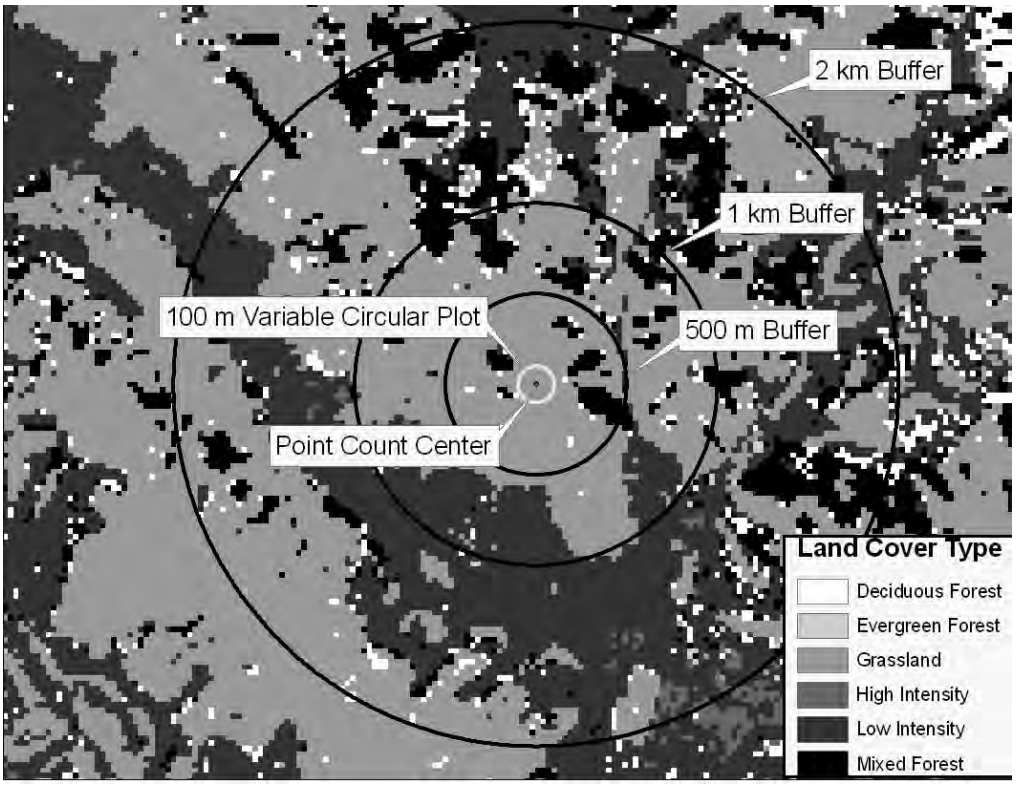

Figure 2—Land cover layer and plot layout: four concentric rings indicating extent of the plot and three buffer zones around the point count center.

I22-41 cont.

Statistical Analysis

Due to the limited number of grassland bird detections, we built logistic regression models (Hosmer and Lemeshow 2000), appropriate for presence/absence data. Separate models were built for each species and for the grassland bird guild as a whole at three spatial scales and for each year. We performed backward stepwise logistic regression to generate models describing the influence of landscape scale variables on the presence of grassland birds, hand-selecting variables at each step. In each plot, a species was counted as present if it was seen at least once over the three visits per year; the guild was counted as present if any one of the four grassland bird species was detected on a plot. All six predictor variables were entered into the full model. At each step, the variable with the highest p-value was removed until only variables with a p-value < 0.10 remained in the model. We used $p < 0.10$ instead of the more standard $p < 0.05$ because this is a preliminary study and we did not want to exclude any important variables. The unweighted sum of squares test was used to determine the overall model fit. Final models were those with variable p-values < 0.10 and model fit p-values > 0.10. All logistic regression analyses were performed using S-PLUS 6.1. The two years of data (2004 and 2005) were analyzed separately because 13 new plots were added during the second field season.

Results

Grassland Bird Guild

The final model for the grassland bird guild, using all four species, included two variables that were consistently significant ($p < 0.10$) across both years: patch size *(fig. 3)* and cover-type richness *(fig. 4)*. In 2004, patch size was significant at 500 m and 2 km, while cover-type richness was significant at the 1 km and 2 km scales (*table 1*). In 2005, patch size entered the final model at 1 km and 2 km, while cover-type richness was significant across all three scales. The guild was also significantly associated with proportion of high-intensity development, proportion of low-intensity development, proportion of deciduous forest, and proportion of evergreen forest.

Individual Species

In both 2004 and 2005, western meadowlarks were detected on a greater number of plots than any other grassland bird species. This probably drives the similarities between results from the guild model and the individual western meadowlark species model. Like the guild as a whole, presence of western meadowlarks was associated with all six landscape variables (*table 1*). In 2004, cover-type richness was significant across all three scales. In 2005, patch size and proportion of low-intensity development were in the model at 1 km and 2 km. The only variable that was consistently significant across years for western meadowlarks was cover-type richness.

Savannah sparrows were associated with patch size, cover-type richness and proportion of evergreen forest (*table 1*). In 2004, presence of savannah sparrows was consistently associated with patch size at all three spatial scales. In 2005, cover-type richness was significant at 500 m and 1 km, and proportion of evergreen forest was significant at 500 m and 2 km. Patch size was the only variable that remained in the models for both 2004 and 2005.

I22-41 cont.

Over the two years of the study, only the 2 km spatial scale in 2005 produced significant results for the horned lark (*table 1*). These significant variables were patch size, cover-type richness, proportion of deciduous forest, and proportion of evergreen forest.

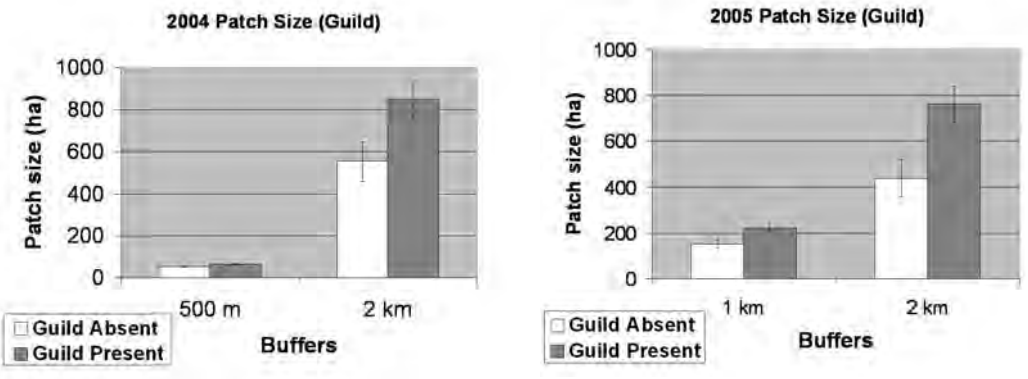

Figure 3—Mean and standard error for patch size (ha) at multiple spatial scales in plots with (shaded) and without (white) the grassland bird guild for 2004 and 2005.

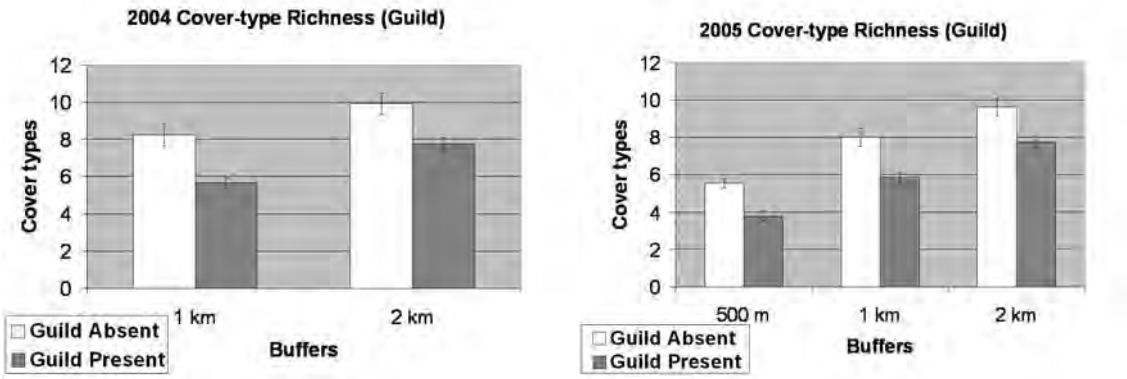

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Figure 4—Mean and standard error for cover-type richness (number of cover types) at multiple spatial scales in plots with (shaded) and without (white) the grassland bird guild for 2004 and 2005.

Grasshopper sparrows were detected less frequently than the other three grassland bird species in both years. Despite their rarity in our study area, grasshopper sparrow presence was significantly associated with several variables, including: cover-type richness, proportion of low-intensity development, proportion of deciduous forest, and proportion of evergreen forest (*table 1*). Proportion of deciduous forest in 2005 was the only variable that was consistently significant across spatial scales. No variables were significant in both years for grasshopper sparrows.

At the 500-m spatial scale in both years, grassland birds tended to be absent in patches that contained development. For example, grasshopper sparrows and savannah sparrows were found only in habitat matrices that did not include high-intensity development. Similarly, horned larks were found in areas with no high- or low-intensity development. Conversely, western meadowlarks were not restricted to patches without development at this scale.

Table 1—*Significant variables for the grassland bird guild and for each species individually at 500 m, 1 km and 2 km for 2004 and 2005. P-V is the p-value for the variable and P-M is the p-value for the model fit. A plus sign indicates a positive association and a minus sign indicates a negative association.*

	2004						2005					
	500 m		1 km		2 km		500 m		1 km		2 km	
Species and Variables	P-V	P-M	P-V	P-M	P-V	P-M	P-V	P-M	P-V	P-M	P-V	P-M
Guild		0.8		0.3		0.8		0.4		0.2		0.8
Patch size	+ 0.008				+ 0.04				+ 0.03		+ 0.01	
Cover-type richness			- 0.004		- 0.008		- 0.001		- 0.02		- 0.006	
% High intensity dev.	- 0.07								- 0.05			
% Low intensity dev.									+ 0.04			
% Deciduous	- 0.05											
% Evergreen forest	+ 0.04											
Western Meadowlark		0.4		0.3		0.3				0.2		0.8
Patch size									+ 0.01		+ 0.006	
Cover-type richness	- 0.003		- 0.007		- 0.01						- 0.01	
% High intensity dev.									- 0.07			
% Low intensity dev.									+ 0.05		+ 0.03	
% Deciduous forest											+ 0.098	
% Evergreen forest					- 0.06							
Savannah Sparrow		0.8		0.7		0.5		0.3		0.2		0.9
Patch size	+ 0.01		+ 0.008		+ 0.004						+ 0.01	
Cover-type richness							- 0.001		- 0.003			
% Evergreen forest							+ 0.04				+ 0.03	
Grasshopper Sparrow				0.6						0.98		0.2
Cover-type richness											- 0.098	
% Low intensity dev.											+ 0.06	
% Deciduous forest									+ 0.04		+ 0.02	
% Evergreen forest			+ 0.09									
Horned Lark												0.4
Patch size											+ 0.01	
Cover-type richness											- 0.04	
% Deciduous forest											+ 0.03	
% Evergreen forest											+ 0.06	

I22-41 cont.

Discussion

Patch Size

Our results show a significant relationship between patch size and western meadowlarks, horned larks, and savannah sparrows. Western meadowlarks were found in patches $\geq$ 55 ha in 2004 and $\geq$160 ha in 2005. Savannah sparrows were found in patches $\geq$ 376 ha in 2004 and $\geq$ 124 ha in 2005. Horned larks were found in patches $\geq$ 124 ha in both years. Our model for grasshopper sparrows does not include patch size as a significant variable; however, they were found only in patches that were $\geq$ 139 ha during both study years. For both years, grassland patches in our study areas ranged from 55 to 1234 ha. Research in forest ecosystems suggests that smaller patches may cause higher rates of nest predation (Gates and Gysel 1978) and parasitism (Brittingham and Temple 1983), more interspecific competition (Ambuel and Temple 1983), and fewer appropriate breeding sites (Wilcove and others 1986).

Perhaps similar processes are occurring in grasslands. Our results agree with several studies showing that grassland birds are sensitive to patch size. For example, in Illinois, Herkert (1994) found that grasshopper sparrows only occurred in patches > 30 ha, and savannah sparrows occurred in patches > 40 ha. Grassland patch size in Herkert's study varied from 0.5 to 650 ha. In Maine, Vickery and others (1994) found that grasshopper sparrows required grassland patches of about 100 ha, whereas savannah sparrows required patches of about 10 ha. Grasslands in Vickery's study ranged from 0.3 to 404 ha. Collier (1994) found that in Southern California, grasshopper sparrow subspecies *A. s. perpallidus* had a territory size of 0.37 ± 0.16 [SD] ha. In the Midwest, grasshopper sparrows only chose breeding patches that were approximately 100 times the size of their territory (California Partners in Flight 2000). Further research may show a similar trend for California populations as well.

Cover-type Richness

At the 2 km scale, there were 14 possible cover types. Cover types fell into the following categories: grassland, forest, cultivated, developed, scrub, wetland, bare land, and water. In our study, savannah sparrows were significantly negatively associated with cover-type richness at 500 m and 1 km in 2005. Grasshopper sparrows were negatively associated with cover-type richness at the 2 km scale in 2005. Additionally, cover-type richness was in our models for the guild, western meadowlarks, and horned larks. This negative relationship between grassland bird presence and cover-type richness was expected because the more cover types in an area, the less likely grassland habitat will be available for grassland bird species. Similarly, in Wisconsin, Ribic and Sample (2001) showed that cover-type diversity, measured by the Shannon diversity index, was a key predictor of grassland bird density. They found that transects with less cover-type diversity had higher densities of grassland birds. These less diverse landscapes consisted mainly of grasslands. Savannah sparrow (at 800 m) and grasshopper sparrow (at 200 and 400 m) densities were higher in landscapes with lower cover-type diversity. Our study evaluated a similar variable using cover-type richness instead of the Shannon diversity index. We used cover-type richness because we found a multicollinear relationship between Shannon diversity index and patch size: as Shannon diversity index increased, patch size decreased. There was no multicollinear relationship between cover-type richness and patch size.

I22-41 cont.

Proportion of Different Habitat Types

We analyzed proportion of deciduous forest and evergreen forest separately and found that grassland birds were most often positively associated with these variables. However, in 2004, the guild was negatively associated with deciduous forest, and western meadowlarks were negatively associated with evergreen forest. This inconsistent result is currently not understood. A negative relationship was expected between grassland birds and forested areas (oak woodlands) because the study species are dependent on grasslands for foraging and breeding, and more oak woodland in an area likely means less grassland. The generally positive association indicates, perhaps, that grassland birds require some amount of heterogeneity in their habitat at a landscape scale. Alternatively, grasslands surrounded by oak woodlands may be larger and more intact or have greater connectivity to other grassland patches than those surrounded by high-intensity development.

Studies in the Midwest have also examined proportion of different land cover types. Bakker and others (2002) analyzed proportion of woodland area at 400 m, 800 m, and 1,600 m buffers in a landscape analysis of grassland birds in South Dakota. While this variable did not enter any of their final models, they found that as the percent of woody vegetation at the grassland patch edge increased, occurrence of savannah sparrows, grasshopper sparrows, and western meadowlarks decreased. Additionally, Fletcher and Koford (2002) included proportion of woodland in the landscape in their analysis in Iowa. While their analysis included grasshopper sparrows and savannah sparrows, amount of woodland was only retained in the best model for red-winged blackbirds (*Agelaius phoeniceus*) indicating a negative relationship.

Mixed forest was another land cover type classified in our dataset that occurred in large proportions. However, there was a multicollinear relationship between mixed forest and patch size; therefore it was not used in this analysis. In the future, consideration of the proportion of mixed forest in a landscape analysis for California grassland birds may offer additional insight.

Proportion of high-intensity development was significant for the grassland guild as a whole and for western meadowlarks. The negative association with high-intensity development was expected because highly developed areas lack large grassland patches and other habitat requirements. Similarly, Bock and others (1999) evaluated edge effects at the grassland suburban interface in Colorado. Their plots were either at the suburban edge or at least 200 m from the edge. Their research showed a significant decrease in abundance of savannah sparrows and grasshopper sparrows from interior plots to the suburban edge plots. While this relationship with horned larks was not significant due to high interplot variances, they were also more often observed on interior plots. While our data cannot be directly compared to the Colorado study due to different parameters, both studies show a significant negative relationship between grassland bird populations and increased human development.

I22-41 cont.

Surprisingly, the guild as a whole, western meadowlarks, and grasshopper sparrows were positively associated with proportion of low-intensity development. Low-intensity development was defined as having considerable amounts of constructed surfaces and considerable amounts of vegetated surfaces. Perhaps these species were utilizing the vegetated surfaces within the low-intensity development cover type.

Variation

Variation between buffer zones and between years is not yet clearly understood. The scope of this study was limited to landscape-scale variables which may not be adequate to explain interannual variation in species responses to their habitat. Thus, additional analysis including landscape-scale, local-scale, and environmental variables may provide a better understanding of the system. For example, grassland birds may require smaller grassland patches in heavy rainfall years, if such years produce a higher density of seeds or invertebrate prey species.

Conclusion

On our plots, California grassland birds were consistently more likely to be found in large grassland patches within a habitat matrix of few land cover types and limited

development. We sampled a relatively small proportion of California grasslands, and additional research throughout the state's grasslands is needed to make broad-scale generalizations and recommendations. However, our results are consistent with research in the Midwest. Ribic and Sample (2001) noted that grassland birds respond to their landscape out to at least 800 m, Fletcher and Koford (2002) up to 1 km, and Bakker and others (2002) up to 1,600 m. Our research shows that grassland birds are responding to their habitat matrix out to at least 2 km. As urbanization continues to expand into formerly undeveloped regions, large grassland patches will shrink. We expect further research will support our assertion that in order to support California grassland bird species, land management agencies should consider purchasing unprotected lands adjacent to existing parks and other protected open space. Additionally, land trusts should build relationships with private land owners to educate and promote conservation easements. Such easements provide a flexible approach to land conservation and open space retention, allowing private land owners to continue living and working on their land. California Partners in Flight (2000) advocate protecting high-quality grassland habitat and areas that support high-grassland bird abundance. To do so, we need to define these areas by studying a broad cross-section of California's grasslands. Protection of grasslands is the first step toward conservation of grassland birds. Maintaining each grassland area will likely require site-specific management plans detailing appropriate methods for habitat enhancement.

Acknowledgements

I22-41 cont.

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References

Ambuel, B.; Temple, S.A. 1983. **Area-dependent changes in the bird communities and vegetation of southern Wisconsin forests.** Ecology 64:1057-1068.

Bakker, K.K.; Naugle, D.E.; Higgins, K.F. 2002. **Incorporating landscape attributes into models for migratory grassland bird conservation.** Conservation Biology 16:1638-1646.

Bock, C.E.; Bock, J.H.; Bennett, B.C. 1999. **Songbird abundance in grasslands at a suburban interface on the Colorado high plains.** In: Vickery, P.D.; Herkert, J.R., editors. Ecology and conservation of grassland birds of the western hemisphere: proceedings of a conference; October 1995; Tulsa, Oklahoma. Series: Studies in Avian Biology 19:131-136.

Bollinger, E.K.; Gavin, T.A. 2004. **Responses of nesting bobolinks (*Dolichonyx oryzivorus*) to habitat edges.** Auk 121:767-776.

Brittingham, M.C.; Temple, S.A. 1983. **Have cowbirds caused forest songbirds to decline?** BioScience 33:31-35.

California Department of Forestry and Fire Protection. 2003. **The changing California: forest and range 2003 assessment.** State of California, the Resources Agency, Dept. of Forestry and Fire Protection, Fire and Resource Assessment Program, Sacramento, CA.

California Partners in Flight. 2000. Version 1.0. **The draft grassland bird conservation plan: a strategy for protecting and managing grassland habitats and associated birds in California** (B. Allen, lead author). Point Reyes Bird Observatory, Stinson Beach, CA. http://www.prbo.org/calpif/plans.html.

Collier, C.L. 1994. **Habitat selection and reproductive success of the grasshopper sparrow at the Santa Rosa Plateau Ecological Reserve.** San Diego, CA: San Diego State University; Master's thesis.

Davis, S.K. 2004. **Area sensitivity in grassland passerines: Effects of patch size, patch shape, and vegetation structure on bird abundance and occurrence in southern Saskatchewan**. The Auk 121:1130–1145.

Fletcher, R.J.J.; Koford, R.R. 2002. **Habitat and landscape associations of breeding birds in native and restored grasslands.** Journal of Wildlife Management 66:1011-1022.

Gates, J.E.; Gysel, L.W. 1978. **Avian nest dispersion and fledging success in field-forest ecotones.** Ecology 59:871-883.

Gennet, A.S.; Bartolome, J.W.; Hammond M. 2006. **Effects of grassland community structure and landscape factors on grassland-dependent songbirds in Valley Grassland, CA.** Abstr. 59th Annual Meeting, Society for Range Management; 2006 February 12-17; Vancouver, BC.

Goerrissen, J.H. 2005. **Grassland birds in California: An investigation into the influence of season, floristic composition, and artificial structures on avian community structure.** Davis, CA: University of California, Davis; 141 p. Ph.D. dissertation.

I22-41 cont.

Heady, H.F.; Bartolome, J.W.; Pitt, M.D.; Savelle, G.D.; Stroud, M.C. 1991. **California prairie.** In Coupland, R.T., editor. Ecosystems of the World 8A: Natural Grasslands, Introduction and Western Hemisphere. New York: Elsevier; 313-335.

Helzer, C.J.; Jelinski, D.E. 1999. **The relative importance of patch area and perimeter-area ratio to grassland breeding birds.** Ecological Applications 9:1448-1458.

Herkert, J.R. 1994. **The effects of habitat fragmentation on Midwestern grassland bird communities.** Ecological Applications 4:461-471.

Hewes, F.; Gannett, H. 1883. **Scribner's statistical atlas of the United States.** New York: Charles Scribner's Sons.

Horn, D.J.; Fletcher, R.J. Jr.; Koford, R.R. 2000. **Detecting area sensitivity: a comment on previous studies.** American Midland Naturalist 144:28-35.

Hosmer, D.W.; Lemeshow, S. 2000. **Applied logistic regression.** 2nd edition. New York, Wiley; 375 p.

Huenneke, L.F. 1989. **Distribution and regional patterns of California grasslands.** In L. F. Huenneke and H. A. Mooney, editors. Grassland structure and function: California annual grassland. Kluwer Academic, Boston; 1-12.

Johnson, D.H.; Igl, L.D. 2001. **Area requirements of grassland birds: A regional perspective.** The Auk 118:24–34.

Knopf, F.L. 1994. **Avian assemblages on altered grasslands.** In: Jehl, Joseph R. Jr.; Johnson, Ned K. editors. A century of avifaunal change in western North America: proceedings of an International Symposium at the centennial meeting of the Cooper Ornithological Society; April 17, 1993; Sacramento, CA. Series: Studies in Avian Biology 15:247-257.

McGarigal, K.; Cushman, S.A.; Neel, M.C.; Ene, E. **FRAGSTATS** [Computer program]. 2002. Amherst, MA: University of Massachusetts. Available from: www.umass.edu/landeco/research/fragstats/fragstats.html.

Mensing, S.; Byrne, R. 1998. **Pre-mission invasion of *Erodium cicutarium* in California.** Journal of Biogeography 25:757-762.

Peterjohn, B.G.; Sauer, J.R. 1999. **Population status of North American grassland birds from the North American Breeding Bird Survey, 1966–1996.** Studies in Avian Biology 19:27–44.

Ralph, C.J.; Droege, S.; Sauer, J.R. 1995. **Managing and monitoring birds using point counts: standards and applications.** In Ralph, C.J.; Sauer, J.R.; Droege, S., editors. Monitoring Bird Populations by Point Counts. USDA Forest Service Publication, Gen. Tech. Rep. PSW-GTR-149, Albany, Calif.

Renfrew, R.B.; Ribic, C.A. 2002. **Influence of topography on density of grassland passerines in pastures.** American Midland Naturalist 147:315–325.

Ribic, C.A.; Sample, D.W. 2001. **Associations of grassland birds with landscape factors in southern Wisconsin.** American Midland Naturalist 146:105-121.

Vickery, P.D.; Hunter, J.M.L.; Melvin, S.M. 1994. **Effects of habitat area on the distribution of grassland birds in Maine.** Conservation Biology 8:1087-1097.

Wilcove, D.S.; McLellan, C.H.; Dobson. A.P. 1986. **Habitat fragmentation in the temperate zone.** Pages 237-256 in M. E. Soulé, editor. Conservation Biology: The Science of Scarcity and Diversity. Sinauer Associates, Sunderland, MA.

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Winter, M.; Faaborg, J. 1999. **Patterns of area sensitivity in grassland-nesting birds.** Conservation Biology 13:1424-1436.

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Abiotic factors control invasion by Argentine ants at the community scale

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Summary

1. A prominent and unresolved question in ecology concerns why communities differ in their susceptibility to invasion. While studies often emphasize biotic resistance, it is less widely appreciated how the physical environment affects community vulnerability to invasion.
2. In this study we performed field experiments to test how abiotic variation directly and indirectly influences the extent to which *Linepithema humile* Mayr (Argentine ants) invade seasonally dry environments in southern California.
3. In controlled and replicated experiments involving drip irrigation, we demonstrate (i) that elevated levels of soil moisture increased both the abundance of Argentine ants and their ability to invade native ant communities and (ii) that cessation of irrigation caused declines in the abundance of Argentine ants and led to their withdrawal from previously occupied areas.
4. Because drip irrigation stimulated plant growth, in an additional experiment we manipulated both soil moisture and plant cover to assess the direct vs. indirect effects of added water on the abundance of *L. humile*.
5. Local abundance of Argentine ants increased in irrigated plots but was 38% higher in irrigated plots with plants compared to irrigated plots where plant growth was suppressed. The results of this experiment thus argue for a direct role of soil moisture in influencing Argentine ant abundance but suggest that that the indirect effects of added water may also be important.
6. Our study illustrates more generally that fine-scale variation in the physical environment can control whether communities become invaded by non-native species and suggests that an understanding of community susceptibility to invasion will be improved by a better appreciation of interactions between the biotic and abiotic environment.

Key-words: Argentine ants, biological invasion, physical conditions, soil moisture.

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Introduction

An important goal of ecology lies in understanding why some communities are readily invaded, whereas others appear closed to the addition of new species. While many recent studies focus on how diversity may influence susceptibility to invasion (Levine & D'Antonio 1999; Stachowicz, Whitlatch & Osman 1999; Levine 2000; Kennedy *et al*. 2002), much less attention, in comparison, is given to the importance of abiotic suitability. When physical conditions do receive consideration, their importance is usually emphasized for large spatial scales: for example, how climate controls the establishment of introduced species in new regions (Blackburn & Duncan 2001) or sets distributional limits at a global scale (Morrison *et al*. 2004; Roura-Pascual *et al*. 2004). At smaller spatial scales, abiotic variability seldom receives attention as a factor influencing a community's vulnerability to invasion. This seems surprising, given that abiotic heterogeneity and species-level differences in environmental tolerances are often emphasized as factors promoting coexistence among interspecific competitors (Chesson & Huntly 1997).

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In this study we test the importance of fine-scale variation in the physical environment as a determinant of community susceptibility to invasion by the Argentine ant, a widespread, abundant and ecologically damaging invasive species (Holway *et al*. 2002a). Native to northern Argentina and surrounding regions (Tsutsui *et al*. 2001; Wild 2004), *L. humile* now occurs world-wide in areas with suitable climates and appears particularly successful in Mediterranean-type ecosystems (Suarez, Holway & Case 2001). Although often associated with anthropogenically disturbed habitats (Passera 1994), Argentine ants readily invade natural environments where they displace native ants aggressively in many parts of the world (Tremper 1976; Bond & Slingsby 1984; Ward 1987; Human & Gordon 1996; Way *et al*. 1997; Miyake *et al*. 2002).

Correlational evidence suggests that fine-scale variation in the physical environment may limit the extent to which Argentine ants invade native ant communities. In areas with seasonally dry Mediterranean-type climates, for example, *L. humile* abundance changes dramatically across soil moisture gradients: heavily invaded mesic sites occur in proximity to mainly uninvaded xeric sites (Holway 1998a; Suarez, Bolger & Case 1998; Holway, Suarez & Case 2002b; Holway 2005). Similar associations have been reported for the red imported fire ant (*Solenopsis invicta*) (Tschinkel 1987). Although such observations point to a role for abiotic factors, studies on this topic have not measured, let alone manipulated, soil moisture (Holway 1998b; Human *et al*. 1998; Suarez *et al*. 1998; DiGirolamo & Fox 2006). Because confounding variables cloud the interpretation of these studies, experiments are required to evaluate how abiotic factors contribute to patterns of invasion at the community level. Here, we use a series of experimental approaches to examine the direct and indirect effects of soil moisture in controlling invasion success of Argentine ants. Our focus is timely, given the recognized and growing importance of invasions, the scarcity of comparable experimental studies on animals and the secondary role often assigned to fine-scale variation in the physical environment as a determinant of invasion success.

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Materials and methods

EXPERIMENT 1: EFFECTS OF SOIL MOISTURE ON ARGENTINE ANT ABUNDANCE

We first conducted an experiment to test the relationship between soil moisture variation and *L. humile* abundance, because the ability of Argentine ants to displace native ants depends in large part on numerical advantages (Holway 1999; Human & Gordon 1999; Holway & Case 2001). We used drip irrigation to increase soil moisture levels in a 2-ha bare, dry field at the UC San Diego Biology Field Station in August–October 2003. Conspicuous above-ground foraging native ants are absent at this site, but low densities of Argentine ants occur throughout. We arranged control ($n = 5$) and treatment ($n = 5$) transects in an alternating configuration such that no two transects were closer than 20 m at any point. Each transect measured 3 × 30 m. Drip irrigation delivered approximately equal amounts of water uniformly along the length of each treatment transect and ran for 4 h day^{-1}, 3 days week^{-1} for 36 days. Control transects were identical to treatment transects, except that irrigation lines carried no water. While irrigation was being used, soil moisture levels along treatment transects ranged from 50% to 80% saturation depending on the time since last watering, whereas control transects averaged < 5% saturation throughout the experiment. All soil moisture measurements (including those discussed in experiments 2–3) were obtained using an Aquaterr EC-200® soil probe (Aquaterr Instruments Incorporated, Costa Mesa, CA, 93637, USA), which estimates the percentage of saturation of the top 10 cm of soil.

We used two methods to estimate *L. humile* abundance: occurrence in pitfall traps and occupation of experimentally provided nesting sites. We conducted pitfall trap sampling every 18 days for 72 days: 36 days while irrigation was running and for an additional 36 days after irrigation stopped. During each of the five sampling periods, we placed five traps evenly along every transect. Each trap consisted of a 50 mL, plastic centrifuge tube buried with the 2·8 cm rim flush with soil level. All traps contained 30 mL of a dilute saline–detergent solution and were left in the ground for 48 h. To quantify occupation of nesting sites, we partially embedded five bricks (20·5 × 9·5 × 5·5 cm) in the soil every 5 m along each transect at the start of the study and examined the soil beneath the bricks for nesting activity at 36 days. Nesting sites were considered occupied if queens, brood or both were present in the soil immediately underneath the bricks.

In the analysis of the pitfall trap data we calculated the mean number of ants per trap for each transect and sampling period and used these means as data points. We then used *t*-tests to compare ant abundances between control and treatment transects for three different timepoints: the start of the experiment, the end of irrigation (after 36 days) and the end of the experiment (after 72 days). We log-transformed abundance data prior to analysis to correct for unequal variances, and used the Bonferroni correction to adjust α for three comparisons. In the analysis of the nesting site data we used the proportion of sites occupied per transect as data points.

EXPERIMENT 2: ARGENTINE ANT INVASION OF NATIVE ANT COMMUNITIES

To test whether soil moisture limits invasion of Argentine ants into native ant communities, we used drip irrigation to manipulate soil moisture levels across five contact zones between Argentine ants and native ants. Study sites were distributed across a large portion of south-western San Diego County, CA (Fig. 1). The

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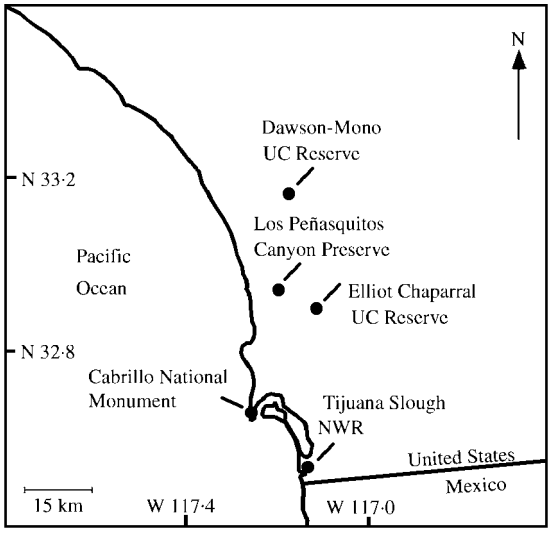

Fig. 1. Map of south-western San Diego County, CA. Filled circles show locations of study sites used in experiment 2.

abrupt contact zones at each site appear to result from pre-existing gradients of soil moisture with Argentine ants occupying relatively moist areas and native ants occurring in drier, exposed areas. Native ants known to be highly susceptible to displacement by Argentine ants (Holway 2005; Ward 1987) were found at or near every contact zone. This pattern indicates that the native ant communities at these sites have not experienced recent invasion by Argentine ants. Sites varied with respect to distance from the coast (Fig. 1) and elevation (10–93 m). Dominant vegetation consisted of a mixture of annual grasses and scrub, with scrub cover ranging from 10% to 60%. At each site we set up single treatment and control transects (each measured 3 × 100 m), which began in the *L. humile* occupied area and extended 100 m into the area with native ants.

We set the spatial and temporal scale of this experiment to exploit key aspects of the Argentine ant's ecology and the prevailing seasonality of precipitation. Transect length corresponded to empirically determined annual rates of spread for *L. humile* (Holway 1998b). We predicted that spread along irrigated transects would result from spatially continuous budding of colonies established at the base of each transect. Colonies of this species relocate opportunistically the location of nests in response to changing environmental circumstances (Newell & Barber 1913). In addition, all transects intersected multiple colonies of native ants. We monitored transects in May–October 2004; irrigation ran for the first 3 months. This 6-month span includes the seasonal peak in colony growth for Argentine ants in mesic habitats (Markin 1970) as well as the prolonged summer drought in California.

Irrigation and monitoring took place as follows. Along the length of each transect, we extended two parallel drip irrigation lines separated by 1·5 m. As in experiment 1, control lines were identical to treatment lines except that they delivered no water. Treatment and control transects at each site were separated by at least 50 m. Irrigation lines were joined to a main water line, which was fitted with a timer and flow regulator to ensure that treatment transects received approximately equal amounts of water. We ran irrigation from 0900 to 1000 every day for 3 months. At monthly intervals, we measured the following: (1) the proportion of each transect (divided into 5-m intervals) with nesting Argentine ants; (2) the number of native ant species and their recruitment activity at baits; and (3) soil moisture. We located nests of Argentine ants by following recruitment trails back to nest entrances. We placed paired 1-g tuna baits every 5 m along each transect and recorded the species present after 60 min and whether recruitment (> 10 conspecific workers present) had occurred at each bait. All baiting took place over temperature intervals at which Argentine ants and the common native ant species are known to forage outside their nests (Holway 1999; Holway *et al*. 2002b). We also conducted standardized monthly visual surveys at each transect to detect nesting activity and species that might have been missed during bait transects. Pitfall traps could not be used here because of the risk of excessive mortality resulting from repeated sampling in a spatially restricted area. We measured soil moisture at 20-m intervals along each transect every month. At 3 months, we estimated the percentage of vegetative cover in 1-m^2 quadrats placed at 10-m intervals along each transect.

To compare the extent of net spread by Argentine ants between treatment and control transects, we determined the farthest point at which Argentine ants were nesting along each transect relative to where they nested at the beginning of the study. We used one-sample *t*-tests to determine if differences in net spread between treatment and control transects differed from zero. We made two such comparisons: (1) at 3 months (i.e. at the end of irrigation) and (2) at 6 months (i.e. at the end of the experiment). We used a Bonferroni correction in this analysis to adjust α for two comparisons. We also tested whether native ant activity at baits changed as a result of irrigation. The dependent variable in this analysis was the proportion of baits to which native ants recruited in the uninvaded sections of each transect. For each transect, we averaged native ant activity across all time periods during which irrigation ran and used these time-averaged values as a measure of native ant activity (Holway 1998b). Because data on Argentine ant spread and native ant activity consist of proportions, these data were arcsine square root-transformed prior to analysis.

EXPERIMENT 3: DIRECT VS. INDIRECT EFFECTS OF SOIL MOISTURE

Because irrigation can enhance plant growth, we conducted a third field experiment in which we manipulated both soil moisture and plant cover to test whether hypothesized increases in Argentine ant abundance

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resulting from irrigation might be due to elevated soil moisture acting in the absence of plant growth or from some combination of increased soil moisture and augmented plant growth. We conducted this experiment in June–August 2004 at the site used in experiment 1. We established 20 experimental plots (each measuring 5 × 5 m) and assigned individual plots to one of four treatment groups: (1) irrigation and herbicide; (2) irrigation but no herbicide; (3) herbicide but no irrigation; and (4) no irrigation or herbicide. None of the plots had any plant cover when the experiment began. The spatial configuration of treatments was such that no two plots in the same treatment group were adjacent to one another and no two irrigated plots were adjacent to one another. Plots were separated by at least 20 m. As with the previous two experiments, we used drip irrigation to increase soil moisture and placed irrigation lines that delivered no water in dry plots. Soil moisture levels in irrigated and dry plots were similar to those observed in experiment 1. Two weeks after the start of the experiment, when irrigation began to stimulate plant growth, we misted Roundup® (Monsanto) onto half the plots to suppress plant growth. All plots treated with herbicide received a once-only application of 1·1 L of a 2% solution of Roundup® in water.

We used pitfall traps and artificial nesting sites to estimate Argentine ant abundance in each plot. Methods were identical to those used in experiment 1, except as follows. Pitfall trap sampling took place just before irrigation began and again at the end of the experiment (40 days). For these two sampling periods, we placed five traps in each experimental plot in the configuration of the five on a die. At the start of the experiment we placed three bricks in each plot and determined whether these nesting sites were occupied after 40 days. At the end of the experiment, we also estimated the percentage of plant cover in five haphazardly selected 30 × 30 cm quadrats within each plot (avoiding areas where traps or bricks were located). We used plot means as data points for analyses involving plant cover and pitfall trap captures.

Although no harmful effects of Roundup® on ants would be expected (Jackson & Pitre 2004), we conducted a laboratory experiment to examine whether direct exposure to this herbicide induces mortality in Argentine ants. We constructed 18 pairs of experimental colonies; each pair originated from a different location in San Diego County. Collecting sites were all separated by ≥ 5 km. Each experimental colony consisted of three queens and approximately 525 workers. Colonies were reared under standard laboratory conditions (Thomas, Tsutsui & Holway 2005). After 14 days in the laboratory, we misted treatment colonies with 25 mL of a 2% Roundup® solution and misted control colonies with 25 mL of water. Forty days after application of either Roundup® or water, worker survivorship did not differ between treatment (456 ± 12 living workers) (mean ± 1 SE) and control (453 ± 11 living workers) colonies (*t*-test: $t_{16} = 0{\cdot}138$, $P = 0{\cdot}89$).

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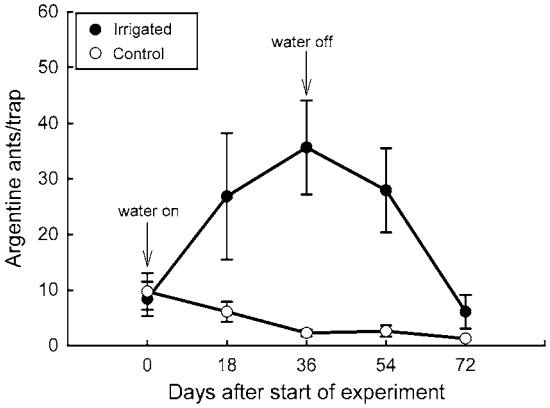

Fig. 2. Results of experiment 1. Mean (± 1 SE) number of Argentine ants in pitfall traps along control ($n = 5$) and irrigated ($n = 5$) transects over the course of 72 days. Control transects received no irrigation.

Results

EXPERIMENT 1: EFFECTS OF SOIL MOISTURE ON ARGENTINE ANT ABUNDANCE

In experimental transects, the local abundance of *L. humile* increased with experimental addition of water and then decreased once irrigation ceased (Fig. 2). Prior to the onset of irrigation, the number of Argentine ants captured in pitfall traps did not differ between control and treatment transects (*t*-test: $t_8 = 0{\cdot}378$, $P = 0{\cdot}72$), but disparities in abundance quickly arose once irrigation started (Fig. 2). Thirty-six days after irrigation began Argentine ants were, on average, 16 times more abundant in pitfall traps along treatment transects than along control transects (*t*-test: $t_8 = 6{\cdot}36$, $P < 0{\cdot}0001$) and had relocated nests extensively along treatment transects [60% of nesting sites occupied ($3{\cdot}0 \pm 0{\cdot}4$ bricks plot^{-1})], whereas no such relocation occurred along control transects (Mann–Whitney *U*-test: $U = 2{\cdot}693$, $P < 0{\cdot}01$). After irrigation stopped, *L. humile* exhibited a symmetrical decrease in abundance, returning to control levels after 72 days (*t*-test: $t_8 = 2{\cdot}55$, $P = 0{\cdot}03$; not significant after Bonferroni correction, $\alpha = 0{\cdot}017$).

EXPERIMENT 2: ARGENTINE ANT INVASION OF NATIVE ANT COMMUNITIES

Argentine ants invaded native ant communities subject to irrigation, but retreated once irrigation ceased and soil moisture declined (Fig. 3). During the first 3 months of the experiment, *L. humile* advanced steadily along irrigated transects while retreating slightly from control transects. At 3 months, Argentine ants nested in 54% more of each irrigated transect, on average, compared to each control transect (one-sample *t*-test: $t_4 = 8{\cdot}01$, $P < 0{\cdot}01$). During monthly sampling periods at all sites, *L. humile* consistently excluded native ants from baits along sections of transect where it was nesting.

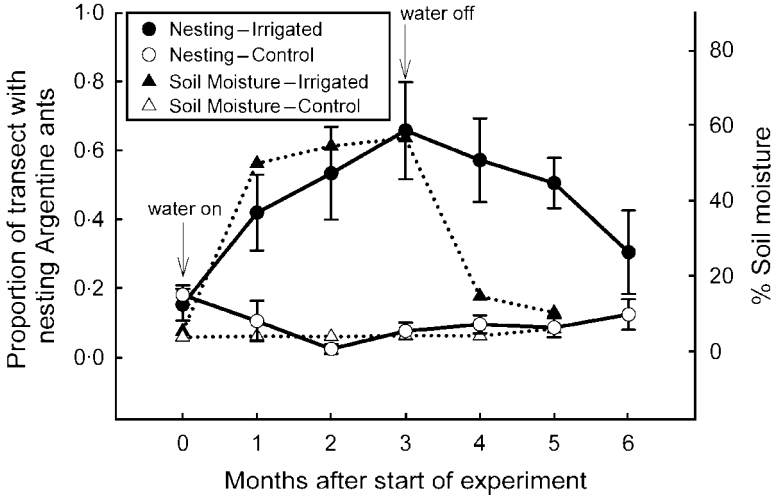

Fig. 3. Results of experiment 2. Mean (± 1 SE) proportion of each control (n = 5) and irrigated (n = 5) transect that supported nesting Argentine ants over a 6-month period. Also shown are mean measurements of percentage of soil moisture in control and irrigated transects. Control transects received no irrigation.

In the uninvaded sections of transects, irrigation also appeared to stimulate native ant activity. Although native ant activity at baits did not differ between control and treatment transects prior to the onset of irrigation (one-sample t-test: $t_4 = 1{\cdot}31$, $P = 0{\cdot}26$), while irrigation was running native ants recruited to more baits along treatment transects than along control transects (one-sample t-test: $t_4 = 2{\cdot}79$, $P < 0{\cdot}05$) (see Table 1 for native ant species). Increased native ant activity at baits was insufficient, however, to discourage the spread of Argentine ants (Fig. 3). Once irrigation was shut off, Argentine ant presence on treatment transects declined monotonically. Although the difference between treatment and control transects still exceeded zero at 6 months (one-sample t-test: $t_4 = 6{\cdot}07$, $P < 0{\cdot}01$), Argentine ants had abandoned more than half of the transect area that they occupied after 3 months of irrigation (Fig. 3).

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Despite heterogeneity in the five study sites with respect to soil type, extent of summer fog, dominant vegetation and degree of exposure, drip irrigation elevated soil moisture to an extent similar to that observed under more homogeneous conditions (e.g. experiment 1). After 3 months of irrigation soil moisture was, on average, an order of magnitude higher along irrigated transects compared to control transects (Fig. 3; 56·6 ± 4·5% saturation vs. 4·2 ± 0·6% saturation) (one-sample t-test: $t_4 = 16{\cdot}8$, $P < 0{\cdot}0001$). No rain fell during the 6-month experiment, except for one precipitation event in mid-October 2004, just before the end of the study. In part because of this long drought, irrigation stimulated plant growth. Percentage plant cover was almost seven times higher in irrigated transects (48·5 ± 11·1%) compared to control transects (7·25 ± 1·58%) (one-sample t-test: $t_4 = 5{\cdot}55$, $P < 0{\cdot}01$). Most plant growth consisted of non-woody introduced species (esp.

Table 1. Above-ground foraging native ants observed at baits and during standardized visuals surveys at control and treatment transects

	Cabrillo National Monument	Dawson-Mono UC Reserve	Elliot Chaparral UC Reserve	Los Peñasquitos Canyon Preserve	Tijuana Slough National Wildlife Refuge
Camponotus vicinus					X
Crematogaster californica	X		X	X	X
Crematogaster hespera		X			
Dorymyrmex insanus	X	X			X
Forelius mccooki			X		
Formica moki		X			
Messor andrei			X		
Myrmecocystus testaceus	X				
Pheidole hyatti	X				
Pheidole vistana			X	X	
Solenopsis xyloni		X	X	X	X
Tapinoma sessile		X		X	

We deposited voucher specimens in the Bohart Museum of Entomology, University of California, Davis (UCDC).

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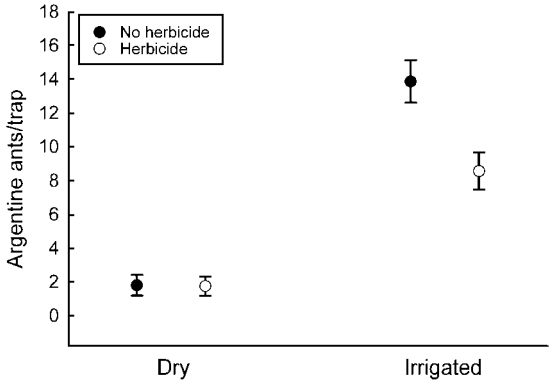

Fig. 4. Results of experiment 3. Mean (± 1 SE) number of Argentine ants in pitfall traps in dry and irrigated experimental plots that were either treated with herbicide or had no herbicide applied; $n = 5$ for each combination of main effects. Argentine ant abundance in pitfalls determined 40 days after start of irrigation.

Carduus sp., *Centaurea solstitialis*, *Chrysanthemum coronarium*).

EXPERIMENT 3: DIRECT VS. INDIRECT EFFECTS OF SOIL MOISTURE

In the factorial experiment in which we manipulated soil moisture and plant cover, irrigation and herbicide affected plant growth in a predictable manner. In irrigated plots the extent of plant growth after 40 days depended strongly on whether plots were treated with herbicide: 78·6 ± 4·0% cover (no herbicide) vs. 7·8 ± 4·0% cover (herbicide) (*t*-test: $t_8 = 9{\cdot}707$, $P < 0{\cdot}0001$). Dry plots experienced little plant growth after 40 days: 6·8 ± 3·1% cover (no herbicide) vs. 0·2 ± 0·1% cover (herbicide).

Prior to the onset of irrigation, the mean number of Argentine ants captured in pitfall traps did not differ across plots (one-way analysis of variance (ANOVA): $F_{3,16} = 0{\cdot}78$, $P = 0{\cdot}52$; 2·3 ± 0·3 ants trap^{-1} – all plots pooled). After 40 days of irrigation *L. humile* presence depended primarily on whether plots received irrigation, but was also influenced positively by plant growth (Fig. 4). Worker abundance in pitfall traps increased with irrigation (two-way ANOVA: $F_{1,16} = 100{\cdot}93$, $P < 0{\cdot}0001$) and decreased with herbicide (two-way ANOVA: $F_{1,16} = 8{\cdot}22$, $P < 0{\cdot}05$), but there was a significant interaction between these two factors (two-way ANOVA: $F_{1,16} = 34{\cdot}54$, $P < 0{\cdot}05$). Pitfall trap captures were uniformly low in dry plots but were, on average, five to eight times higher in irrigated plots depending on whether herbicide had been applied (Fig. 4). The occupation of experimentally added nesting sites revealed a pattern qualitatively similar to that observed for the pitfall data. In dry plots none of the nesting sites were occupied by Argentine ants after 40 days, whereas in irrigated plots occupation ranged from 33% (1·0 ± 0·0 bricks plot^{-1}) in plots that received herbicide to 47% (1·4 ± 0·2 bricks plot^{-1}) in plots that did not receive herbicide.

Discussion

This study provides a striking experimental demonstration of how community vulnerability to invasion can hinge upon fine-scale variation in environmental conditions. Irrigation led to increases in the local abundance of *L. humile* (Fig. 2) and fuelled the invasion of native ant communities (Fig. 3). Similarly, when we stopped watering Argentine ants declined in abundance (Fig. 2) and retreated from areas that were occupied when added water was present (Fig. 3). The Argentine ant's rapid and strongly positive response to irrigation was probably the combined result of colony reproduction by budding, nest relocation and enhanced colony productivity.

Elevated soil moisture may contribute both directly and indirectly to the spread of *L. humile*. Argentine ant abundance increased in irrigated plots even when plant growth was suppressed (Fig. 4), and there was no indication that Argentine ants were attracted to food resources in these plots. These findings argue for an important and direct role for soil moisture and are consistent with the physiological limitations of *L. humile* (Holway *et al.* 2002b). We stress the importance of soil moisture, but recognize that this variable acts in combination with ground temperature variation to create a 'temperature-humidity envelope' within which workers can remain active without experiencing lethal physiological stress (Hölldobler & Wilson 1990). Indirect effects of soil moisture may also be important and include those caused by plants: further amelioration of the physical environment (e.g. shade) and increased resource availability (e.g. nectar, aggregations of honeydew-producing insects). The latter is of interest, given how strongly Argentine ants respond to the presence of honeydew-producing insects (Newell & Barber 1913). In experiment 3, censuses conducted immediately after we stopped irrigating revealed aphid aggregations in all plots that received added water but no herbicide; we did not detect aphids elsewhere. The presence of aphids provides a probable explanation for why Argentine ant abundance in irrigated plots was 38% higher in plots with plants compared to those treated with herbicide (Fig. 4). Future research might explore further the interactions between added water, plant growth and changes in resource availability resulting from primary production.

A somewhat unexpected result of our study was that native ants also reacted positively to irrigation. As with Argentine ants, native ants may have responded both directly and indirectly to added water. At two sites we recorded the native *Tapinoma sessile* relocating its nests to areas within irrigated transects, perhaps to take advantage of a more favourable physical environment. At another site we observed a harvester ant, *Messor andrei*, forming recruitment trails to irrigated transects, where it fed on seeds produced by weeds that grew in response to the added water. None of the common native ant species observed in our study exhibited

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diminished activity in response to irrigation. Despite increased native ant activity, *L. humile* advanced along irrigated transects. Holway (1998b) reported a comparable finding; in that study the rate that Argentine ants spread in riparian corridors correlated positively with native ant presence at baits. These results suggest that competition from native ants may not be a powerful force limiting the spread of *L. humile* in areas that are abiotically suitable from the perspective of this invader.

CONSERVATION IMPLICATIONS

In seasonally dry environments under threat of invasion by Argentine ants, sensible water use practices should be a more prominent consideration of reserve design and management. Our results illustrate, for example, how the interception and diversion of urban run-off could restrict the Argentine ant's spread into natural areas. The common use of drip irrigation in habitat restoration projects should also be evaluated carefully for unintended consequences (e.g. encouraging invasive species). No simple relationship exists between the extent of invasion by Argentine ants and the magnitude of surface water inputs. Our manipulations, however, were modest in terms of volume, duration and spatial scale, yet the abundance of *L. humile* increased or decreased dramatically in response to the presence or absence of added water. These results suggest that even small reductions in urban run-off may act to limit *L. humile* in areas that are otherwise too dry. Although this study focuses on a single invasive species, our results may be of broader practical significance. Because many of the plants and animals that invade mediterranean habitats in southern California require mesic conditions (Alberts *et al*. 1993; Bolger *et al*. 2000), our findings are generally relevant to conservation planning and land management in this biologically rich but compromised region.

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RELEVANCE TO LARGE-SCALE MODELLING EFFORTS

As problems caused by invasive species grow in public awareness, ecologists may rely increasingly on geographic information systems (GIS) models and related procedures [e.g. Genetic Algorithm for Rule Set Production (GARP)] to forecast potential range limits of invasive species (Peterson 2003; Arriaga *et al*. 2004; Morrison *et al*. 2004; Roura-Pascual *et al*. 2004). While these approaches have obvious merit, our study highlights the necessity of considering fine-scale environmental heterogeneity. First, we demonstrated that abiotic factors varying over just a few metres can determine the presence or absence of an invasive species in natural communities. Typical GIS models, in contrast, use environmental data that average local variation across much larger spatial scales (e.g. = 1 km^2). Moreover, variation in the key abiotic factor from our study was only partly a function of local climate; both stream flow and urban run-off no doubt contribute importantly to soil moisture variation in our system and are decoupled to varying degrees from local climatic variation. For these reasons, sites that a temperature envelope model might identify as being unsuitable for an invasive species could, none the less, support heavy infestations. Efforts to model potential range limits of invasive species may be improved through a more sophisticated understanding of scaling issues such as those discussed here (Mack 2000).

Conclusions

Our study illustrates how fine-scale variation in the physical environment may act both directly and indirectly to influence community susceptibility to invasion. These results cannot be used to clarify the role of biotic resistance in this system (sites did not differ in the number of native ant species present; Table 1), but results from other studies (Holway 1998b) suggest that the number of native ant species does little to curb the rate at which *L. humile* spreads in natural communities. Given the Argentine ant's extreme competitive dominance, we suspect that if biotic resistance does act in this system, it may be most important in areas where *L. humile* experiences stressful physical conditions. In hot, dry environments, for example, Argentine ants will have reduced foraging activity and high worker mortality, both of which will reduce its competitive strength against native ants better adapted to this range of abiotic variation (Holway *et al*. 2002b). It seems probable that interspecific competition from native ants may combine with abiotic stress to limit the extent to which Argentine ants invade xeric environments (Thomas & Holway 2005). Analogous conclusions have been discussed for plant invasions (Amsberry *et al*. 2000). In a recent meta-analysis, for example, Levine, Adler & Yelenik (2004) found that biotic resistance acted most strongly to reduce the spread of invasive plants in environments that were physiologically stressful to the invader. Taken together, these results generally argue for an improved understanding of how biotic and abiotic factors interact with one another to generate variation in community susceptibility to invasion.

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References

Alberts, A.C., Richman, A.D., Tran, D., Sauvajot, R., McCalvin, C. & Bolger, D.T. (1993) Effects of habitat fragmentation on native and exotic plants in southern California coastal scrub. *Interface Between Ecology and Land Development in Southern California* (ed. J.E. Keeley), pp. 103–110. Southern California Academy of Sciences, Los Angeles, CA.

Amsberry, L., Baker, M.A., Ewanchuk, P.J. & Bertness, M.D. (2000) Clonal integration and the expansion of *Phragmites australis*. *Ecological Applications*, **10**, 1110–1118.

Arriaga, L., Castellanos, A.E., Moreno, E. & Alarcon, J. (2004) Potential ecological distribution of alien invasive species and risk assessment: a case study of buffel grass in arid regions of Mexico. *Conservation Biology*, **18**, 1504–1514.

Blackburn, T.M. & Duncan, R.P. (2001) Determinants of establishment success in introduced birds. *Nature*, **414**, 195–197.

Bolger, D.T., Suarez, A.V., Crooks, K.R., Morrison, S.A. & Case, T.J. (2000) Arthropods in urban habitat fragments in Southern California: area, age, and edge effects. *Ecological Applications*, **10**, 1230–1248.

Bond, W. & Slingsby, P. (1984) Collapse of an ant–plant mutualism: the Argentine Ant (*Iridomyrmex humilis*) and myrmecochorous Proteaceae. *Ecology*, **65**, 1031–1037.

Chesson, P. & Huntly, N. (1997) The roles of harsh and fluctuating conditions in the dynamics of ecological communities. *American Naturalist*, **150**, 519–553.

DiGirolamo, L.A. & Fox, L.R. (2006) The influence of abiotic factors and temporal variation on local invasion patterns of the Argentine ant (*Linepithema humile*). *Biological Invasions*, **8**, 125–135.

Hölldobler, B. & Wilson, E.O. (1990) *The Ants*. The Belknap Press of Harvard University Press, Cambridge, MA.

Holway, D.A. (1998a) Effect of Argentine ant invasions on ground-dwelling arthropods in northern California riparian woodlands. *Oecologia*, **116**, 252–258.

Holway, D.A. (1998b) Factors governing rate of invasion: a natural experiment using Argentine ants. *Oecologia*, **115**, 206–212.

Holway, D.A. (1999) Competitive mechanisms underlying the displacement of native ants by the invasive Argentine ant. *Ecology*, **80**, 238–251.

Holway, D.A. (2005) Edge effects of an invasive species across a natural ecological boundary. *Biological Conservation*, **121**, 561–567.

Holway, D.A. & Case, T.J. (2001) Effects of colony-level variation on competitive ability in the invasive Argentine ant. *Animal Behaviour*, **61**, 1181–1192.

Holway, D.A., Lach, L., Suarez, A.V., Tsutsui, N.D. & Case, T.J. (2002a) The causes and consequences of ant invasions. *Annual Review of Ecology and Systematics*, **33**, 181–233.

Holway, D.A., Suarez, A.V. & Case, T.J. (2002b) Role of abiotic factors in governing susceptibility to invasion: a test with Argentine ants. *Ecology*, **83**, 1610–1619.

Human, K.G. & Gordon, D.M. (1996) Exploitation and interference competition between the invasive Argentine ant, *Linepithema humile*, and native ant species. *Oecologia*, **105**, 405–412.

Human, K.G. & Gordon, D.M. (1999) Behavioral interactions of the invasive Argentine ant with native ant species. *Insectes Sociaux*, **46**, 159–163.

Human, K.G., Weiss, S., Weiss, A., Sandler, B. & Gordon, D.M. (1998) Effects of abiotic factors on the distribution and activity of the invasive Argentine ant (Hymenoptera: Formicidae). *Environmental Entomology*, **27**, 822–833.

Jackson, R.E. & Pitre, H.N. (2004) Influence of Roundup Ready soybean production systems and glyphosate application on pest and beneficial insects in narrow-row soybean. *Journal of Entomological Science*, **39**, 62–70.

Kennedy, T.A., Naeem, S., Howe, K.M., Knops, J.M.H., Tilman, D. & Reich, P. (2002) Biodiversity as a barrier to ecological invasion. *Nature*, **417**, 636–638.

Levine, J.M. (2000) Species diversity and biological invasions: relating local process to community pattern. *Science*, **288**, 852–854.

Levine, J.M., Adler, P.B. & Yelenik, S.G. (2004) A meta-analysis of biotic resistance to exotic plant invasions. *Ecology Letters*, **7**, 975–989.

Levine, J.M. & D'Antonio, C.M. (1999) Elton revisited: a review of evidence linking diversity and invasibility. *Oikos*, **87**, 15–26.

Mack, R.N. (2000) Assessing the extent, status, and dynamism of plant invasions: current and emerging approaches. In: *Invasive Species in a Changing World* (eds H.A. Mooney & R.J. Hobbs), pp. 141–168. Island Press, Covelo, CA.

Markin, G.P. (1970) Seasonal life cycle of Argentine ant, *Iridomyrmex humilis* (Hymenoptera – Formicidae), in Southern California. *Annals of the Entomological Society of America*, **63**, 1238–1242.

Miyake, K., Kameyama, T., Sugiyama, T. & Ito, F. (2002) Effect of Argentine ant invasions on Japanese ant fauna in Hiroshima Prefecture, western Japan: a preliminary report (Hymenoptera: Formicidae). *Sociobiology*, **39**, 465–474.

Morrison, L.W., Porter, S.D., Daniels, E. & Korzukhin, M.D. (2004) Potential global range expansion of the invasive fire ant, *Solenopsis invicta*. *Biological Invasions*, **6**, 183–191.

Newell, W. & Barber, T.C. (1913) The Argentine ant. *Bureau of Entomology Bulletin*, **122**, 1–98.

Passera, L. (1994) Characteristics of tramp species. In: *Exotic Ants: Impact and Control of Introduced Species* (ed. D. F. Williams), pp. 23–43. Westview Press, Boulder, CO.

Peterson, A.T. (2003) Predicting the geography of species' invasions via ecological niche modeling. *Quarterly Review of Biology*, **78**, 419–433.

Roura-Pascual, N., Suarez, A.V., Gomez, C., Pons, P., Touyama, Y., Wild, A.L. & Peterson, A.T. (2004) Geographical potential of Argentine ants (*Linepithema humile* Mayr) in the face of global climate change. *Proceedings of the Royal Society of London, Series B, Biological Sciences*, **271**, 2527–2534.

Stachowicz, J.J., Whitlatch, R.B. & Osman, R.W. (1999) Species diversity and invasion resistance in a marine ecosystem. *Science*, **286**, 1577–1579.

Suarez, A.V., Bolger, D.T. & Case, T.J. (1998) Effects of fragmentation and invasion on native ant communities in coastal Southern California. *Ecology*, **79**, 2041–2056.

Suarez, A.V., Holway, D.A. & Case, T.J. (2001) Patterns of spread in biological invasions dominated by long-distance jump dispersal: insights from Argentine ants. *Proceedings of the National Academy of Science*, **98**, 1095–1100.

Thomas, M.L. & Holway, D.A. (2005) Condition-specific competition between invasive Argentine ants and Australian *Iridomyrmex*. *Journal of Animal Ecology*, **74**, 532–542.

Thomas, M.L., Tsutsui, N.D. & Holway, D.A. (2005) Intraspecific competition influences the symmetry and intensity of

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aggression in the Argentine ant. *Behavioral Ecology*, **16**, 472–481.

Tremper, B.S. (1976) *Distribution of the Argentine Ant* Iridomyrmex humilis *Mayr, in Relation to Certain Native Ants of California: Ecological, Physiological, and Behavioral Aspects*. University of California, Berkeley.

Tschinkel, W.R. (1987) Distribution of the fire ants (*Solenopsis invicta* and *S. geminata* (Hymenoptera: Formicidae) in northern Florida in relation to habitat and disturbance. *Annals of the Entomological Society of America*, **81**, 76–81.

Tsutsui, N.D., Suarez, A.V., Holway, D.A. & Case, T.J. (2001) Relationships among native and introduced populations of the Argentine ant (*Linepithema humile*) and the source of introduced populations. *Molecular Ecology*, **10**, 2151–2161.

Ward, P.S. (1987) Distribution of the introduced Argentine ant (*Iridomyrmex humilis*) in natural habitats of the Lower Sacramento Valley and its effects on the indigenous ant fauna. *Hilgardia*, **55**, 1–16.

Way, M.J., Cammell, M.E., Paiva, M.R. & Collingwood, C.A. (1997) Distribution and dynamics of the Argentine ant *Linepithema* (*Iridomyrmex*) *humile* (Mayr) in relation to vegetation, soil conditions, topography and native competitor ants in Portugal. *Insectes Sociaux*, **44**, 415–433.

Wild, A.L. (2004) Taxonomy and distribution of the Argentine ant, *Linepithema humile* (Hymenoptera: Formicidae). *Annals of the Entomological Society of America*, **97**, 1204–1215.

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Short communication

Light pollution is a driver of insect declines

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ABSTRACT

Insects around the world are rapidly declining. Concerns over what this loss means for food security and ecological communities have compelled a growing number of researchers to search for the key drivers behind the declines. Habitat loss, pesticide use, invasive species, and climate change all have likely played a role, but we posit here that artificial light at night (ALAN) is another important—but often overlooked—bringer of the insect apocalypse. We first discuss the history and extent of ALAN, and then present evidence that ALAN has led to insect declines through its interference with the development, movement, foraging, and reproductive success of diverse insect species, as well as its positive effect on insectivore predation. We conclude with a discussion of how artificial lights can be tuned to reduce their impact on vulnerable populations. ALAN is unique among anthropogenic habitat disturbances in that it is fairly easy to ameliorate, and leaves behind no residual effects. Greater recognition of the ways in which ALAN affects insects can help conservationists reduce or eliminate one of the major drivers of insect declines.

1. Introduction

Over the last two decades, researchers have uncovered steep declines in insect diversity and biomass (Dirzo et al., 2014; Potts et al., 2010) across geographically distinct areas including Germany (Hallmann et al., 2017), the Netherlands (van Langevelde et al., 2018; van Strien et al., 2019), Sweden (Franzén and Johannesson, 2007), the British Isles (Powney et al., 2019; Shortall et al., 2009; Wilson et al., 2018), Puerto Rico (Lister and Garcia, 2018), and Costa Rica (Janzen and Hallwachs, 2019). This alleged "insect apocalypse" (Jarvis, 2018) has generated an appropriate amount of public concern: insects are a critical component of all terrestrial and freshwater food webs (Baxter et al., 2005; van Veen et al., 2006) and provide important ecosystem services (Schowalter et al., 2018). Their absence would have devastating consequences for life on this planet. If insect decline is indeed a global phenomenon (see Wagner, 2019), the question then becomes: What is the problem, and how can we best address it? One recent review of insect decline has sought to identify the main causes by ranking potential drivers in order of their frequency of mention within relevant literature (Sánchez-Bayo and Wyckhuys, 2019). The authors found, as indeed have we, that habitat loss, chemical pollution (especially pesticide use), invasive species, and climate change are the most well-described threats to insect persistence. However, we do not agree that relative degree of scientific consideration reflects importance in this case. Instead we posit that "diurnal bias"—a preference among ecologists for studying daytime phenomena (Gaston, 2019)—has led insect conservationists to overlook another widespread habitat disturbance, pollutant, and method of insect control: artificial light at night (ALAN).

Although discrete sources of anthropogenic light have been used to kill insects since *circa* 60 CE (Beavis, 1995), the modern phenomenon of ecological light pollution began in earnest with the invention of the arc lamp in the early 1800s (Dillon and Dillon, 2002; Saunders, 1887). Soon after, dedicated "light traps" were adopted as a common method of pest control (U.S. Patent, 4808), and are indeed still used for this purpose today (Johansen et al., 2011; Pawson et al., 2009; Shimoda and Honda, 2013); around the 1950s, light traps became popular among entomologists for use in surveying insect biodiversity (Leather, 2015). More recently, as lighting technology has advanced and the cost per unit of brightness declined, both the intensity and quantity of artificial light installations have increased worldwide (Kyba, 2018; Kyba et al.,

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Fig. 1. Both local sources of artificial light (**left**) and diffuse skyglow (**right**) can impact the physiology, behavior, and fitness of insects. Positively phototactic insects, including macromoths and beetles, exhibit a "fatal attraction" to ALAN (**A**), while negatively phototactic insects such as weta avoid it (**B**). ALAN also amplifies polarized light pollution, causing mayflies and other aquatic insects to oviposit on non-aquatic flat surfaces (**C**). ALAN obscures natural nocturnal light sources (**D**), including the astronomical cues used by dung beetles to navigate and the bioluminescent signals produced by fireflies and other insects, with consequences for foraging and reproductive success in these species. In the short term, ALAN can alter circadian patterns of activity and rest (*E*), causing diurnal pollinators and insectivores to extend their foraging bouts into the evening, while fully nocturnal insects delay their nightly emergence. Over the long term, these repeated perturbations have been shown to alter the development and phenology of crickets and aphids (**F**). The resulting phenological mismatches between host plants, predators, and prey will have cascading effects on pollination success, host-parasite interactions, and eventually entire food webs (**G**). Textures modified from Creative Commons Attribution 2.0 Generic licensed images (Wikimedia Commons, Flickr; Milky Way: John Fowler; túngara frog: Geoff Gallice; Townsend's big-eared bat: National Parks Service).

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2017; Tsao et al., 2010). Modern light pollution is no longer confined to urban centers, but radiates outwards through the atmosphere and along road networks that run into or around otherwise pristine areas (Gaston et al., 2015; Gaston and Holt, 2018; Guetté et al., 2018). Since 1992, levels of light pollution have doubled in high biodiversity areas, and are likely to continue to rise (Koen et al., 2018; Kyba et al., 2017). By 2014, over 23% of the land surface of the planet experienced artificially elevated levels of night sky brightness (Falchi et al., 2016); by comparison, agricultural crops cover approximately 12% (FAO, 2012). Insect conservationists now frequently lament, as do we, the dearth of insects to be found swarming around artificial lights (*e.g.* Janzen and Hallwachs, 2019), yet rarely consider that the lights themselves may be an issue.

Artificial light at night is a potent evolutionary trap (Schlaepfer et al., 2002; Altermatt and Ebert, 2016; Hopkins et al., 2018). Most anthropogenic disturbances have natural analogs: the climate has warmed before, habitats have fragmented, species have invaded new ranges, and new pesticides (also known as plant defenses) have been developed. Yet for all of evolutionary time, the daily cycle of light and dark, the lunar cycle, and the annual cycle of the seasons have all remained constant. Until now (Altermatt and Ebert, 2016), insects have had no cause to evolve any relevant adaptations to ALAN. And so some species retreat from streetlights (Farnworth et al., 2018) while others for unclear reasons perch beneath them, stunned, or circle around them until claimed by injury, exhaustion, or predation (Frank, 1988; Owens and Lewis, 2018). While the total fitness impact of an artificial light source will depend on its intensity, direction, spectral distribution (Elvidge et al., 2010), and flicker rate (Inger et al., 2014), as well as the time of day and structure of nearby surfaces (Horváth et al., 2009; Szaz et al., 2015), the light output of most common fixtures is more than enough to radically disturb the entire habitat of small-bodied animals such as insects. Insects that manage to escape the cone of light beneath a fixture can still be affected by skyglow, which emanates far beyond urban centers at levels sufficient to obscure or alter vital environmental cues including polarized moonlight, starlight, moon phase, and day-length (Davies et al., 2013b; Kyba et al., 2011a; 2011b).

A growing body of research demonstrates that ALAN can impact the fitness of plants and animals (Bennie et al., 2016; Gaston et al., 2013), and more recent reviews have catalogued its broadscale effects on insects in particular (Desouhant et al., 2019; Grubisic et al., 2018; Owens and Lewis, 2018; Seymoure, 2018). Some estimates suggest that one third of insects attracted to stationary artificial light sources die before morning, either through exhaustion or predation (Eisenbeis, 2006; Frank, 2006; Yoon et al., 2010); insects attracted to vehicle headlights likely die immediately (Frank, 2006; Gaston and Holt, 2018). This "fatal attraction" has been estimated to result in 100 billion insect deaths per summer in Germany (Eisenbeis and Hänel 2009) and had the potential to swiftly eliminate isolated populations of *Hydraecia petasitis* moths in Finland (Väisänen and Hublin, 1983; see also Cantelo et al., 1972). Insects that escape immediate death may still become trapped in a "light sink," unable to engage in behaviors vital to fitness (van Langevelde et al., 2017). The potential for individual deaths to compound into large-scale declines (Kokko and Sutherland, 2001) has been borne out by the results of a 30 year survey of Dutch macromoths (van Langevelde et al., 2018), during which time positively phototactic and nocturnal species underwent steeper declines than diurnal species not attracted to light. A similar survey of macromoths in the UK and Ireland found greater losses at light polluted sites (Wilson et al., 2018), even after controlling for urbanization (Bates et al., 2014), and that nocturnal species once again underwent disproportionate declines (Coulthard et al., 2019). However, a small number of studies have found disproportionate declines in day-active insect species instead (Franzén and Johannesson, 2007).

One complicating factor is the fact that temporal niche partitioning between diurnal and nocturnal species has become less extreme in response to human activity (Ditchkoff et al., 2006; Gaynor et al., 2018; Levy et al., 2019). At the same time, deforestation and habitat fragmentation have reduced the availability of dark refuges for all species (reviewed in Seymoure, 2018). If ALAN is contributing to a worldwide decline of entomofauna, insects that occupy open habitats should be more threatened than those that occupy closed habitats, and terrestrial and aquatic species more so than fossorial species—as indeed they are (Coulthard et al., 2019; Fox et al., 2014; Franzén and Johannesson, 2007; Guerra Alonso et al., 2019; Paukkunen et al., 2018; Potocký et al., 2018; Sánchez-Bayo and Wyckhuys, 2019; van Strien et al., 2019), although few have viewed these trends with light in mind.

We argue here that ALAN impacts the vital biological functions of nocturnal and diurnal insects alike in ways both related and unrelated to flight-to-light behavior (Fig. 1). ALAN can cause immediate behavioral change, or more complex behavioral expression of physiological changes induced by external timekeeping signals (*i.e.Zeitgebers*); both

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Table 1
Examples of the effects of ALAN on vital fitness-related behaviors in diverse insect taxa. **RESPONSE to ALAN** adapted from Owens and Lewis (2018): positive and negative phototaxis refer to impulsive movement towards or away from a light source; spatial disorientation connotes an impaired ability to navigate due to altered environmental cues; temporal disorientation arises from the disruption of circadian rhythms; altered recognition refers to the impact of additional and/or spectrally unnatural illumination on the perception of visual cues; indirect effects are the bottom-up or top-down effects of ALAN on food plants, prey, hosts, or natural enemies. Citations followed by an asterik have directly shown the described impact of ALAN on insect fitness; while other citations show a clear potential for the described impact, ALAN was not a focus of these studies.

BEHAVIOR	RESPONSE to ALAN	FITNESS COST	EXAMPLE TAXON	citation(s)
development	*temporal disorientation*	juvenile insects exposed to ALAN experience accelerated, slowed, or impaired growth	field crickets	Durrant et al., 2018*
movement	*positive phototaxis*	insects caught in the orbit of artificial lights are trapped, unable to advance or retreat	macromoths	Somers-Yeates et al., 2013*
	negative phototaxis	insects that avoid moving through or around lit areas are unable to effectively disperse	aquatic insects	Perkin et al., 2014a,b*
	spatial disorientation	ALAN obscures orientational cues such as the moon or stars, and thus impedes navigation	sand hoppers	Ugolini et al., 2005
	temporal disorientation	ambient illumination inhibits nocturnal activity, including locomotion, in night-active insects	leafhoppers	Shi et al., 2017*
foraging	*positive phototaxis*	insects trapped around or under artificial lights do not engage in normal foraging behavior	insect pollinators	Knop et al., 2017*
	negative phototaxis	insects that avoid lit areas are unable to capitalize on the foraging opportunities within	tree and cave weta	Farnworth et al., 2016*
	temporal disorientation	insects that shift to new temporal niches are physiologically unprepared to forage therein	dung beetles	Caveney et al., 1995
	altered recognition	unnatural spectra obscure the visual signals insects use to identify food sources or hosts	parasitoid wasps	Gerhard et al., 2017*
	indirect effects	the impact of ALAN on plant growth decreases food availability for herbivorous insects	pea aphids	Bennie et al., 2018a*
reproduction	*sex-biased phototaxis*	disproportionate attraction to ALAN skews the effective sex ratio in insect populations	winter moths	van Geffen et al., 2015b*
	temporal disorientation	physiological effects of ALAN lead to sterility or decreased fecundity of adult reproductives	fruit flies	McLay et al., 2017*
	altered recognition	ALAN obscures or masks the visual signals that insects use to find and court potential mates	firefly beetles	reviewed in Owens and Lewis, 2018*
predation	*positive phototaxis*	insects trapped around or under artificial lights are vulnerable to exploitation by predators	giant water bugs	Yoon et al., 2010*
	altered recognition	unnatural spectra obscure aposematic coloration and/or camouflage in prey insects	*Heliconius* butterflies	Seymoure, 2016*
	indirect effects	increased illumination allows visually guided insectivores to hunt more effectively	lady beetle prey	Miller et al., 2017*

changes may be triggered by certain wavelengths of light only. ALAN can also interact with other anthropogenic disturbances such as climate change or noise pollution in complex ways (McMahon et al., 2017; Miller et al., 2017; Walker et al., 2019). For example, pollinator insects pushed from agricultural fields to road verges by pesticides will be more exposed to streetlights and vehicle headlights (Phillips et al., 2019). Impacts on single species will have downstream effects on other members of the food web, the outcome of which can be extremely difficult to predict (Sanders and Gaston, 2018). To keep this review in scope, we focus here on the way in which ALAN impacts several vital fitness-related behaviors of insects on the individual level. We also discuss some of the potential consequences for insect populations, many of which are just now becoming apparent (Table 1)

2. Movement

Large-scale seasonal migration and small-scale daily movements in pursuit of food or habitat both play a crucial role in maintaining the fitness of insect species (Hammock and Wetzel, 2013; Rankin, 1985), and are necessary to the recovery of at-risk metapopulations (Schultz et al., 2019). The attractive and repulsive effects of discrete sources of artificial light are well known to prevent natural patterns of movement (Allema et al., 2012) and alter the distribution of insects in a landscape away from the evolved baseline (Degen et al., 2016; Macgregor et al., 2017; Manfrin et al., 2017; Manríquez et al., 2019; Šustek, 1999; but see Grenis et al., 2015; White, 2018). The fitness repercussions of "fatal attraction" are described above, and not covered in any more detail here. Lines of closely spaced streetlights, as are found along most major roads, can also act as a barrier to the movement of positively and negatively phototactic species alike (Degen et al., 2016; Eisenbeis, 2006), effectively fragmenting major swaths of otherwise suitable habitat. For example, the drift rates of negatively phototactic immature aquatic insects are significantly lower in the presence of riverside lighting (Henn et al., 2014; Perkin et al., 2014a), and their adult forms prevented from moving between streams or colonizing new streams (Perkin et al., 2014b).

Nocturnal light signals serve an important role in the orientation of many insect species (reviewed in Foster et al., 2018; Owens and Lewis, 2018). For example, *Scarabaeus satyrus* dung beetles use the stars and dim patterns of polarized starlight to efficiently navigate away from dung piles (Dacke et al., 2013), while *Talitrus saltator* sand hoppers maintain a route parallel to the shoreline on their nightly excursions by moving with respect to the moon (Ugolini et al., 2005). These signals can be partially or fully obscured in light polluted habitats (Davies et al., 2013b; Kyba et al., 2011a; 2011b); lunar signals also face competition from overhead sources of artificial light (e.g. streetlights; Sotthibandhu and Baker, 1979). Upwelling light (e.g. path lighting) can further disorient flying insects such as wasps and dragonflies that maintain a horizontal position in the air by keeping the more illuminated half of their visual field always overhead (Berry et al., 2011; Goodman, 1965). In fact, both upwelling and downwelling artificial lights are intentionally used in agriculture to suppress the movement and abundance of pest insects (Loughlin, 2014; Miller et al., 2015; Shi et al., 2017; Shimoda and Honda, 2013), yet we wonder why more desirable species have stopped visiting our increasingly illuminated backyards.

3. Foraging

Artificial light at night can interfere with efficient acquisition of food, vital to the developmental and reproductive success of insects (Wenninger and Landolt, 2011), in several ways. Diurnal and crepuscular insects that move their foraging activity into the "night light niche" (Garber, 1978) must endure cold stress (Caveney et al., 1995; Urbanski et al., 2012), while nocturnal insects that continue to forage alongside may experience reduced rates of growth due to increased

competition and/or what is effectively a reduction in their spatial niche (Duarte et al., 2019). Insects avoid profitable foraging patches under illumination due to perceived (Skutelsky, 1996) or actual increases in their risk of predation by invertebrate (Heiling, 1999; Miller et al., 2017), avian (Dwyer et al., 2013, and mammalian insectivores (Rydell, 2006). For example, the reduced presence of tree (*Hemideina thoracica*) and cave (Rhaphidophoridae sp.) weta at artificially illuminated sites is thought to be in avoidance of geckos and other nocturnal predators (Farnworth et al., 2018).

Nocturnal insects that postpone foraging until their habitat is sufficiently dark (Dreisig, 1980) are likely to be negatively affected by a reduction in temporal niche (Tierney et al., 2017). For example, in laboratory environments exposure to dim ALAN is linked to less frequent feeding in several moth species (van Langevelde et al., 2017). *Orchestoidea tuberculata* sand hoppers consume less food under ALAN, and grow less (Luarte et al., 2016). Tasmanian cave glow-worms (*Arachnocampa tasmaniensis*) extinguish their bioluminescent lures when exposed to artificial light (Merritt and Clarke, 2013), and could therefore starve under constant cave lighting. In the field, pollinators that delay their nightly forage due to the day lengthening effects of skyglow are likely to become desynchronized from their food plants, especially in cases where flower opening is cued by temperature instead of light (Seymoure, 2018; Somanathan et al., 2008; van Doorn and Van Meeteren, 2003). Differences in the environmental cues used to guide development of insects and their food plants result in increasingly exaggerated desynchronization over the course of the growing season (Forrest and Thomson, 2011; Laube et al., 2014) and decrease pollinator effectiveness (Rafferty and Ives, 2012).

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Artificial light at night might also cause unexpected trophic cascades through its effects on plants (Bennie et al., 2016; Schroer et al., 2019) or insect natural enemies (see Predation). For example, ALAN stunts the growth of larval cutworms (*Apamea sordens*) by increasing the cuticle toughness of their smooth brome host plants (Grenis and Murphy, 2018). By decreasing the flower abundance of pea plants (Bennie et al., 2018a, 2016), ALAN has also been shown to impact pea aphids (*Acyrthosiphon pisum*) (Bennie et al., 2018b) as well as the parasitoid wasps (*Aphidius* megourae; *Lysiphlebus fabarum* and *Aphidius ervi*) that prey upon them (Sanders et al., 2018, 2015). When food is available, and foraging insects present and active, ALAN can still impact foraging success. Unnatural spectra may obscure the particular visual cues that tobacco hornworm moths (*Manduca sexta*) and other insects use to identify flowers, plants, or prey (Cutler et al., 1995; Davies et al., 2013a; Streinzer et al., 2019). For example, monochromatic red illumination has been found to decrease the rate at which parasitoid wasps encounter their pea aphid hosts (Cochard et al., 2017; 2019a, 2019b). Finally, ALAN can incapacitate positively phototactic insects such as giant water bugs (*Lethocerus deyrolli*; Choi et al., 2009; Yoon et al., 2010) and macromoths (Somers-Yeates et al., 2013) that might otherwise spend the evening engaged in foraging activities, including nocturnal pollination (Knop et al., 2017; Macgregor et al., 2015).

4. Reproduction

ALAN can delay or eliminate the window of time during which night-active insects engage in courtship and mating (Dreisig, 1975; Lall, 1993; Li et al., 2019). The corn earworm moth (*Helicoverpa zea*) never mates when ambient light levels are above that produced by a quarter moon (Agee, 1969), and other strictly nocturnal insects are likely similarly sensitive, but understudied. The insects that manage to maintain a nightly routine within light polluted habitats may still have difficulty locating suitable mates. Firefly beetles are one unique example: the courtship of most fireflies requires the exchange of bioluminescent signals, which are obscured or inhibited by artificial illumination (Firebaugh and Haynes, 2016; Owens et al., 2018) to the point that receptive *Lampyris noctiluca* females perched underneath streetlights are never visited by male conspecifics (Ineichen and Rüttimann, 2012). In certain cases, these females must compete with the streetlights to attract males (Bek, 2015). Other insects may see but be unable to recognize conspecifics: male crepuscular horned beetles (*Coprophanaeus lancifer*) have a coloration that reflects the purplish light of dusk, and will be less apparent to females when lit by artificial light of a different spectral composition (Davies et al., 2013a; Kelley et al., 2019; Théry et al., 2008).

ALAN can also impact the reproductive success of insects directly through its various effects on development and physiology (Honnen et al., 2016). Exposure to constant light is known to sterilize males (Bebas et al., 2001; Giebultowicz et al., 1990), suppress female sex pheromones (Fatzinger, 1973; van Geffen et al., 2015a), and interfere with oviposition in moths (Nemec, 1971; Yamaoka and Hirao, 1981) – likely a result of its disruption of the circadian timing of reproductive development or behavior. Similarly, exposure to dim ALAN decreases the fecundity of *Drosophila melanogaster* (McLay et al., 2017). Exposure to different ratios of blue or red light at night significantly alters the sex ratio of parasitoid wasps (Cochard et al., 2019a, 2019b), and may impact other insect species as well. The effective sex ratio of surviving reproductives can be further altered by the differential impacts of ALAN on behavior: for example, male tree weta avoid illuminated areas but female tree weta do not (Farnworth et al., 2018), and female winter moths (*Operophtera brumata*) avoid illuminated tree trunks (van Geffen et al., 2015b). In general, female moths tend to be less strongly attracted to artificial lights than males of the same species (Altermatt et al., 2009; Garris and Snyder, 2010; van Geffen et al., 2015b). Those that can be found at light traps are often gravid (Frank, 1988) and may be compelled to oviposit in the immediate area regardless of habitat suitability. Perhaps most dramatically, polarized light pollution frequently misleads aquatic insects into ovipositing on non-aquatic, impermeable surfaces (Szaz et al., 2015; Villalobos Jiménez and de, 2017), efficiently decimating subsequent generations.

5. Predation

Insects that become caught in the orbit of artificial lights can be readily exploited by insectivores. This may be why predatory arthropods tend to be disproportionately represented in illuminated habitats (Davies et al., 2017, 2012; Eccard et al., 2018; Manfrin et al., 2017), just as insectivorous bats (Jung and Kalko, 2010; Minnaar et al., 2015; Russo et al., 2019; Rydell, 2006), rats (Yoon et al., 2010), shorebirds (Dwyer et al., 2013), geckos (Zozaya et al., 2015) and cane toads (González-Bernal et al., 2016) are often found feeding around artificial lights. Orb-web spiders prefer to build their webs near artificial lights, where they net more prey (Czaczkes et al., 2018; Heiling, 1999; Yuen and Bonebrake, 2017). Diurnal predators such as jumping spiders (Frank, 2009; Wolff, 1982) and anoles (Garber, 1978) have also been described hunting for insects at lights at night (Manfrin et al., 2018), while birds are known to feed on aquatic insects trapped by polarized light pollution (Robertson et al., 2010). In general, prey insects do not appear able to defend against the increased predation pressure. To the contrary, a wide variety of moth species willingly approach streetlights monitored by foraging bats (Acharya and Fenton, 1999), where they are less able to execute their normal evasive flight behavior (Minnaar et al., 2015; Svensson and Rydell, 1998).

Predators do not only benefit from the dense aggregation of insect prey under artificial lights, but also the increased visibility, which is thought to benefit visually oriented vertebrate insectivores including some birds (Dwyer et al., 2013; Santos et al., 2010) and fish (Meyer and Sullivan, 2013). Other invertebrate predators may also benefit: pea aphids are more frequently predated by visually oriented lady beetles (*Coccinella septempunctata*) under ALAN, but not by lady beetles that use non-visual cues to hunt (Miller et al., 2017). When light levels are too bright, however, some predatory and parasitoid insects themselves succumb to its suppressive effects on foraging behavior (Eccard et al., 2018; Sanders et al., 2018, 2015). Finally, alterations to the intensity

and spectra of the nocturnal light environment can interfere with visual signals, which play an important role the predator-prey arms race. The aposematic glows of larval fireflies (Branham and Wenzel, 2003; Leavell et al., 2018) and the aposematic coloration of *Heliconius* butterflies (Seymoure, 2016) are likely to become less apparent under ALAN, as these and other warning signals have evolved to maximize visibility within particular natural light environments. Camouflage has also evolved within environments illuminated solely by natural sources (Davies et al., 2013a; Delhey and Peters, 2017), and could become ineffectual when viewed under ALAN. In some cases, intelligent predators given the opportunity to observe insects perched beneath artificial lights may become better at recognizing them in natural light environments (Frank, 2006). Whenever evolutionary traps increase predation risk in this way, they are likely to cause the rapid extinction of affected species (Kokko and Sutherland, 2001; Robertson et al., 2018).

6. Development

Artificial light at night can interfere with the development of immature insects by directly inhibiting or promoting nocturnal or diurnal foraging activity (see **Foraging**), or by interfering with the production of a suite of endocrine hormones (Ouyang et al., 2018; Russart and Nelson, 2018a) and the processes that they regulate, including circadian rhythms (Aulsebrook et al., 2018; Dominoni et al., 2016) and metabolic function (Gaston et al., 2017; Marcheva et al., 2013). One insect hormone particularly affected by environmental light – especially short wavelength light (Aubé et al., 2013; Lampel et al., 2005) – is melatonin. Melatonin is an active antioxidant (Durrant et al., 2019; Jones et al., 2015; Tan et al., 2010) and key biological signal (Hardeland and Poeggeler, 2003), which is primarily produced in darkness and suppressed by blue light. Its daily oscillation helps to regulate circadian rhythms of activity as well as circannual photoperiodism (Desouhant et al., 2019; Evans et al., 2007; Tan et al., 2010).

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Previous research into the circadian rhythms of insects has used regimens of constant darkness or light to elucidate the fitness costs of total arrhythmicity (Winfree, 1974), which include impaired immune function, reduced fecundity, and a shorter lifespan (Durrant et al., 2015; Kouser and Palaksha Shakunthala, 2014). Other subtler fitness costs may arise from the mistiming of crucial life history events. For example, many insect species synchronize certain developmental activities with particular times of day: for example, *Drosophila jambulina* fruit flies eclose before dawn when ambient temperature and humidity are optimal (Thakurdas et al., 2009), while intertidal midges (*Pontomyia oceana* and *Clunio* spp.) eclose during periods of low tide (Neumann, 1989; Soong et al., 2011); improper timing could cause fruit flies to desiccate and intertidal midges to drown.

Artificially lengthened photoperiods delay the development of insects that overwinter as juveniles, including locusts (*Locusta migratoria;* Tanaka et al., 1993) and thrips (*Megalurothrips sjostedti;* Ekesi et al., 1999), while accelerating the development of multivoltine lady beetles (*Coelophora saucia;* Omkar and Pathak, 2006), aphids (*Megoura viciae;* Kehoe et al., 2018) and flower bugs (*Orius sauteri;* Wang et al., 2013). By effectively lengthening photoperiod, and potentially suppressing melatonin production, ALAN prolongs juvenile development in black field crickets (*Teleogryllus commodus;* Durrant et al., 2018), but accelerates development in orb-web spiders (*Eriophora biapicata;* Willmott et al., 2018). Short-wavelength light speeds up the pupal development of cabbage moths (*Mamestra brassicae;* van Geffen et al., 2014), while red light has no effect. ALAN also causes aphids that exhibit seasonal polyphenism to maintain their summer form well into autumn (Sanders et al., 2015), and horse-chestnut leafminers (*Cameraria ohridella*) to undergo more generations per season (Schroer et al. 2019); both of these changes likely lead to cold stress. Whether ALAN slows or speeds development in a certain species is ultimately immaterial: whenever insects are desynchronized from their external climate, conspecifics, host plants, food sources, *etc.*, the survival, reproduction and general fitness consequences are catastrophic (Boggs and Inouye, 2012; Bosch et al., 2010; Buckley et al., 2017; Conrad et al., 2003; Konvička et al., 2016; Kudo and Ida, 2013; Miller-Rushing et al., 2010; Schenk et al., 2018).

7. Recommendations

We still have yet to fully understand how diverse insect taxa respond to artificial light of varying spectral composition, intensity, polarization, and flicker. To make matters more complicated, old fashioned bulb types often release large amounts of heat (Elvidge et al., 2010), while some modern LED fixtures emit ultrasonic frequencies that could have compounding effects on insect fitness (John Swaddle, *pers. comm.*). A combination of insect electroretinography and thoughtfully controlled behavioral studies (Cronin et al., 2014) may reveal ways of reducing the ecological consequences of ALAN on insects while still maintaining sufficient levels of nighttime illumination for human safety and enjoyment. In general, efforts to mitigate ALAN driven declines in insect diversity and biomass should take a spectral, spatial, and temporal approach (Bruce-White and Shardlow, 2011).

Monochromatic LEDs can be engineered to produce light of any desired spectral composition (Pimputkar et al., 2009). Therefore, once we know the specific wavelength affinities of insects, we can in theory design lights with minimal output in the wavelengths that most affect insect fitness. Many insects are capable of perceiving ultraviolet wavelengths, but are fairly insensitive to red, deep red, and infrared (Briscoe and Chittka, 2001; Lind et al., 2017). Long wavelength light (amber or red) tends to induce relatively low levels of flight-to-light behavior across insect groups (Donners et al., 2018; Longcore et al., 2018; Seymoure et al., 2019; Spoelstra et al., 2015), and has the least suppressive effect on melatonin production (Dauchy et al., 2016; Do et al., 2009; Russart and Nelson, 2018b), which may reduce impacts on insect physiology and development (Desouhant et al., 2019; Do et al., 2009; Jones et al., 2015; Russart and Nelson, 2018b; Saunders, 2012). However, the spectral needs of certain insect (Bek, 2015; Pacheco et al., 2016; Spoelstra et al., 2015; van Langevelde et al., 2017) and non-insect taxa such as plants, fish, and birds (Bennie et al., 2016; Dominoni, 2015; Seymoure et al., 2019) do not always align. Furthermore, many monochromatic LED fixtures on the market today are so bright, with such a broad full width at half maximum (FWHM, a measure of the proportion of photons emitted on either side of the peak wavelength), that their color as stated is not particularly relevant.

In many cases, it is far easier, quicker, and cheaper to shield, dim, or turn off a light source than it is to find the particular bulb type or narrow bandpass filter that makes its emissions visible to humans alone. Spatial mitigation of ALAN must involve the installation of proper shielding, but shielding alone is insufficient: it may block glare at human eye level and reduce atmospheric skyglow, but it will not prevent downwelling light from affecting insects in the immediate habitat; stationary insects, including pond-dwelling aquatic species and most female fireflies, may be completely incapacitated by a perfectly shielded streetlight. Rather than focusing overly much on shielding, insect conservation efforts should instead be directed towards the following methods of spatial mitigation: limiting illumination to desired areas such as sidewalks or roads; dimming light sources to the lowest acceptable intensity; and—perhaps most importantly—reducing the number of fixtures installed in and around ecologically vulnerable areas. In ecotourist hotspots, path lights might be shielded from the top *and* the bottom to minimize their impact on nearby biodiversity. Increased understanding of how insects are affected by "invisible" qualities of light including polarization (Egri et al., 2017; Száz et al., 2016) and flicker rate (Barroso et al., 2017; Inger et al., 2014; Shields, 1989) can further inform the design of low-impact fixtures as well as their surrounding surfaces. Finally, temporal approaches comprising motion activation and/or automatic timers that extinguish lights when they are not needed, or when vulnerable species are likely to be most

affected (e.g. during the two month long courtship season of the common glow-worm; (Gardiner, 2011), can greatly improve insect survivorship.

8. Conclusion

Some estimates predict that one million species, including up to 40% of insects, will go extinct within the next several decades (IPBES, 2019; Sánchez-Bayo and Wyckhuys, 2019). It is urgent therefore that we seek to identify the range of threats that insects face, and understand how to best address them. In light of the evidence presented above, we strongly believe that ALAN—in combination with habitat loss, chemical pollution, invasive species, and climate change—is driving insect declines. The relative lack of research into its ecological impact is likely a reflection of diurnal bias (Gaston, 2019), and not due to an inherent lack of importance. Quite the contrary: light is the source of all life on this planet, a fundamental part of the perceptive ability of most animal taxa, and an environmental cue of time of day and year that has been constant throughout all of evolutionary history. Anthropogenic changes to the natural light environment should be predicted to affect all life that has evolved within it—that is to say, almost all life on Earth.

In this paper we have summarized numerous studies demonstrating the ways in which ALAN impacts nocturnal and diurnal insects through effects on movement, foraging, reproduction, predation risk, and development. We would like to emphasize that ALAN is not merely a subcategory of urbanization: the ecological consequences of light pollution are not limited to urban and suburban centers, but widespread along roadways and around protected areas. Although there is obviously no single cause of insect declines, each threat identified is an opportunity for better informed management practices. Furthermore, unlike other potential drivers of insect declines, ALAN is relatively straightforward to reverse, and doing so could greatly reduce insect losses immediately. Our aim in sharing our perspective is thus to urge policy makers and land managers to incorporate the known consequences of ALAN into their insect conservation agendas. Meanwhile, more research is needed to further document the role of ALAN in insect declines, as well as to engineer more insect friendly lighting technology.

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Declaration of Competing Interest

The authors have no conflicts of interest to declare. Furthermore, this manuscript has not been submitted to any other journals.

References

Acharya, L., Fenton, M.B., 1999. Bat attacks and moth defensive behaviour around street lights. Can. J. Zool. 77, 27–33.

Agee, H.R., 1969. Mating behavior of bollworm moths. Ann. Entomol. Soc. Am. 62, 1120–1122.

Altermatt, F., Baumeyer, A., Ebert, D., 2009. Experimental evidence for male biased flight-to-light behavior in two moth species. Entomol. Exp. Appl. 130, 259–265.

Altermatt, F., Ebert, D., 2016. Reduced flight-to-light behaviour of moth populations exposed to long-term urban light pollution. Biol. Lett. 12. https://doi.org/10.1098/rsbl.2016.0111.

Aubé, M., Roby, J., Kocifaj, M., 2013. Evaluating potential spectral impacts of various artificial lights on melatonin suppression, photosynthesis, and star visibility. PLoS One 8, e67798.

Aulsebrook, A.E., Jones, T.M., Mulder, R.A., Lesku, J.A., 2018. Impacts of artificial light at night on sleep: a review and prospectus. J Exp Zool A Ecol Integr Physiol 329, 409–418.

Barroso, A., Haifig, I., Janei, V., da Silva, I., Dietrich, C., Costa-Leonardo, A.M., 2017. Effects of flickering light on the attraction of nocturnal insects. Light. Res. Technol. 49, 100–110.

Bates, A.J., Sadler, J.P., Grundy, D., Lowe, N., Davis, G., Baker, D., Bridge, M., Freestone, R., Gardner, D., Gibson, C., Hemming, R., Howarth, S., Orridge, S., Shaw, M., Tams, T., Young, H., 2014. Garden and landscape-scale correlates of moths of differing conservation status: significant effects of urbanization and habitat diversity. PLoS One 9, e86925.

Baxter, C.V., Fausch, K.D., Carl Saunders, W., 2005. Tangled webs: reciprocal flows of invertebrate prey link streams and riparian zones. Freshw. Biol. 50, 201–220.

Beavis, I.C., 1995. The first light trap, 1st century AD. Entomol. Rec. J. Var. 107, 155.

Bebas, P., Cymborowski, B., Giebultowicz, J.M., 2001. Circadian rhythm of sperm release in males of the cotton leafworm, Spodoptera littoralis: in vivo and in vitro studies. J. Insect Physiol. 47, 859–866.

Bek, R.J., 2015. Investigating the Impact of Artificial Night Lighting on the Common European Glow-worm, Lampyris noctiluca (L.) (Coleoptera: Lampyridae) (BSc). University of Leeds.

Bennie, J., Davies, T.W., Cruse, D., Bell, F., Gaston, K.J., 2018a. Artificial light at night alters grassland vegetation species composition and phenology. J. Appl. Ecol. 55, 442–450.

Bennie, J., Davies, T.W., Cruse, D., Gaston, K.J., 2016. Ecological effects of artificial light at night on wild plants. J. Ecol. 104, 611–620.

Bennie, J., Davies, T.W., Cruse, D., Inger, R., Gaston, K.J., 2018b. Artificial light at night causes top-down and bottom-up trophic effects on invertebrate populations. J. Appl. Ecol. 55, 2698–2706.

Berry, R.P., Wcislo, W.T., Warrant, E.J., 2011. Ocellar adaptations for dim light vision in a nocturnal bee. J. Exp. Biol. 214, 1283–1293.

Boggs, C.L., Inouye, D.W., 2012. A single climate driver has direct and indirect effects on insect population dynamics. Ecol. Lett. 15, 502–508.

Bosch, J., Sgolastra, F., Kemp, W.P., 2010. Timing of eclosion affects diapause development, fat body consumption and longevity in Osmia lignaria, a univoltine, adult-wintering solitary bee. J. Insect Physiol. 56, 1949–1957.

Branham, M.A., Wenzel, J.W., 2003. The origin of photic behavior and the evolution of sexual communication in fireflies (Coleoptera: lampyridae). Cladistics 19, 1–22.

Briscoe, A.D., Chittka, L., 2001. The evolution of color vision in insects. Annu. Rev. Entomol. 46, 471–510.

Bruce-White, C., Shardlow, M., 2011. A Review of the Impact of Artificial Light on Invertebrates. Buglife-The Invertebrate Conservation Trust.

Buckley, L.B., Arakaki, A.J., Cannistra, A.F., Kharouba, H.M., Kingsolver, J.G., 2017. Insect development, thermal plasticity and fitness implications in changing, seasonal environments. Integr. Comp. Biol. 57, 988–998.

Cantelo, W.W., Smith, J.S., Baumhover, A.H., Stanley, J.M., Henneberry, T.J., 1972. Suppression of an isolated population of the tobacco hornworm with blacklight traps unbaited or baited with virgin female moths. Environ. Entomol. 1, 253–258.

Caveney, S., Scholtz, C.H., McIntyre, P., 1995. Patterns of daily flight activity in onitine dung beetles (Scarabaeinae: onitini). Oecologia 103, 444–452.

Choi, H., Kim, H., Kim, J.G., 2009. Landscape analysis of the effects of artificial lighting around wetland habitats on the giant water bug Lethocerus deyrollei in Jeju Island. J. Ecol. Field Biol. 32. https://doi.org/10.5141/JEFB.2009.32.2.083.

Cochard, P., Galstian, T., Cloutier, C., 2019a. The influence of light environment on host colour preference in a parasitoid wasp. Ecol. Entomol.

Cochard, P., Galstian, T., Cloutier, C., 2019b. The proportion of blue light affects parasitoid wasp behavior in LED-extended photoperiod in greenhouses: increased parasitism and offspring sex ratio bias. Biol. Control 133, 9–17.

Cochard, P., Galstian, T., Cloutier, C., 2017. Light environments differently affect parasitoid wasps and their hosts' locomotor activity. J. Insect Behav. 30, 595–611.

Conrad, K.F., Woiwod, I.P., Perry, J.N., 2003. East Atlantic teleconnection pattern and the decline of a common Arctiid moth. Glob. Chang. Biol. 9, 125–130.

Coulthard, E., Norrey, J., Shortall, C., Harris, W.E., 2019. Ecological traits predict population changes in moths. Biol. Conserv. 233, 213–219.

Cronin, T.W., Johnsen, S., Justin Marshall, N., Warrant, E.J., 2014. Visual Ecology, 1 edition. ed. Princeton University Press.

Cutler, D., Bennett, R., Stevenson, R., White, R., 1995. Feeding behavior in the nocturnal moth Manduca sexta is mediated mainly by blue receptors, but where are they located in the retina? J. Exp. Biol. 198, 1909–1917.

Czaczkes, T.J., Bastidas-Urrutia, A.M., Ghislandi, P., Tani, C., 2018. Reduced light avoidance in spiders from populations in light-polluted urban environments. Naturwissenschaften 105, 64.

Dacke, M., Baird, E., Byrne, M., Scholtz, C.H., Warrant, E.J., 2013. Dung beetles use the Milky Way for orientation. Curr. Biol. 23, 298–300.

Dauchy, R.T., Wren-Dail, M.A., Hoffman, A.E., Hanifin, J.P., Warfield, B., Brainard, G.C., Hill, S.M., Belancio, V.P., Dauchy, E.M., Blask, D.E., 2016. Effects of daytime exposure to light from blue-enriched light-emitting diodes on the nighttime melatonin amplitude and circadian regulation of rodent metabolism and physiology. Comp. Med. 66, 373–383.

Davies, T.W., Bennie, J., Cruse, D., Blumgart, D., Inger, R., Gaston, K.J., 2017. Multiple night-time light-emitting diode lighting strategies impact grassland invertebrate assemblages. Glob. Chang. Biol. https://doi.org/10.1111/gcb.13615.

Davies, T.W., Bennie, J., Gaston, K.J., 2012. Street lighting changes the composition of invertebrate communities. Biol. Lett. 8, 764–767.

Davies, T.W., Bennie, J., Inger, R., de Ibarra, N.H., Gaston, K.J., 2013a. Artificial light pollution: are shifting spectral signatures changing the balance of species interactions? Glob. Glob. Change Biol. Bioenergy 19, 1417–1423.

Davies, T.W., Bennie, J., Inger, R., Gaston, K.J., 2013b. Artificial light alters natural regimes of night-time sky brightness. Sci. Rep. 3, 1722.

Degen, T., Mitesser, O., Perkin, E.K., Weiß, N.-S., Oehlert, M., Mattig, E., Hölker, F., 2016. Street lighting: sex-independent impacts on moth movement. J. Anim. Ecol. 85, 1352–1360.

Delhey, K., Peters, A., 2017. Conservation implications of anthropogenic impacts on visual communication and camouflage. Conserv. Biol. 31, 30–39.

Desouhant, E., Gomes, E., Mondy, N., Amat, I., 2019. Mechanistic, ecological, and evolutionary consequences of artificial light at night for insects: review and prospective. Entomol. Exp. Appl. 167, 37–58.

Dillon, M., Dillon, M., 2002. Artificial sunshine: a social history of domestic lighting. National Trust.

Dirzo, R., Young, H.S., Galetti, M., Ceballos, G., Isaac, N.J.B., Collen, B., 2014. Defaunation in the anthropocene. Science 345, 401–406.

Ditchkoff, S.S., Saalfeld, S.T., Gibson, C.J., 2006. Animal behavior in urban ecosystems:

modifications due to human-induced stress. Urban Ecosyst. 9, 5–12.
Dominoni, D.M., 2015. The effects of light pollution on biological rhythms of birds: an integrated, mechanistic perspective. J. Ornithol. 156, 409–418.
Dominoni, D.M., Borniger, J.C., Nelson, R.J., 2016. Light at night, clocks and health: from humans to wild organisms. Biol. Lett. 12, 20160015.
Do, M.T.H., Kang, S.H., Xue, T., Zhong, H., Liao, H.-W., Bergles, D.E., Yau, K.-W., 2009. Photon capture and signalling by melanopsin retinal ganglion cells. Nature 457, 281–287.
Donners, M., van Grunsven, R.H.A., Groenendijk, D., van Langevelde, F., Bikker, J.W., Longcore, T., Veenendaal, E., 2018. Colors of attraction: modeling insect flight to light behavior. J Exp Zool A Ecol Integr Physiol 329, 434–440.
Dreisig, H., 1980. The importance of illumination level in the daily onset of flight activity in nocturnal moths. Physiol. Entomol. 5, 327–342.
Dreisig, H., 1975. Environmental control of the daily onset of luminescent activity in glowworms and fireflies (Coleoptera: lampyridae). Oecologia 18, 85–99.
Duarte, C., Quintanilla-Ahumada, D., Anguita, C., Manríquez, P.H., Widdicombe, S., Pulgar, J., Silva-Rodríguez, E.A., Miranda, C., Manríquez, K., Quijón, P.A., 2019. Artificial light pollution at night (ALAN) disrupts the distribution and circadian rhythm of a sandy beach isopod. Environ. Pollut. https://doi.org/10.1016/j.envpol.2019.02.037.
Durrant, J., Botha, L.M., Green, M.P., Jones, T.M., 2018. Artificial light at night prolongs juvenile development time in the black field cricket, Teleogryllus commodus. J. Exp. Zool. 12, 202.
Durrant, J., Green, M.P., Jones, T.M., 2019. Dim artificial light at night reduces the cellular immune response of the black field cricket, Teleogryllus commodus. Insect Sci. https://doi.org/10.1111/1744-7917.12665.
Durrant, J., Michaelides, E.B., Rupasinghe, T., Tull, D., Green, M.P., Jones, T.M., 2015. Constant illumination reduces circulating melatonin and impairs immune function in the cricket Teleogryllus commodus. PeerJ 3, e1075.
Dwyer, R.G., Bearhop, S., Campbell, H.A., Bryant, D.M., 2013. Shedding light on light: benefits of anthropogenic illumination to a nocturnally foraging shorebird. J. Anim. Ecol. 82, 478–485.
Eccard, J.A., Scheffler, I., Franke, S., Hoffmann, J., 2018. Off-grid: solar powered LED illumination impacts epigeal arthropods. Insect Conserv. Divers. 12, 20160111.
Egri, Á., Száz, D., Farkas, A., Pereszlényi, Á., Horváth, G., Kriska, G., 2017. Method to improve the survival of night-swarming mayflies near bridges in areas of distracting light pollution. R. Soc. Open Sci. 4, 171166.
Eisenbeis, G., 2006. Artificial night lighting and insects: attraction of insects to streetlamps in a rural setting in Germany. In: Rich, C., Longcore, T. (Eds.), Ecological Consequences of Artificial Night Lighting. Island Press, Washington, D.C, pp. 281–304.
Ekesi, S., Maniania, N.K., Onu, I., 1999. Effects of temperature and photoperiod on development and oviposition of the legume flower thrips, Megalurothrips sjostedti. Entomol. Exp. Appl. 93, 149–155.
Elvidge, C.D., Keith, D.M., Tuttle, B.T., Baugh, K.E., 2010. Spectral identification of lighting type and character. Sensors 10, 3961–3988.
Evans, J.A., Elliott, J.A., Gorman, M.R., 2007. Circadian effects of light no brighter than moonlight. J. Biol. Rhythms 22, 356–367.
Falchi, F., Cinzano, P., Duriscoe, D., Kyba, C.C.M., Elvidge, C.D., Baugh, K., Portnov, B.A., Rybnikova, N.A., Furgoni, R., 2016. The new world atlas of artificial night sky brightness. Sci. Adv. 2, e1600377.
Fao, F.A., 2012. FAOSTAT Online Statistical Service. Food and Agriculture Organization of the United Nations.
Farnworth, B., Innes, J., Kelly, C., Littler, R., Waas, J.R., 2018. Photons and foraging: Artificial light at night generates avoidance behaviour in male, but not female, New Zealand weta. Environ. Pollut. 236, 82–90.
Fatzinger, C.W., 1973. Circadian rhythmicity of sex pheromone release by dioryctria abietella (Lepidoptera: pyralidae (Phycitinae)) and the effect of a diel light cycle on its precopulatory behavior. Ann. Entomol. Soc. Am. 66, 1147–1153.
Firebaugh, A., Haynes, K.J., 2016. Experimental tests of light-pollution impacts on nocturnal insect courtship and dispersal. Oecologia. https://doi.org/10.1007/s00442-016-3723-1.
Forrest, J.R.K., Thomson, J.D., 2011. An examination of synchrony between insect emergence and flowering in Rocky Mountain meadows. Ecol. Monogr. 81, 469–491.
Foster, J.J., Smolka, J., Nilsson, D.-E., Dacke, M., 2018. How animals follow the stars. Proc. Biol. Sci. 285. https://doi.org/10.1098/rspb.2017.2322.
Fox, R., Oliver, T.H., Harrower, C., Parsons, M.S., Thomas, C.D., Roy, D.B., 2014. Long-term changes to the frequency of occurrence of British moths are consistent with opposing and synergistic effects of climate and land-use changes. J. Appl. Ecol. 51, 949–957.
Frank, K.D., 2009. Exploitation of artificial light at night by a diurnal jumping spider. Peckhamia.
Frank, K.D., 2006. Effects of artificial night lighting on moths. In: Rich, C., Longcore, T. (Eds.), Ecological Consequences of Artificial Night Lighting. Island Press, Washington, D.C, pp. 305–344.
Frank, K.D., 1988. Impact of outdoor lighting on moths: an assessment. J. Lepid. Soc. 42, 63–93.
Franzén, M., Johannesson, M., 2007. Predicting extinction risk of butterflies and moths (Macrolepidoptera) from distribution patterns and species characteristics. J. Insect Conserv. 11, 367–390.
Garber, S.D., 1978. Opportunistic feeding behavior of Anolis cristatellus (Iguanidae: reptilia) in Puerto Rico. Trans. Kans. Acad. Sci. 81, 79.
Gardiner, T.A., 2011. Glowing, Glowing, Gone? The Plight of the Glow-worm in Essex. British Naturalists' Association.
Garris, H.W., Snyder, J.A., 2010. Sex-specific attraction of moth species to ultraviolet light traps. Southeast. Nat. 9, 427–434.
Gaston, K.J., 2019. Nighttime ecology: the "Nocturnal problem" revisited. Am. Nat. 193, 481–502.
Gaston, K.J., Bennie, J., Davies, T.W., Hopkins, J., 2013. The ecological impacts of nighttime light pollution: a mechanistic appraisal. Biol. Rev. Camb. Philos. Soc. 88, 912–927.
Gaston, K.J., Davies, T.W., Nedelec, S.L., Holt, L.A., 2017. Impacts of artificial light at night on biological timings. Annu. Rev. Ecol. Evol. Syst. 48, 49–68.
Gaston, K.J., Duffy, J.P., Bennie, J., 2015. Quantifying the erosion of natural darkness in the global protected area system. Conserv. Biol. 29, 1132–1141.
Gaston, K.J., Holt, L.A., 2018. Nature, extent and ecological implications of night-time light from road vehicles. J. Appl. Ecol. https://doi.org/10.1111/1365-2664.13157.
Gaynor, K.M., Hojnowski, C.E., Carter, N.H., Brashares, J.S., 2018. The influence of human disturbance on wildlife nocturnality. Science 360, 1232–1235.
Giebultowicz, J.M., Ridgway, R.L., Imberski, R.B., 1990. Physiological basis for sterilizing effects of constant light in Lymantria dispar. Physiol. Entomol. 15, 149–156.
González-Bernal, E., Greenlees, M.J., Brown, G.P., Shine, R., 2016. Toads in the backyard: why do invasive cane toads (Rhinella marina) prefer buildings to bushland? Popul. Ecol. 58, 293–302.
Goodman, L.J., 1965. The role of certain optomotor reactions in regulating stability in the rolling plane during flight in the desert locust, Schistocerca gregaria. J. Exp. Biol. 42, 385–407.
Grenis, K., Murphy, S.M., 2018. Direct and indirect effects of light pollution on the performance of an herbivorous insect. Insect Sci. https://doi.org/10.1111/1744-7917.12574.
Grenis, K., Tjossem, B., Murphy, S.M., 2015. Predation of larval Lepidoptera in habitat fragments varies spatially and temporally but is not affected by light pollution. J. Insect Conserv. 19, 559–566.
Grubisic, M., van Grunsven, R.H.A., Kyba, C.C.M., Manfrin, A., Hölker, F., 2018. Insect declines and agroecosystems: does light pollution matter? Ann. Appl. Biol. 173, 180–189.
Guerra Alonso, C.B., Zurita, G.A., Bellocq, M.I., 2019. Livestock areas with canopy cover sustain dung beetle diversity in the humid subtropical Chaco forest. Insect Conserv. Divers. 12, 296–308.
Guetté, A., Godet, L., Juigner, M., Robin, M., 2018. Worldwide increase in Artificial Light At Night around protected areas and within biodiversity hotspots. J. Biol. Conserv. 223, 97–103.
Hallmann, C.A., Sorg, M., Jongejans, E., Siepel, H., Hofland, N., Schwan, H., Stenmans, W., Müller, A., Sumser, H., Hörren, T., Goulson, D., de Kroon, H., 2017. More than 75 percent decline over 27 years in total flying insect biomass in protected areas. PLoS One 12, e0185809.
Hammock, B.G., Wetzel, W.C., 2013. The relative importance of drift causes for stream insect herbivores across a canopy gradient. Oikos 122, 1586–1593.
Hardeland, R., Poeggeler, B., 2003. Non-vertebrate melatonin. J. Pineal Res. 34, 233–241.
Heiling, A.M., 1999. Why do nocturnal orb-web spiders (Araneidae) search for light? Behav. Ecol. Sociobiol. (Print) 46, 43–49.
Henn, M., Nichols, H., Zhang, Y., Bonner, T.H., 2014. Effect of artificial light on the drift of aquatic insects in urban central Texas streams. J. Freshw. Ecol. 29, 307–318.
Honnen, A.-C., Johnston, P.R., Monaghan, M.T., 2016. Sex-specific gene expression in the mosquito Culex pipiens f. molestus in response to artificial light at night. BMC Genomics 17, 22.
Hopkins, G.R., Gaston, K.J., Visser, M.E., Elgar, M.A., Jones, T.M., 2018. Artificial light at night as a driver of evolution across urban-rural landscapes. Front. Ecol. Environ. 114, 8951.
Horváth, G., Kriska, G., Malik, P., Robertson, B., 2009. Polarized light pollution: a new kind of ecological photopollution. Front. Ecol. Environ. 7, 317–325.
Ineichen, S., Rüttimann, B., 2012. Impact of artificial light on the distribution of the common European glow-worm, Lampyris noctiluca (Coleoptera: lampyridae). Lampyrid.
Inger, R., Bennie, J., Davies, T.W., Gaston, K.J., 2014. Potential biological and ecological effects of flickering artificial light. PLoS One 9, e98631.
IPBES, 2019. In: Díaz, S., Settele, J., Brondizio, E.S., Ngo, H.T., Guèze, M., Agard, J., Arneth, A., Balvanera, P., Brauman, K.A., Butchart, S.H.M., Chan, K.M.A., Garibaldi, L.A., Ichii, K., Liu, J., Subramanian, S.M., Midgley, G.F., Miloslavich, P., Molnár, Z., Obura, D., Pfaff, A., Polasky, S., Purvis, A., Razzaque, J., Reyers, B., Roy Chowdhury, R., Shin, Y.J., Visseren-Hamakers, I.J., Willis, K.J., Zayas, C.N. (Eds.), Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. IPBES secretariat, Bonn, Germany.
Janzen, D.H., Hallwachs, W., 2019. Perspective: where might be many tropical insects? Biol. Conserv. 233, 102–108.
Jarvis, B., 2018. The Insect Apocalypse Is Here. The New York Times.
Johansen, N.S., Vänninen, I., Pinto, D.M., Nissinen, A.I., Shipp, L., 2011. In the light of new greenhouse technologies: 2. Direct effects of artificial lighting on arthropods and integrated pest management in greenhouse crops. Ann. Appl. Biol. 159, 1–27.
Jones, T.M., Durrant, J., Michaelides, E.B., Green, M.P., 2015. Melatonin: a possible link between the presence of artificial light at night and reductions in biological fitness. Philos. Trans. R. Soc. Lond., B, Biol. Sci. 370. https://doi.org/10.1098/rstb.2014.0122.
Jung, K., Kalko, E.K.V., 2010. Where forest meets urbanization: foraging plasticity of aerial insectivorous bats in an anthropogenically altered environment. J. Mammal. 91, 144–153.
Kehoe, R.C., Cruse, D., Sanders, D., Gaston, K.J., van Veen, F.J.F., 2018. Shifting day-length regimes associated with range shifts alter aphid-parasitoid community dynamics. Ecol. Evol. 147, 381.
Kelley, J.L., Tatarnic, N.J., Schröder-Turk, G.E., Endler, J.A., Wilts, B.D., 2019. A dynamic optical signal in a nocturnal moth. Curr. Biol. https://doi.org/10.1016/j.cub.2019.

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07.005. 0.
Knop, E., Zoller, L., Ryser, R., Gerpe, C., Hörler, M., Fontaine, C., 2017. Artificial light at night as a new threat to pollination. Nature. https://doi.org/10.1038/nature23288.
Koen, E.L., Minnaar, C., Roever, C.L., Boyles, J.G., 2018. Emerging threat of the 21st century lightscape to global biodiversity. Glob. Chang. Biol. 24, 2315–2324.
Kokko, H., Sutherland, W.J., 2001. Ecological traps in changing environments: ecological and evolutionary consequences of a behaviourally mediated Allee effect. Evol. Ecol. Res. 3, 603–610.
Konvička, M., Beneš, J., Čížek, O., Kuras, T., Klečková, I., 2016. Has the currently warming climate affected populations of the mountain ringlet butterfly, Erebia epiphron (Lepidoptera: nymphalidae), in low-elevation mountains? Eur. J. Entomol. https://doi.org/10.14411/eje.2016.036.
Kouser, S., Palaksha Shakunthala, V., 2014. Study on fitness of Drosophila melanogaster in different light regimes. Biol. Rhythm Res. 45, 293–300.
Kudo, G., Ida, T.Y., 2013. Early onset of spring increases the phenological mismatch between plants and pollinators. Ecology 94, 2311–2320.
Kyba, C.C.M., 2018. Is light pollution getting better or worse? Nat. Astron. https://doi.org/10.1038/s41550-018-0402-7.
Kyba, C.C.M., Kuester, T., Sánchez de Miguel, A., Baugh, K., Jechow, A., Hölker, F., Bennie, J., Elvidge, C.D., Gaston, K.J., Guanter, L., 2017. Artificially lit surface of Earth at night increasing in radiance and extent. Sci. Adv. 3, e1701528.
Kyba, C.C.M., Ruhtz, T., Fischer, J., Hölker, F., 2011a. Cloud coverage acts as an amplifier for ecological light pollution in urban ecosystems. PLoS One 6, e17307.
Kyba, C.C.M., Ruhtz, T., Fischer, J., Hölker, F., 2011b. Lunar skylight polarization signal polluted by urban lighting. J. Geophys. Res. 116, D24106.
Lall, A.B., 1993. Action spectra for the initiation of bioluminescent flashing activity in males of twilight-active firefly Photinus scintillans (Coleoptera: lampyridae). 2. J. Insect Physiol. 39, 123–127.
Lampel, J., Briscoe, A.D., Wasserthal, L.T., 2005. Expression of UV-, blue-, long-wavelength-sensitive opsins and melatonin in extraretinal photoreceptors of the optic lobes of hawk moths. Cell Tissue Res. 321, 443–458.
Laube, J., Sparks, T.H., Estrella, N., Höfler, J., Ankerst, D.P., Menzel, A., 2014. Chilling outweighs photoperiod in preventing precocious spring development. Glob. Chang. Biol. 20, 170–182.
Leather, S., 2015. Entomological Classics – the Light Trap. [WWW Document]. Don't Forget the Roundabouts. URL https://simonleather.wordpress.com/2015/08/06/entomological-classics-the-light-trap/ (Accessed 8.22.19). .
Leavell, B.C., Rubin, J.J., McClure, C.J.W., Miner, K.A., Branham, M.A., Barber, J.R., 2018. Fireflies thwart bat attack with multisensory warnings. Sci. Adv. 4 eaat6601.
Levy, O., Dayan, T., Porter, W.P., Kronfeld-Schor, N., 2019. Time and ecological resilience: can diurnal animals compensate for climate change by shifting to nocturnal activity? Ecol. Monogr. 89, e01334.
Lind, O., Henze, M.J., Kelber, A., Osorio, D., 2017. Coevolution of coloration and colour vision? Philos. Trans. R. Soc. Lond., B, Biol. Sci. 372. https://doi.org/10.1098/rstb.2016.0338.
Lister, B.C., Garcia, A., 2018. Climate-driven declines in arthropod abundance restructure a rainforest food web. Proc. Natl. Acad. Sci. U. S. A. 115, E10397–E10406.
Li, X., Jia, X., Xiang, H., Diao, H., Yan, Y., Wang, Y., Ma, R., 2019. The effect of photoperiods and light intensity on mating behavior and reproduction of Grapholita molesta (Lepidoptera: tortricidae). Environ. Entomol. https://doi.org/10.1093/ee/nvz066.
Longcore, T., Rodríguez, A., Witherington, B., Penniman, J.F., Herf, L., Herf, M., 2018. Rapid assessment of lamp spectrum to quantify ecological effects of light at night. J Exp Zool A Ecol Integr Physiol. https://doi.org/10.1002/jez.2184.
Loughlin, D., 2014. UAE: light traps issued to Abu Dhabi farmers for pest control. International Pest Control 56, 70.
Luarte, T., Bonta, C.C., Silva-Rodriguez, E.A., Quijón, P.A., Miranda, C., Farias, A.A., Duarte, C., 2016. Light pollution reduces activity, food consumption and growth rates in a sandy beach invertebrate. Environ. Pollut. 218, 1147–1153.
Macgregor, C.J., Evans, D.M., Fox, R., Pocock, M.J.O., 2017. The dark side of street lighting: impacts on moths and evidence for the disruption of nocturnal pollen transport. Glob. Chang. Biol. 23, 697–707.
Macgregor, C.J., Pocock, M.J.O., Fox, R., Evans, D.M., 2015. Pollination by nocturnal Lepidoptera, and the effects of light pollution: a review. Ecol. Entomol. 40, 187–198.
Manfrin, A., Lehmann, D., van Grunsven, R.H.A., Larsen, S., 2018. Dietary changes in predators and scavengers in a nocturnally illuminated riparian ecosystem. Oikos.
Manfrin, A., Singer, G., Larsen, S., Weiss, N., van Grunsven, R.H., Weiss, N.-S., Wohlfahrt, S., Monaghan, M., Hölker, F., 2017. Artificial light at night affects organism flux across ecosystem boundaries and drives community structure in the recipient ecosystem. Front. Environ. Sci. Eng. China 5, 61.
Manríquez, P.H., Jara, M.E., Diaz, M.I., Quijón, P.A., Widdicombe, S., Pulgar, J., Manríquez, K., Quintanilla-Ahumada, D., Duarte, C., 2019. Artificial light pollution influences behavioral and physiological traits in a keystone predator species, Concholepas concholepas. Sci. Total Environ. https://doi.org/10.1016/j.scitotenv.2019.01.157.
Marcheva, B., Ramsey, K.M., Peek, C.B., Affinati, A., Maury, E., Bass, J., 2013. Circadian clocks and metabolism. Handb. Exp. Pharmacol. 127–155.
McLay, L.K., Green, M.P., Jones, T.M., 2017. Chronic exposure to dim artificial light at night decreases fecundity and adult survival in Drosophila melanogaster. J. Insect Physiol. 100, 15–20.
McMahon, T.A., Rohr, J.R., Bernal, X.E., 2017. Light and noise pollution interact to disrupt interspecific interactions. Ecology. https://doi.org/10.1002/ecy.1770.
Merritt, D.J., Clarke, A.K., 2013. The impact of cave lighting on the bioluminescent display of the Tasmanian glow-worm Arachnocampa tasmaniensis. J. Insect Conserv. 17, 147–153.
Meyer, L.A., Sullivan, S.M.P., 2013. Bright lights, big city: influences of ecological light pollution on reciprocal stream–riparian invertebrate fluxes. Ecol. Appl. 23, 1322–1330.
Miller, C.R., Barton, B.T., Zhu, L., Radeloff, V.C., Oliver, K.M., Harmon, J.P., Ives, A.R., 2017. Combined effects of night warming and light pollution on predator-prey interactions. Proc. Biol. Sci. 284. https://doi.org/10.1098/rspb.2017.1195.
Miller, J.R., Adams, C.G., Weston, P.A., Schenker, J.H., 2015. Trapping of Small Organisms Moving Randomly: Principles and Applications to Pest Monitoring and Management. Springer, Cham.
Miller-Rushing, A.J., Høye, T.T., Inouye, D.W., 2010. The effects of phenological mismatches on demography. Philos. Trans. R. Soc. Lond., B, Biol. Sci. 365, 3177–3186.
Minnaar, C., Boyles, J.G., Minnaar, I.A., Sole, C.L., McKechnie, A.E., 2015. Stacking the odds: light pollution may shift the balance in an ancient predator–prey arms race. J. Appl. Ecol. 52, 522–531.
Nemec, S.J., 1971. Effects of lunar phases on light-trap collections and populations of bollworm moths. J. Econ. Entomol. 64, 860–864.
Neumann, D., 1989. Circadian components of semilunar and lunar timing mechanisms. J. Biol. Rhythms 4, 285–294.
Ouyang, J.Q., Davies, S., Dominoni, D., 2018. Hormonally mediated effects of artificial light at night on behavior and fitness: linking endocrine mechanisms with function. J. Exp. Biol. 221. https://doi.org/10.1242/jeb.156893.
Owens, A.C.S., Lewis, S.M., 2018. The impact of artificial light at night on nocturnal insects: a review and synthesis. Ecol. Evol. 8, 11337–11358.
Owens, A.C.S., Meyer-Rochow, V.B., Yang, E.-C., 2018. Short- and mid-wavelength artificial light influences the flash signals of Aquatica ficta fireflies (Coleoptera: Lampyridae). PLoS One 13, e0191576.
Pacheco, Y.M., Martin, G.J., Bybee, S.M., 2016. On the phototactic response of rwandan Diaphanes motschulsky (Coleoptera: lampyridae) to a trap with a 630Nm red light. Coleopt. Bull. 70, 559–561.
Patent 4808, U.S., 1846. Improvement in lanterns for destroying insects. US Patent. 4808.
Paukkunen, J., Pöyry, J., Kuussaari, M., 2018. Species traits explain long-term population trends of Finnish cuckoo wasps (Hymenoptera: chrysididae). Insect Conserv. Divers. 11, 58–71.
Pawson, S.M., Watt, M.S., Brockerhoff, E.G., 2009. Using differential responses to light spectra As a monitoring and control tool for Arhopalus ferus (Coleoptera: cerambycidae) and other exotic wood-boring pests. J. Econ. Entomol. 102. https://doi.org/10.1603/029.102.0112.
Perkin, E.K., Hölker, F., Tockner, K., 2014a. Artificial light as a disturbance to light-naïve streams. Freshwater.
Perkin, E.K., Hölker, F., Tockner, K., 2014b. The effects of artificial lighting on adult aquatic and terrestrial insects. Freshw. Biol.
Phillips, B.B., Gaston, K.J., Bullock, J.M., Osborne, J.L., 2019. Road verges support pollinators in agricultural landscapes, but are diminished by heavy traffic and summer cutting. J. Appl. Ecol. https://doi.org/10.1111/1365-2664.13470.
Pimputkar, S., Speck, J.S., DenBaars, S.P., Nakamura, S., 2009. Prospects for LED lighting. Nat. Photonics 3, 180.
Potocký, P., Bartoňová, A., Beneš, J., Zapletal, M., Konvička, M., 2018. Life-history traits of Central European moths: gradients of variation and their association with rarity and threats. Insect Conserv. Divers. 11, 493–505.
Potts, S.G., Biesmeijer, J.C., Kremen, C., Neumann, P., Schweiger, O., Kunin, W.E., 2010. Global pollinator declines: trends, impacts and drivers. Trends Ecol. Evol. (Amst.) 25, 345–353.
Powney, G.D., Carvell, C., Edwards, M., Morris, R.K.A., Roy, H.E., Woodcock, B.A., Isaac, N.J.B., 2019. Widespread losses of pollinating insects in Britain. Nat. Commun. 10, 1018.
Rafferty, N.E., Ives, A.R., 2012. Pollinator effectiveness varies with experimental shifts in flowering time. Ecology 93, 803–814.
Rankin, M.A.R., 1985. Migration: Mechanisms and Adaptive Significance, Contributions in Marine Science v. 27 suppl. Marine Science Institute, the University of Texas at Austin, Port Aransas, Tex.
Robertson, B.A., Keddy-Hector, I.A., Shrestha, S.D., Silverberg, L.Y., Woolner, C.E., Hetterich, L., Horvath, G., 2018. Susceptibility to ecological traps is similar among closely related taxa but sensitive to spatial isolation. Anim. Behav. 135, 77–84.
Robertson, B., Kriska, G., Horvath, V., Horvath, G., 2010. Glass buildings as bird feeders: urban birds exploit insects trapped by polarized light pollution. Acta Zool. Academ. Sci. Hung. 56, 283–293.
Russart, K.L.G., Nelson, R.J., 2018a. Artificial light at night alters behavior in laboratory and wild animals. J Exp Zool A Ecol Integr Physiol. https://doi.org/10.1002/jez.2173.
Russart, K.L.G., Nelson, R.J., 2018b. Light at night as an environmental endocrine disruptor. Physiol. Behav. 190, 82–89.
Russo, D., Cosentino, F., Festa, F., De Benedetta, F., Pejic, B., Cerretti, P., Ancillotto, L., 2019. Artificial illumination near rivers may alter bat-insect trophic interactions. Environ. Pollut. 252, 1671–1677.
Rydell, J., 2006. Bats and their insect prey at streetlights. In: Rich, C., Longcore, T. (Eds.), Ecological Consequences of Artificial Night Lighting. Island Press, Washington, D.C.
Sánchez-Bayo, F., Wyckhuys, K.A.G., 2019. Worldwide decline of the entomofauna: a review of its drivers. Biol. Conserv. 232, 8–27.
Sanders, D., Gaston, K.J., 2018. How ecological communities respond to artificial light at night. J Exp Zool A Ecol Integr Physiol. https://doi.org/10.1002/jez.2157.
Sanders, D., Kehoe, R., Cruse, D., van Veen, F.J.F., Gaston, K.J., 2018. Low levels of artificial light at night strengthen top-down control in insect food web. Curr. Biol. 28, 2474–2478 e3.
Sanders, D., Kehoe, R., Tiley, K., Bennie, J., Cruse, D., Davies, T.W., Frank van Veen, F.J., Gaston, K.J., 2015. Artificial nighttime light changes aphid-parasitoid population dynamics. Sci. Rep. 5, 15232.
Santos, C.D., Miranda, A.C., Granadeiro, J.P., Lourenço, P.M., Saraiva, S., Palmeirim,

I22-43 cont.

J.M., 2010. Effects of artificial illumination on the nocturnal foraging of waders. Acta Oecol. 36, 166–172.
Saunders, D.S., 2012. Insect photoperiodism: seeing the light. Physiol. Entomol. 37, 207–218.
Saunders, H.S., 1887. Collecting at the electric light, 1886. Can. Entomol. 19, 21–29.
Schenk, M., Krauss, J., Holzschuh, A., 2018. Desynchronizations in bee-plant interactions cause severe fitness losses in solitary bees. J. Anim. Ecol. 87, 139–149.
Schlaepfer, M.A., Runge, M.C., Sherman, P.W., 2002. Ecological and evolutionary traps. Trends Ecol. Evol. 17, 474–480.
Schowalter, T.D., Noriega, J.A., Tscharntke, T., 2018. Insect effects on ecosystem services—introduction. Basic Appl. Ecol. 26, 1–7.
Schultz, C.B., Haddad, N.M., Henry, E.H., Crone, E.E., 2019. Movement and demography of At-Risk butterflies: building blocks for conservation. Annu. Rev. Entomol. 64, 167–184.
Seymoure, B.M., 2018. Enlightening butterfly conservation efforts: the importance of natural lighting for butterfly behavioral ecology and conservation. Insects 9. https://doi.org/10.3390/insects9010022.
Seymoure, B.M., 2016. Heliconius In A New Light: The Effects of Light Environments on Mimetic Coloration, Behavior, and Visual Systems (Ph.D.). Arizona State University.
Seymoure, B.M., Linares, C., White, J., 2019. Connecting spectral radiometry of anthropogenic light sources to the visual ecology of organisms. J. Zool. 329, 465.
Shields, E.J., 1989. Artificial light: experimental problems with insects. Bull. Entomol. Soc. Am. 35, 40–45.
Shi, L., Vasseur, L., Huang, H., Zeng, Z., Hu, G., Liu, X., You, M., 2017. Adult tea green leafhoppers, Empoasca onukii (Matsuda), change behaviors under varying light conditions. PLoS One 12. e0168439.
Shimoda, M., Honda, K.-I., 2013. Insect reactions to light and its applications to pest management. Appl. Entomol. Zool. 48, 413–421.
Shortall, C.R., Moore, A., Smith, E., Hall, M.J., Woiwod, I.P., Harrington, R., 2009. Long-term changes in the abundance of flying insects. Insect Conserv. Divers. 2, 251–260.
Skutelsky, O., 1996. Predation risk and state-dependent foraging in scorpions: effects of moonlight on foraging in the scorpion Buthus occitanus. Anim. Behav. 52, 49–57.
Somanathan, H., Borges, R.M., Warrant, E.J., Kelber, A., 2008. Visual ecology of Indian carpenter bees I: light intensities and flight activity. J. Comp. Physiol. A Neuroethol. Sens. Neural. Behav. Physiol. 194, 97–107.
Somers-Yeates, R., Hodgson, D., McGregor, P.K., Spalding, A., Ffrench-Constant, R.H., 2013. Shedding light on moths: shorter wavelengths attract noctuids more than geometrids. Biol. Lett. 9, 20130376.
Soong, K., Lee, Y.J., Chang, I.H., 2011. Short-lived intertidal midge Pontomyia oceana have semilunar eclosion rhythm entrained by night light. Mar. Ecol. Prog. Ser. 433, 121–130.
Sothibandhu, S., Baker, R., 1979. Celestial orientation by the large yellow underwing moth Noctua pronuba. Animal Behavior 27, 786–800.
Spoelstra, K., van Grunsven, R.H.A., Donners, M., Gienapp, P., Huigens, M.E., Slaterus, R., Berendse, F., Visser, M.E., Veenendaal, E., 2015. Experimental illumination of natural habitat—an experimental set-up to assess the direct and indirect ecological consequences of artificial light of different spectral composition. Philos. Trans. R. Soc. Lond., B, Biol. Sci. 370, 20140129.
Streinzer, M., Roth, N., Paulus, H.F., Spaethe, J., 2019. Color preference and spatial distribution of glaphyrid beetles suggest a key role in the maintenance of the color polymorphism in the peacock anemone (Anemone pavonina, Ranunculaceae) in Northern Greece. J. Comp. Physiol. A Neuroethol. Sens. Neural. Behav. Physiol. https://doi.org/10.1007/s00359-019-01360-2.
Šustek, Z., 1999. Light attraction of carabid beetles and their survival in the city centre. Biologia Bratislava 43, 539–551.
Svensson, A.M., Rydell, J., 1998. Mercury vapour lamps interfere with the bat defence of tympanate moths (Operophtera spp.; Geometridae). Anim. Behav. 55, 223–226.
Szaz, D., Horvath, G., Barta, A., Robertson, B.A., Farkas, A., Egri, A., Tarjanyi, N., Racz, G., Kriska, G., 2015. Lamp-lit bridges as dual light-traps for the night-swarming mayfly, Ephoron virgo: interaction of polarized and unpolarized light pollution. PLoS One 10, e0121194.
Száz, D., Mihályi, D., Farkas, A., Egri, Á., Barta, A., Kriska, G., Robertson, B., Horváth, G., 2016. Polarized light pollution of matte solar panels: anti-reflective photovoltaics reduce polarized light pollution but benefit only some aquatic insects. J. Insect Conserv. 20, 663–675.
Tanaka, S., Hakomori, T., Hasegawa, E., 1993. Effects of daylength and hopper density on reproductive traits in a Japanese population of the migratory locust, Locusta migratoria L. J. Insect Physiol. 39.
Tan, D.-X., Hardeland, R., Manchester, L.C., Paredes, S.D., Korkmaz, A., Sainz, R.M., Mayo, J.C., Fuentes-Broto, L., Reiter, R.J., 2010. The changing biological roles of melatonin during evolution: from an antioxidant to signals of darkness, sexual selection and fitness. Biol. Rev. Camb. Philos. Soc. 85, 607–623.
Thakurdas, P., Sharma, S., Vanlalhriatpuia, K., Sinam, B., Chib, M., Shivagaje, A., Joshi, D., 2009. Light at night alters the parameters of the eclosion rhythm in a tropical fruit fly, Drosophila jambulina. Chronobiol. Int. 26, 1575–1586.
Théry, M., Pincebourde, S., Feer, F., 2008. Dusk light environment optimizes visual perception of conspecifics in a crepuscular horned beetle. Behav. Ecol. 19, 627–634.
Tierney, S.M., Friedrich, M., Humphreys, W.F., Jones, T.M., Warrant, E.J., Wcislo, W.T., 2017. Consequences of evolutionary transitions in changing photic environments. Aust. Entomol. 56, 23–46.
Tsao, J.Y., Saunders, H.D., Creighton, J.R., Coltrin, M.E., Simmons, J.A., 2010. Solid-state lighting: an energy-economics perspective. J. Phys. D Appl. Phys. 43. https://doi.org/10.1088/0022-3727/43/35/354001.
Ugolini, A., Boddi, V., Mercatelli, L., Castellini, C., 2005. Moon orientation in adult and young sandhoppers under artificial light. Proc. Biol. Sci. 272, 2189–2194.
Urbanski, J., Mogi, M., O'Donnell, D., DeCotiis, M., Toma, T., Armbruster, P., 2012. Rapid adaptive evolution of photoperiodic response during invasion and range expansion across a climatic gradient. Am. Nat. 179, 490–500.
Väisänen, R., Hublin, C., 1983. The effect of continuous light trapping on moth populations: a mark-recapture experiment on Hydraecia petasitis (Lepidoptera, Noctuidae). Notulae Entomologicae 63, 187–191.
van Doorn, W.G., Van Meeteren, U., 2003. Flower opening and closure: a review. J. Exp. Bot. 54, 1801–1812.
van Geffen, K.G., Groot, A.T., Van Grunsven, R.H.A., Donners, M., Berendse, F., Veenendaal, E.M., 2015a. Artificial night lighting disrupts sex pheromone in a noctuid moth. Ecol. Entomol. 40, 401–408.
van Geffen, K.G., van Eck, E., de Boer, R.A., van Grunsven, R.H.A., Salis, L., Berendse, F., Veenendaal, E.M., 2015b. Artificial light at night inhibits mating in a Geometrid moth. Insect Conserv. Divers. 8, 282–287.
van Geffen, K.G., van Grunsven, R.H.A., van Ruijven, J., Berendse, F., Veenendaal, E.M., 2014. Artificial light at night causes diapause inhibition and sex-specific life history changes in a moth. Ecol. Evol. 4, 2082–2089.
van Langevelde, F., Braamburg-Annegarn, M., Huigens, M.E., Groendijk, R., Poitevin, O., van Deijk, J.R., Ellis, W.N., van Grunsven, R.H.A., de Vos, R., Vos, R.A., Franzén, M., DeVries, M.F.W., 2018. Declines in moth populations stress the need for conserving dark nights. Glob. Chang. Biol. https://doi.org/10.1111/gcb.14008.
van Langevelde, F., van Grunsven, R.H.A., Veenendaal, E.M., Fijen, T.P.M., 2017. Artificial night lighting inhibits feeding in moths. Biol. Lett. 13. https://doi.org/10.1098/rsbl.2016.0874.
van Strien, A.J., van Swaay, C.A.M., van Strien-van Liempt, W.T.F.H., Poot, M.J.M., WallisDeVries, M.F., 2019. Over a century of data reveal more than 80% decline in butterflies in the Netherlands. Biol. Conserv. 234, 116–122.
van Veen, F.J.F., Morris, R.J., Godfray, H.C.J., 2006. Apparent competition, quantitative food webs, and the structure of phytophagous insect communities. Annu. Rev. Entomol. 51, 187–208.
Villalobos Jiménez, G., de, J., 2017. The Impacts of Urbanisation on the Ecology and Evolution of Dragonflies and Damselflies (Insecta: Odonata) (phd). University of Leeds.
Wagner, D.L., 2019. Global insect decline: Comments on Sánchez-Bayo and Wyckhuys (2019). Biol. Conserv. https://doi.org/10.1016/j.biocon.2019.03.005.
Walker, W.H., Meléndez-Fernández II, O.H., Nelson, R.J., Reiter, R.J., 2019. Global climate change and invariable photoperiods: a mismatch that jeopardizes animal fitness. Ecol. Evol. 310, 456.
Wang, S., Tan, X.L., Michaud, J.P., Zhang, F., Guo, X., 2013. Light intensity and wavelength influence development, reproduction and locomotor activity in the predatory flower bug Orius sauteri (Poppius) (Hemiptera: anthocoridae). Biocontrol 58, 667–674.
Wenninger, E.J., Landolt, P.J., 2011. Apple and sugar feeding in adult codling moths, Cydia pomonella: effects on longevity, fecundity, and egg fertility. J. Insect Sci. 11, 161.
White, P.J.T., 2018. An aerial approach to investigating the relationship between Macromoths and artificial nighttime lights across an urban landscape. J. Agric. Urban Entomol. 1–14.
Willmott, N.J., Henneken, J., Selleck, C.J., Jones, T.M., 2018. Artificial light at night alters life history in a nocturnal orb-web spider. PeerJ 6, e5599.
Wilson, J.F., Baker, D., Cheney, J., Cook, M., Ellis, M., Freestone, R., Gardner, D., Geen, G., Hemming, R., Hodgers, D., Howarth, S., Jupp, A., Lowe, N., Orridge, S., Shaw, M., Smith, B., Turner, A., Young, H., 2018. A role for artificial night-time lighting in long-term changes in populations of 100 widespread macro-moths in UK and Ireland: a citizen-science study. J. Insect Conserv. https://doi.org/10.1007/s10841-018-0052-1.
Winfree, A.T., 1974. Suppressing drosophila circadian rhythm with dim light. Science 183, 970–972.
Wolff, R.J., 1982. Nocturnal activity under artificial lights by the jumping spider Sitticus fasciger. Peckhamia 2, 32.
Yamaoka, K., Hirao, T., 1981. Mechanisms of ovipositional behaviour in Bombyx mori: time-gating and accumulation of the internal factor. Int. J. Invertebr. Reprod. 4, 169–180.
Yoon, T.J., Kim, D.G., Kim, S.Y., Jo, S.I., Bae, Y.J., 2010. Light-attraction flight of the giant water bug, Lethocerus deyrolli (Hemiptera: belostomatidae), an endangered wetland insect in East Asia. Aquat. Insects 32, 195–203.
Yuen, S.W., Bonebrake, T.C., 2017. Artificial night light alters nocturnal prey interception outcomes for morphologically variable spiders. PeerJ 5, e4070.
Zozaya, S.M., Alford, R.A., Schwarzkopf, L., 2015. Invasive house geckos are more willing to use artificial lights than are native geckos: house geckos and artificial lights. Austral Ecol. 40, 982–987.

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MAJOR REVIEW

Is light pollution driving moth population declines? A review of causal mechanisms across the life cycle

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Abstract. 1. The night-time environment is increasingly being lit, often by broad-spectrum lighting, and there is growing evidence that artificial light at night (ALAN) has consequences for ecosystems, potentially contributing to declines in insect populations.

2. Moths are species-rich, sensitive to ALAN, and have undergone declines in Europe, making them the ideal group for investigating the impacts of light pollution on nocturnal insects more broadly. Here, we take a life cycle approach to review the impacts of ALAN on moths, drawing on a range of disciplines including ecology, physiology, and applied entomology.

3. We find evidence of diverse impacts across most life stages and key behaviours. Many studies have examined flight-to-light behaviour in adults and our meta-analysis found that mercury vapour, metal halide, and compact fluorescent bulbs induce this more than LED and sodium lamps. However, we found that ALAN can also disrupt reproduction, larval development, and pupal diapause, with likely negative impacts on individual fitness, and that moths can be indirectly affected via hostplants and predators. These findings indicate that ALAN could also affect day-flying insects through impacts on earlier life stages.

4. Overall, we found strong evidence for effects of artificial light on moth behaviour and physiology, but little rigorous, direct evidence that this scales up to impacts on populations. Crucially, there is a need to determine the potential contribution of ALAN to insect declines, relative to other drivers of change. In the meantime, we recommend precautionary strategies to mitigate possible negative effects of ALAN on insect populations.

Key words. Artificial light at night, insect declines, Lepidoptera, meta-analysis, nocturnal, phototaxis, street lighting.

I22-44

Introduction

Life on Earth has evolved over millions of years under predictable photic cycles, namely the daily light–dark cycle, seasonal variation in day length, and lunar periodicity. These natural cycles have become increasingly disrupted since the beginning of the 20th century by anthropogenic light (Gaston *et al.*, 2017). There is growing evidence that these changes can have profound impacts on biodiversity and associated ecosystem processes (Hölker *et al.*, 2010; Davies & Smyth, 2018; Sanders & Gaston, 2018).

It is estimated that 23% of the world's area experiences light-polluted skies (Falchi *et al.*, 2016), and the global area that is artificially lit grew by 2% per year between 2012 and 2016 (Kyba *et al.*, 2017). Urban green space, domestic gardens, and road verges are expected to be among the most frequently illuminated habitats, though light pollution is also encroaching into less human-influenced areas, including biodiversity hotspots (Guetté *et al.*, 2018; Koen *et al.*, 2018), as well as freshwater and marine systems (Perkin *et al.*, 2011; Davies *et al.*, 2014). Furthermore, rapid shifts are underway in the spectral composition of outdoor lighting (Kyba *et al.*, 2017; Davies & Smyth, 2018). Narrow spectrum lighting, such as sodium lamps (characterised by a warm, yellow-orange light), is being replaced by LEDs, which are more energy efficient but typically emit light over a broader range of wavelengths (producing a cool, white light) (Taguchi, 2008; De Almeida *et al.*, 2014).

Nocturnal and crepuscular species are expected to be most vulnerable to artificial light. More than 60% of invertebrates are estimated to be nocturnal (Hölker *et al.*, 2010), including 75–85% of Lepidoptera (Kawahara *et al.*, 2018). Adult moths

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famously fly towards light (positive phototaxis) and, consequently, this group has been comparatively well studied in the context of light pollution. Furthermore, moths are ecologically and evolutionarily diverse, functionally important across terrestrial ecosystems globally, and have decades of high-quality data on abundance and occurrence in certain parts of Europe. For these reasons, moths are uniquely placed for understanding the population-level impacts of ALAN on nocturnal insects more broadly.

Long-term declines in moth abundance have been reported from some parts of central Europe. In Great Britain, standardised monitoring has revealed that 34% of the 390 commonest macro-moths had statistically significant declines between 1970 and 2016, with a 25% decline in a 442-species abundance indicator over the same period (Randle *et al*., 2019; Hayhow *et al*., 2019) and there is evidence for similar declines in macro-moth abundance from the Netherlands (Groenendijk & Ellis, 2011; Hallmann *et al*., 2020). The causes of these declines are incompletely understood, although climate change (Conrad *et al*., 2002; Martay *et al*., 2017) and habitat degradation are thought to be largely responsible (Fox, 2013; Fox *et al*., 2014). Yet, there is growing concern that light pollution may have a role in moth declines (e.g. van Langevelde *et al*., 2018), and artificial light has been suggested as a driver of insect declines more broadly (Grubisic *et al*., 2018; Owens *et al*., 2020).

Anthropogenic light is known to have wide-ranging effects on moth behaviour and physiology, and recent studies have found correlative evidence linking light pollution to the negative population trends of some European moths (van Langevelde *et al*., 2018; Wilson *et al*., 2018). However, field studies have delivered mixed conclusions on the effects of night-time lighting on moth communities (Spoelstra *et al*., 2015; Plummer *et al*., 2016; Macgregor *et al*., 2017; White, 2018; Péter *et al*., 2020). Thus, there is a clear need to elucidate the mechanisms by which ALAN might be affecting moth populations.

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Here, we substantially build upon previous reviews on the effects of light pollution on moths (Frank, 1988; Macgregor *et al*., 2015) and insects more broadly (Eisenbeis & Hänel, 2009; Owens & Lewis, 2018; Desouhant *et al*., 2019), by adopting a holistic approach to consider the potential mechanisms by which light affects moths throughout their entire life cycle. We define 'mechanisms' as any way that ALAN can affect the physiology, behaviour, or processes of individual moths, and thereby potentially impact on moth populations. Relevant research from outside the context of ecological light pollution is synthesised (e.g. within the pest control literature) with a growing number of newly published studies. We also conduct a network meta-analysis of studies to reveal which lighting technologies are the most effective at eliciting flight-to-light behaviour for both moths and all nocturnal insects. Having considered mechanisms, we then seek to determine the extent to which individual-level responses translate to the population level (including past applications of light for pest control) and so critically assess the quality of evidence linking ALAN with changes in moth assemblages or population trends. Finally, we consider the options for mitigating the disruptive impacts of lighting on moth behaviour and identify knowledge gaps for future research.

Methods

Scientific articles were located using Web of Science and Google Scholar, using an iterative process. Searches were conducted with the following terms: 'Moth' OR 'Lepidoptera' AND 'Light*' OR 'Phot*', followed by supplementary terms including circadian, activity, diel, attraction, phototaxis, behaviour, development, reproduction, diapause, predation, and parasitism. Additional articles were located through searching reference lists (snowballing) and subsequent citations (reverse snowballing). This was repeated until no new relevant articles were found. We deemed a systematic search to be inappropriate for this review given the very broad scope of relevant articles, spanning many disciplines, which we had already located.

In order to answer the specific question of which types of outdoor lighting technology induce the strongest flight-to-light responses for both moths and all nocturnal insects, a fully systematic search was conducted. Data from 14 qualifying studies were entered into two Bayesian network meta-analyses. Details of the search methodology, inclusion criteria, data extraction, and the meta-analysis models are given in the Supporting Information Appendix S1.

The thorough search of the literature produced evidence of direct and indirect impacts of ALAN throughout the moth life cycle, with evidence from fields as diverse as ecology, physiology, cellular biology, and pest management. We consider potential impacts sequentially from the adult stage to the egg (Figure 1), clearly describing the mechanisms and our assessment of the weight of evidence for each impact. We give priority to field or laboratory experimental studies focusing on moths, but also include observations and hypothesised effects (or effects demonstrated in other taxa). Where possible, the intensity and type of light (see Box 1) responsible for a result are reported.

Direct effects of artificial light at night on moths

Adult life stage

Moths are typically only adults for a small proportion of their entire life cycle; however, adults are responsible for reproduction, and in the vast majority of species, also dispersal. Consequently, there is disproportionate potential for ALAN to impact moth populations via mechanisms that affect adults.

Suppression of activity. There is clear evidence that artificial light can suppress the activity of adult moths, even at low levels, potentially preventing them from carrying out important behaviours. The onset of activity in nocturnal moths is often controlled by a drop in ambient light levels and laboratory experiments have found that the critical light level at which moths become active is typically below 1 lux (Persson, 1971; Dreisig, 1980). This means that moths resting in the vicinity of night-time lighting could fail to commence nocturnal activity. Experimentally illuminating oak tree trunks with LEDs at 10 lux strongly reduces the numbers of female *Operophtera brumata* (Linnaeus; Geometridae) caught in funnel traps (relative to

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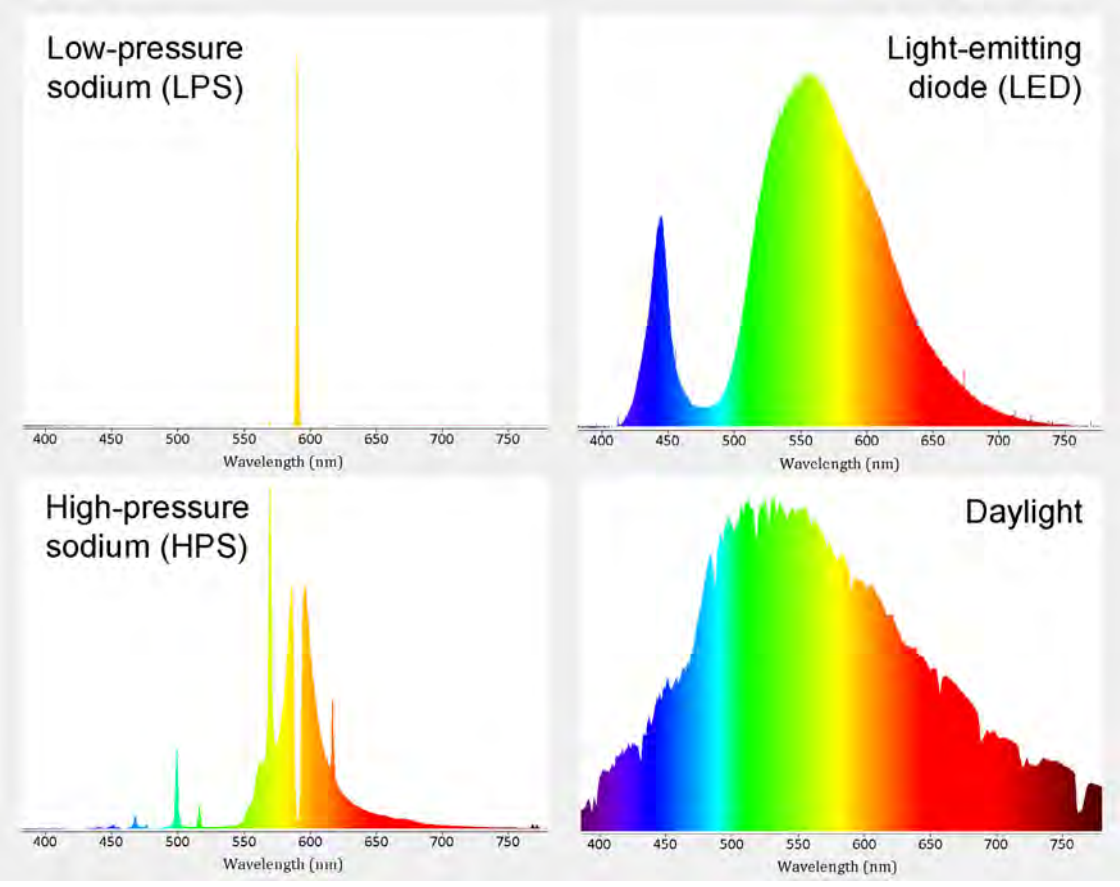
BOX 1. THE INTENSITY AND SPECTRAL PROFILE OF OUTDOOR LIGHTING

The two most biologically significant properties of light are its intensity and its spectral composition. Lux is the SI unit of luminance, which is widely used by urban planners, as well as ecologists, despite it representing the intensity of light as perceived by the human eye. This means that lux not a good metric when examining ecological impacts, because potentially relevant spectral information is omitted (Longcore & Rich, 2004). For instance, two lamps might produce the same value of lux, while emitting this light over different parts of the spectrum. For insects, the spectral composition of night-time lighting may be more biologically significant than its intensity (Longcore *et al.*, 2015). Common outdoor lamp types vary significantly in their spectral output. Low-pressure sodium (LPS) is almost monochromatic (producing only orange light), while high-pressure sodium (HPS) produces light over a wide range of wavelengths (including some blue and green light). Light-emitted diodes can be any colour, but LEDs used for amenity lighting tend to emit light across the visible spectrum to produce white light. Mercury-vapour and metal halide lamps also produce white light, but with a significant amount of ultraviolet light. The former was previously commonly used for street lighting but has been widely phased out in Europe. [Color figure can be viewed at wileyonlinelibrary.com]

Lux	Comparable value	References
103 000	Daylight – sunny day	Rich and Longcore (2013)
1000–10 000	Overcast day	Rich and Longcore (2013)
400–600	Office	Rich and Longcore (2013)
100–300	Home	Rich and Longcore (2013)
10	Lit parking lot	Rich and Longcore (2013)
3.6 (range: 0.1–16, n = 30)	Verges and hedgerow adjacent to street lighting	D. H. Boyes, unpublished data
0.1–0.5	Skyglow	Eisenbeis (2006)
0.1–0.3	Full moon; clear sky	Rich and Longcore (2013)
0.001	No moon; clear sky	Rich and Longcore (2013)

I22-44 cont.



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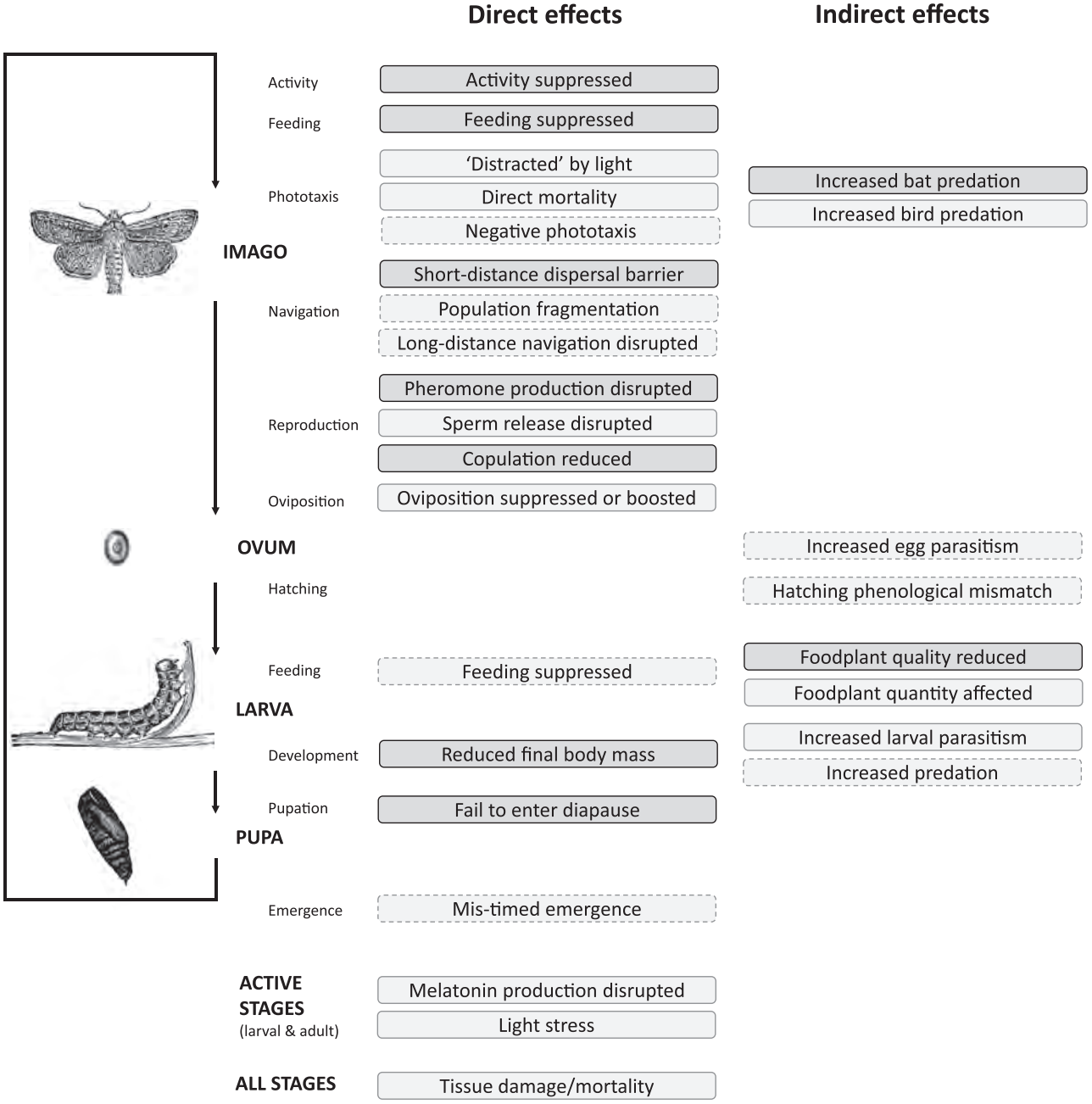

Fig. 1. Evidence for effects from artificial light on moths across the life cycle, as discussed in this review. Shaded boxes show effects with strong evidence, i.e. experimentally demonstrated in moths for at least one species in the field or laboratory, using field-realistic levels of light. Lighter boxes are effects with anecdotal evidence in moths, or effects documented at higher intensities of light, or strong evidence of a comparable effect in another insect taxon. Dashed boxes represent plausible effects but little or no evidence as yet.

controls), suggesting that light inhibits their activity (van Geffen *et al*., 2015a). Moths that fly from darkness into an illuminated area can become inactive, sometimes remaining so for the rest of the night (Frank, 2006). This may be as the exposure to light triggers the day-time response of ceasing activity, possibly mediated through the light-adapted and dark-adapted states of the compound eye in insects (Robinson, 1952; and see Walcott, 1969; Laughlin & Hardie, 1978). It has been proposed that a sudden change in light levels effectively blinds a moth until its eyes have readjusted (Frank, 1988), something that can take over 30 min in some species (Bernhard & Ottoson, 1960).

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There is seemingly no evidence of the opposite phenomenon: diurnal Lepidoptera (day-flying moths or butterflies) becoming active at night in artificially lit environments, although this occupation of the 'night light niche' has been observed in other diurnal taxa, such as jumping spiders (Wolff, 1982; Frank, 2009).

Disruption of adult feeding. Many adult moths feed, typically on nectar from flowers, which increases their longevity and fecundity (Leather, 1984; Leahy & Andow, 1994; Tisdale & Sappington, 2001; Song *et al*., 2007) and there is strong evidence that ALAN can disrupt his behaviour. Night-time feeding in four species of macro-moth was inhibited by artificial light at an intensity of 15 lux (produced by green, white, or red LEDs), compared to unlit controls (van Langevelde *et al*., 2017). Consistent with the authors' expectations, shorter wavelengths of light (bluer) were most effective at suppressing feeding; however, even the red treatment (producing little light below 600 nm) reduced the probability of feeding by more than half. Negative impacts on feeding are irrelevant for the moth species that do not feed as adults (Norris, 1936; Frank, 1988); nevertheless, night-time lighting may have comparable effects on other key behaviours (e.g. reproduction).

Eliciting flight-to-light. Moths famously exhibit positive phototaxis (flight-to-light), though this is also found in many other insect groups. The consequences for an individual that has been attracted to a light range from a brief disruption of routine behaviours (small fitness cost) through to mortality (high fitness cost, especially if the individual had yet to reproduce); however, the costs of this behaviour at the population-level are poorly known.

I22-44 cont.

Several explanations have been put forward to explain positive phototaxis in insects (summarised by Nowinszky, 2003). These include the light-compass theory, whereby lamps are being mistaken for a celestial cue used for orientation (Baker & Sadovy, 1978), and the idea that bright light simply dazzles night-flying insects (Robinson & Robinson, 1950). Upon encountering a light source, a moth can spiral around it, crash into it, settle some distance from it, or simply ignore it; no single theory successfully accounts for this diversity of behaviours (Frank, 2006).

Whilst the reasons for flight-to-light remain unresolved, different lamp types are known to elicit this behaviour to varying degrees. Shorter wavelengths of light, particularly ultraviolet, are the most effective at attracting moths (van Langevelde *et al*., 2011; Barghini & de Medeiros, 2012). Taxonomic families of Lepidoptera do not respond uniformly to light (Merckx & Slade, 2014); for instance, Noctuidae are more strongly attracted to shorter wavelengths than Geometridae (Somers-Yeates *et al*., 2013). Moths can also be sensitive to the polarisation of light (Belušič *et al*., 2017). Polarised light pollution is thought to be particularly harmful to aquatic insects (Horváth *et al*., 2009), though its potential effects on moths remain unexplored.

Many studies have compared the catches resulting from various types of bulbs commonly used for street lighting (Table 1). We included 14 studies in a meta-analysis; these either had data available or the effect sizes could be obtained from the

Table 1. Studies that have compared the number of moths and/or insects attracted to different bulb types commonly used for outdoor lighting. Note that some of these studies have compared additional bulb types not reported here (because these are not widely used for outdoor lighting, e.g. coloured LEDs).

Study	Relevant bulb types compared	Results
Rydell (1992)*	MV; HPS; LPS	MV attracted more insects than HPS. LPS did not attract any insects, compared to unlit controls
Blake *et al*. (1994)*	MV; LPS	Eight times more insects seen around MV lamps than LPS
Eisenbeis (2006), and studies therein*	MV, HPS	MV attracted more insects than HPS
Huemer *et al*. (2010)	MH; HPS; warm and cool LED	All insects: MH > HPS > cool LED > warm LED. Moths: MH > HPS > cool LED = warm LED
Barghini and de Medeiros (2012)	MV; HPS	MV attracted more insects and more moths than HPS.
Somers-Yeates *et al*. (2013)	MH, HPS	In moths, MH was more attractive to Noctuidae than HPS. Geometridae showed no difference
Soneira (2013)	MH; LED	MH caught more insects and moths than LED.
Pawson and Bader (2014)	HPS; LED (of different colour temperatures)	LED caught more insects than HPS. Catches from different LEDs did not differ significantly
van Grunsven *et al*. (2014a)	MV; MH, LPS, LED	MV attracted many more insects than the other lamp types (which each attracted comparable numbers)
Longcore *et al*. (2015)	CFL; LED	CFL caught more insects and moths than LED
Poiani *et al*. (2015)	CFL; LED	CFL caught more insects and moths than LED
Justice and Justice (2016)	CFL; Warm and cool LED	No significant difference for neither all insects nor just moths
Wakefield *et al*. (2016)	CFL; Warm and cool LED	CFL attracted more insects than LEDs. No significant difference between warm and cool LEDs
Pintérné and Pödör (2017)*	MH; HPS	MH caught more moths than HPS
Wakefield *et al*. (2018)	MH, LED, HPS	MH caught five times as many insects than LED or HPS
van Grunsven *et al*. (2019)	MV; LED	MV caught twice as many insects as LED

MV, mercury-vapour; HPS, high-pressure sodium; LPS, low-pressure sodium; MH, metal halide; LED, light-emitting diode; CFL, compact fluorescent lamp. * Asterisks indicate that the study was unable to be included in the quantitative meta-analyses (Figure 2; Supporting Information Appendix S1).

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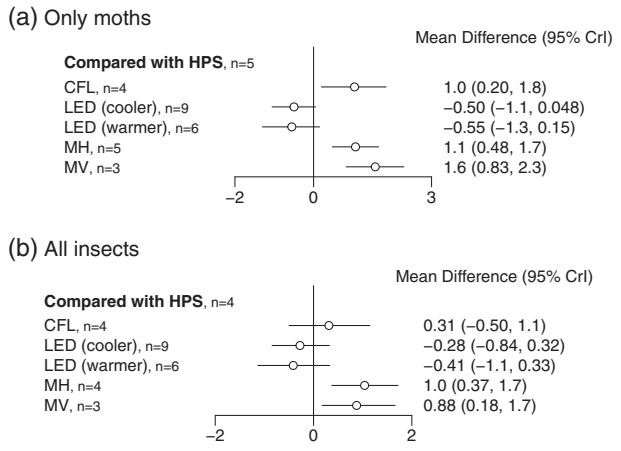

Fig. 2. Forest plots from network meta-analyses on the abundance of (a) Lepidoptera and (b) all insects attracted to different types of lamps commonly used for street lighting, relative to the incumbent technology: high-pressure sodium. Error bars show 95% credible intervals. Note that mean differences are on a $\log_e$ scale, so each unit represents a 2.7-fold change in number. The number of contributing studies is shown for each treatment. LEDs with colour temperatures of 2700 k to 3500 k were grouped as 'warmer', while those of 4000 k to 6500 k were 'cooler'. Abbreviations used in the plots: high-pressure sodium (HPS); compact fluorescent lamp (CFL); light-emitting diode (LED); metal halide (MH); mercury-vapour (MV). The methods are given in the Supporting Information Appendix S1, along with results for each treatment pairwise comparison; Supporting Information Appendix S2 reports the 39 studies found by the systematic search and the rationale for inclusion or exclusion; Supporting Information Appendix S3 lists the treatment estimates from the studies included in the meta-analyses.

I22-44 cont.

publication (Supporting Information Appendix S1). High-pressure sodium (HPS) is the incumbent street light technology across much of Europe so we compared the capture rates of insects of HPS lamps to other bulb types, using capture rate as an indicator of the flight-to-light response. Relative to HPS, LED lamps with cool colour temperatures catch 0.6 times the number of moths on average than HPS (however, the 95% credible intervals (CrI) overlap slightly with no difference; range: -1.05–0.33; Fig. 2a). There was no detectable difference between the attractiveness of LEDs of cooler or warmer colour temperatures (Supporting Information Fig. S2). Metal halide (MH) and mercury-vapour (MV) lamps (both rich in ultraviolet light) attract three and five times more moths, respectively, than HPS.

Averaged across 10 studies that reported order-level data, Lepidoptera only made up 11% of the total insects attracted to light [the third most abundant order after Diptera (48%) and Coleoptera (11%)]. Despite this, moths show comparable responses to the catches of all orders pooled (Fig. 2; Fig. S2), with a strong correlation in the treatment pairwise mean differences between only moths and all insects (Pearson's rho: 0.94, $n = 11$). This indicates that moths are a suitable model group for nocturnal insects more broadly (at least with respect to phototaxis).

These studies have implicitly or explicitly assumed that the number of insects attracted to a certain lighting type is a suitable proxy for the bulb's ecological impact. This may not necessarily be valid. For instance, a certain type of bulb may catch few insects because it is suppressing flight activity, not because insects are insensitive to it. Moreover, the approach fails to consider negative impacts on fundamental life processes (e.g. reproduction) and other life stages (Fig. 1).

Nonetheless, the number of insects drawn to a given lighting type may be a reasonable proxy for its ecological impact provided that a biologically significant portion of the individuals attracted either: (i) suffer direct mortality or (ii) remain effectively trapped, being unable to carry out normal behaviours. Direct mortality can occur due to collision with a hot bulb (although this is presumably only applicable to less energy-efficient lamps), or exhaustion if the moth continually circles the light. Another source of mortality is predation, which can be heightened around street lights (see section on indirect effects). It has been estimated that 33% of insects that are attracted to street lights perish (Eisenbeis, 2006); however, it is not clear how this figure was obtained. It remains unknown what proportion of the moths that are initially attracted to a street light die from collision with the bulb, succumb to exhaustion, are predated, or fly away unharmed.

A commonly discussed concern in the context of flight-to-light behaviour is trap effects (Macgregor *et al*., 2015), or a 'vacuum cleaner' effect (Eisenbeis & Hänel, 2009). These hypothesise that moths are continually drawn in from the surroundings, depleting those populations, with the illuminated area forming a sink habitat. At present, there is little evidence to support this idea, though this could partly reflect the challenges of detecting it. A study in Japan found that the abundance and species richness of moths caught in a light trap does not increase over consecutive nights, suggesting that individuals can escape the lamp's radius of attraction (Hirao *et al*., 2008).

We believe it is useful to distinguish a trap effect from a concentration effect (Figure 3), whereby moths are drawn in from surrounding habitats but are otherwise not negatively impacted. Such outcomes are likely to be context-specific, for instance, a trap effect is more likely if the lit area comprises entirely unsuitable breeding habitat (e.g. car parks, airports, industrial units). An alternative idea is the disruption effect, whereby behaviour is impacted locally, but individuals are not drawn in from surrounding areas.

There are reasons why flight-to-light behaviour might be expected to have a limited impact at the population level. The distance at which moths are drawn to lamps is generally thought to be small (Frank, 1988; Nowinszky, 2004). The effective range of a 125 w mercury-vapour lamp has been estimated at 3–5 m (Baker & Sadovy, 1978), while others have reached a figure an order of magnitude greater (Robinson & Robinson, 1950; Robinson, 1960; Degen *et al*., 2016). A mark-release-recapture study estimated the proportion of individuals recaptured when flying 0–1 m past a 6 w actinic light was only up to 10% for noctuids, 15% for geometrids, and 50% for erebids (Merckx & Slade, 2014), while a similar study using 15 w actinic lamps reported most recaptures occurred at release distances <30 m, and typically <10 m (Truxa & Fiedler, 2012) and another study found that only 25% of moths released 2 m from a 6 w actinic light were recaptured by the trap (van Grunsven *et al*., 2014b).

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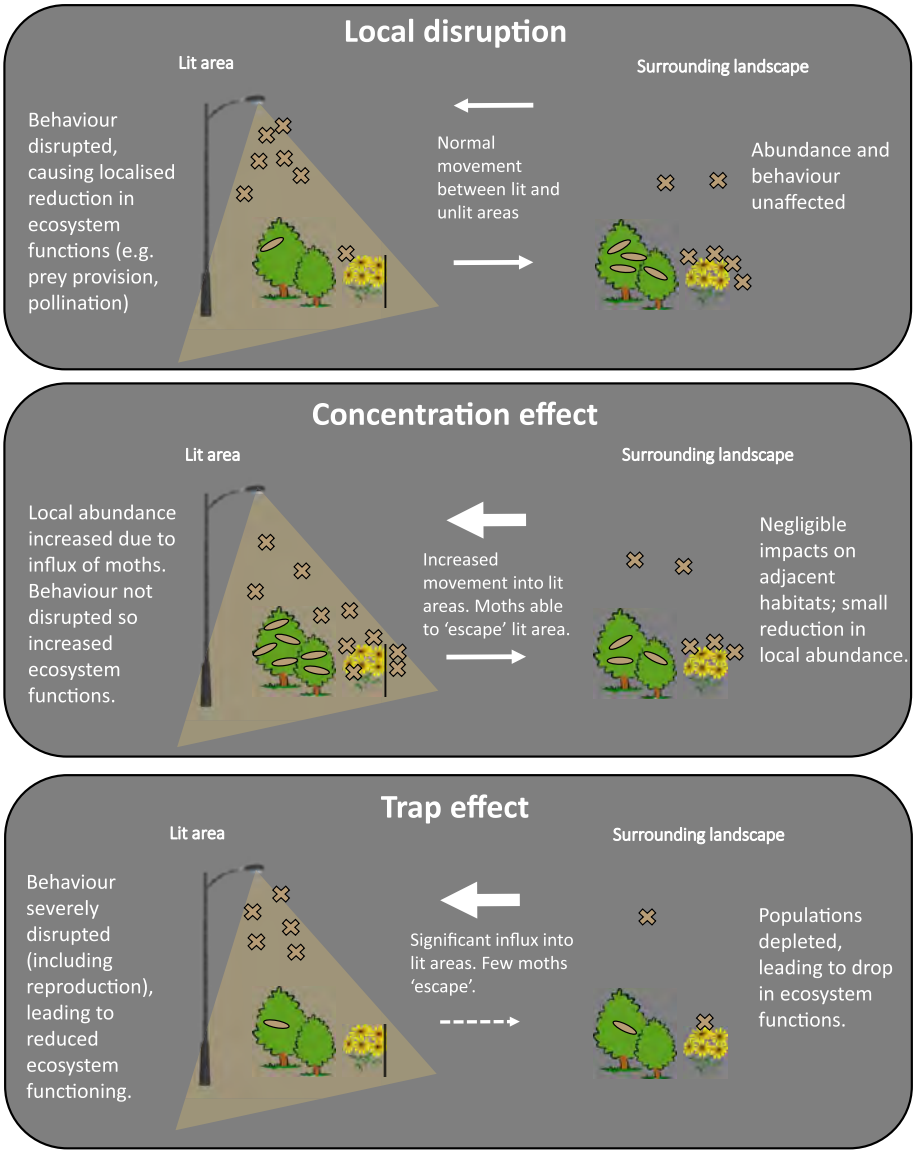

I22-44 cont.

Fig. 3. Three hypothetical impacts of light on moths (adapted from Macgregor *et al*., 2015), in terms of their populations and the ecosystem functions they provide. Crosses represent adult moths and ovals represent larvae.

These studies have investigated the lighting types used in moth traps. The radius of attraction of the lamps most commonly used for outdoor lighting (e.g. HPS, white LEDs) remains largely untested but might be expected to be lower as these emit little or no ultraviolet light. Thus, the idea that moths are routinely lured into urban areas over great distances (Eisenbeis & Hänel, 2009) seems unlikely.

The population-level ramifications of phototaxis by moths may also be limited by the fact that females are less strongly affected. A 4-year study using light traps found that males were more frequently captured for 45/51 species examined, with only 15% of the 9,926 individuals caught being female (Williams, 1939). The actual sex ratios of these moth populations are not known; however, experimental evidence for male-biased flight-to-light behaviour has been reported, with males from two species being 1.6 times more likely to fly to light (Altermatt *et al*., 2009). This is most likely because males are more mobile (thus are more likely to enter the radius of attraction), as opposed to being more strongly attracted to light (Degen *et al*., 2016).

Evidence that flight-to-light behaviour can have negative population-level effects on moths comes from the discovery that individuals of the micro-moth *Yponomeuta cagnagella* (Hübner; Yponomeutidae) from urban areas appear to have evolved to be less attracted to light (Altermatt & Ebert, 2016). Larvae were reared in a common garden setting after being collected in north-western Switzerland and eastern France from five rural areas and five light-polluted sites (albeit all within a single city: Basel).

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Adults from urban sites were 30% less likely to be caught by the light trap (6 w actinic lamp), which was 5.7 m away at the opposing end of a mesh cage. Further evidence to test the generality of this finding would be valuable. Evolution by moths in response to anthropogenic lighting has long been hypothesised (Frank, 1988) and may be expected given artificial light at night can represent a strong selective pressure (Hopkins *et al*., 2018). If an evolutionary change towards reduced phototaxis was widespread among moths, light trap catches would be expected to decrease in light-polluted areas over time. Yet, in the Rothamsted Insect Survey (a UK-wide, long-term systematic monitoring scheme), abundance trends from locations where light pollution had increased from 1992 to 2000 were not more negative than trends at sites that remained dark (Conrad *et al*., 2006).

Negative phototaxis. There is limited evidence that adult moths avoid illuminated areas at night, though this may be due to the challenges of studying the behaviour in insects. Certain vertebrate taxa are known to be repelled by artificial light at night, including some bats (Lewanzik & Voigt, 2017) and some authors consider it likely that certain moths exhibit comparable behaviour (Robinson, 1952). One species of moth, *Amphipyra tragopoginis* (Clerck; Noctuidae), is infrequently seen in light traps, compared to its abundance in suction samples, so is probably is poorly attracted to light (Taylor & Carter, 1961). Given the typical adult behaviour of this species is to scuttle for cover when exposed to light (Waring & Townsend, 2017), it is plausible the species may actively avoid lit areas at night.

I22-44 cont.

Disruption of short and long-distance movements. It has been hypothesised that linear sections of street lighting may disrupt movement in moths, potentially leading to population fragmentation (Frank, 2006). A grid of 12 experimental street lights (4 × 3) fitted with flight interception traps found that the two lamps in the middle caught fewer moths than lights on the edge of the grid, which the authors propose is evidence that street lighting can interrupt short-distance moth dispersal (Degen *et al*., 2016). However, the lamps in the centre may also have been less effective at attracting moths due to elevated background illumination from the surrounding edge lights (Bowden, 1982). Furthermore, the flight intercept traps were lethal, thus, movement is likely to be more significantly restricted than at regular street lights, where a proportion of the moths that were initially attracted would continue past unharmed.

Light pollution has been suggested as a potential issue for moths that use celestial cues to orientate during long-distance dispersal, such as *Noctua pronuba* (Linnaeus; Noctuidae) (Sotthibandhu & Baker, 1979) and *Agrotis exclamationis* (Linnaeus; Noctuidae) (Baker, 1987). These behaviours are only known to occur routinely in a select number of highly abundant moths, and it is questionable whether local populations of these species are dependent on effectively navigated long-distance movements. Celestial cues are not exclusively used for orientation, with some moths using a magnetic compass (Baker & Mather, 1982). Furthermore, migration in Lepidoptera typically occurs at high altitudes (Wood *et al*., 2009) so is unlikely to be affected by direct illumination from artificial lights, although it is plausible that diffuse anthropogenic light pollution ('skyglow') could interfere with this process.

Impacts on reproduction. Reproduction in moths is closely linked to the natural light cycle and there is clear evidence that ALAN (especially at high levels) can impact reproduction through several different mechanisms. The synthesis and release of female sex pheromones in moths are typically timed using the day-night cycle (Groot, 2014). Overnight illumination of 17 lux inhibits pheromone production in female *Mamestra brassicae* (Linnaeus; Noctuidae), with only a third of the amount produced under shorter wavelengths (green LEDs), relative to dark controls (van Geffen *et al*., 2015b). The same lighting treatments also significantly altered the chemical composition of the pheromone blend. This reduction in the quantity and quality of pheromones is hypothesised by the authors to correspond to reduced mating success.

Female pheromone production and 'calling' behaviour (during which the pheromones are released) is inhibited by continuous lighting in cultures of *Dioryctria abietella* (Denis & Schiffermüller; Pyralidae) (Fatzinger, 1973), and a similar effect is observed in *Helicoverpa assulta* (Guenée; Noctuidae) (Kamimura & Tatsuki, 1994). In *Trichoplusia ni* (Hübner; Noctuidae), the release of pheromones is increasingly inhibited by light intensity from 0.3 to 300 lux (Sower *et al*., 1970). Calling in female *Plodia interpunctella* (Hübner; Pyralidae) is not suppressed by constant light, which may be because this is a pest of stored grain that has adapted to survive without natural day-night cycles (Závodská *et al*., 2012; Groot, 2014). Yet, calling in female *Ephestia kuehniella* Zeller (Pyralidae), another stored grain pest, is suppressed by constant light, while the diel rhythm persists in continual darkness: a characteristic of circadian regulation (Závodská *et al*., 2012). Similar circadian rhythms in sex activity have been demonstrated in several other moths from natural habitats (Groot, 2014).

The production of mature sperm in moths is also closely linked to the diel cycle and can be disrupted by ALAN. Under natural day-night cycles, sperm is released rhythmically through the reproductive tract towards the duplex (where it is stored until mating); however, continuous light can disrupt this sequential release of sperm, meaning little reaches the duplex and the males are effectively sterile (Giebultowicz *et al*., 1990; Bębas *et al*., 2001; Seth *et al*., 2002). Male sterility, or significantly depressed fertility, in response to continuous light has been shown in laboratory cultures of moths from the families Noctuidae (Hagan & Brady, 1981; Bębas & Cymborowski, 1999), Pyralidae (Lum & Flaherty, 1970; Riemann & Ruud, 1974; Cymborowski & Giebułtowicz, 1976), and Erebidae (Giebultowicz *et al*., 1990). However, the phenomenon is not universal since *Cydia pomonella* (Linnaeus; Tortricidae) does not appear to show adverse impacts on male reproductive capacity from continuous lighting (Giebultowicz & Brooks, 1998).

Artificial lights may also disrupt moth reproduction by directly reducing the incidence of copulation. Mating is gradually inhibited by light levels above 0.3 lux in *T. ni* under laboratory conditions, although very bright light (>300 lux) is required to completely suppress the behaviour (Shorey, 1966). This process is temperature dependent in *Chilo suppressalis* (Walker; Crambidae); for instance, 5 lux is sufficient to suppress mating

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at 30°C, but 600 lux is required at 15°C (Kanno, 1980). Light may also disrupt copulation by suppressing male flight activity, or cause males to exhibit positive phototaxis, diverting them away from females. Low levels of light (0.1–0.9 lux) cause male *Lymantria dispar* (Linnaeus; Erebidae) to fly less directly towards females (Keena *et al*., 2001).

When oak trunks are illuminated with 10 lux, the proportion of mated *O. brumata* females drops by half under longer wavelengths (red LEDs) and a quarter under shorter wavelengths (green LEDs), relative to dark controls (van Geffen *et al*., 2015a). This reduction may be due to disrupted pheromone production by females, inhibition of mating behaviour, suppression of male flight activity, or males being 'distracted' from females by flying towards light (or a combination thereof). The authors also deployed traps baited with synthetic female pheromone and found a smaller (but statistically significant) drop in males caught under the lighting treatments. This suggests that the male response to female pheromones is disrupted by light, but that the observed drop in mated females is likely to be predominately attributable to disrupted pheromone release or suppressed mating behaviour.

Artificial light might also affect oviposition in moths. Moderate light levels (8–40 lux) produced by an incandescent bulb significantly reduce the number of eggs laid by *P. interpunctella* (Sambaraju & Phillips, 2008). Suppression of oviposition by light has been demonstrated for several other species under laboratory conditions, though this has typically been tested with continuous bright light (>200 lux) (Broodryk, 1971; Henneberry & Leal, 1979; Skopik & Takeda, 1980; Ismail *et al*., 1988). The opposite effect, whereby oviposition is concentrated around artificial lights, has been reported anecdotally (Frank, 1988). For instance, larval infestations of *Helicoverpa armigera* (Hübner; Noctuidae) in cornfields were several times higher in the vicinity of light traps (Martin & Houser, 1941). This is may lead to reduced larval fitness through intensified intra-specific competition.

I22-44 cont.

As ova

We found no evidence that artificial light, at the intensities normally found outdoors, can impact moth fitness during the egg stage. The diel timing of hatching is under circadian control in some moths, although constant light does not seem to prevent hatching (Minis & Pittendrigh, 1968). Furthermore, photoperiod is not an important cue for seasonality in moth ova; hatching is usually controlled by temperature (Du Merle, 1999; Visser & Holleman, 2001). The adult fecundity of three tortricids is affected by the photoperiods experienced by the ova and first instar larvae (Deseo & Saringer, 1975); however, it is not clear whether this effect would also occur at field-realistic levels of artificial light during the night.

Larval stage

Feeding and development. Many moth larvae are nocturnal feeders and we found some evidence that ALAN could affect their physiology and behaviour, although several plausible mechanisms of ALAN on moth larvae remain to be tested.

Negative developmental effects from low levels of ALAN have been demonstrated experimentally in two noctuids larvae. Male *M. brassicae* larvae reared under 7 lux of white and green LEDs at night reached a lower final body mass, relative to dark controls (van Geffen *et al*., 2014). No difference was observed for female larvae, nor males reared under red LEDs. In *Apamea sordens* (Hufnagel; Noctuidae), larvae experiencing dark nights achieved significantly higher body mass after 10 weeks, compared to those reared under HPS lamps (Grenis & Murphy, 2019). Larval survival was not affected in either study; however, the authors hypothesise that the reduction in final larval mass would translate to reduced adult fitness (e.g. reduced fecundity).

Moth larvae of many species feed predominately at night, when fewer predators and parasitoids are active (Porter, 2010). Positive phototaxis has been observed in the larvae of several moth species (De Ruiter & van der Horn, 1957; Buck & Callaghan, 1999), which could theoretically cause caterpillars to be drawn away from their hostplants. Outdoor lighting might also suppress feeding behaviour in nocturnal caterpillars (triggering the normal day-time response of inactivity), with knock-on effects for larval development, though this has yet to be tested.

Diapause and pupation. Diapause is a state of dormancy that enables insects to survive unfavourable conditions (e.g. winter) and we found evidence that lighting can readily disrupt diapause, although the impact on populations remains unknown. Night-time lighting can prevent multivoltine species from entering winter diapause, a process that is typically initiated by shortening day lengths (Adkisson, 1966; Peterson & Hamner, 1968; Bell *et al*., 1975). White and green LEDs at an intensity of 7 lux inhibits *M. brassicae* larvae from entering diapause (van Geffen *et al*., 2014), which instead enter a non-diapausing pupal stage. Fluorescent lamps extending daylength in field plots to 17 h results in 70% of *C. pomonella* and 76% of *Ostrinia nubilalis* (Hübner; Crambidae) failing to enter diapause, compared to 0% of larvae in plots with natural day-night conditions (Hayes *et al*., 1970). The authors state that the larvae that fail to enter diapause would perish over the winter. In a greenhouse study, 60 lux of LED inhibited diapause in the leaf-miner Cameraria ohridella Deschka & Dimić (Gracillariidae), which the author concludes could lead to either increased outbreaks (more generations per year) or local extinction (if pupae that failed to enter diapause died over winter) (Schroer, 2019).

Pupal stage

We could find no documented effects of artificial lighting in the pupal stage, and we conclude that this unlikely to be an important mechanism whereby ALAN affects moths. It is plausible that outdoor lighting could cause mistimed adult emergence in temperate moths that use photoperiod cues to detect seasonality, which could disrupt population synchronicity. It has been suggested that the emergence of adults in some species is

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synchronised with lunar periodicity, perhaps to maximise the chances of finding mates (Nemec, 1971; Nowinszky *et al*., 2010). There is little evidence of this, however, and cyclical dynamics appearing in light trap data are considered an artefact arising from the reduced sampling effectiveness around full moon (Williams *et al*., 1956; Yela & Holyoak, 1997).

Diel emergence synchronicity could be theoretically disrupted by light pollution, as certain species tend to emerge at the same time of day (e.g. Bergh *et al*., 2006; Calatayud *et al*., 2007), provided the emergence cue involved is photic and not thermal. The reasons for this behaviour are unclear but may include promoting population synchronicity between males and females, as well as avoiding predation.

Molecular and physiological effects (on various life stages)

The physiological and molecular-level effects of ALAN on moths are not well known. Melatonin is a highly conserved hormone found in most living organisms, including insects (Hardeland & Poeggeler, 2003; Zhao *et al*., 2019). Its synthesis and release typically happen during darkness and are suppressed during the daytime (Bloch *et al*., 2013). Melatonin is involved in the circadian regulation of adult moths (Linn *et al*., 1995; Lampel *et al*., 2005), and the hormone has been found in moth larvae (Itoh *et al*., 1995) where it is likely to perform a similar role. Melatonin is also a powerful antioxidant, having a protective role within cells (Reiter *et al*., 2017). It is plausible, though untested, that light pollution could suppress melatonin synthesis in moths, leading to oxidative stress and cellular damage. The potential implications of this for moth fitness are unknown but might be limited given their short life cycles.

I22-44 cont.

All insect life stages can be vulnerable to direct exposure to certain wavelengths of light. The negative effects of ultraviolet (UV) light at a cellular level are well known, for instance, its ability to damage DNA molecules (Sinha & Häder, 2002). In addition to its lethal effects on insects (Beard, 1972), UV light can cause changes in the expression of neuropeptides in adult moths (Wang *et al*., 2018). Prolonged irradiance by shorter wavelengths of visible light can cause high mortality in various life stages of a fruit fly, a flour beetle, and a mosquito (Hori *et al*., 2014). However, it is doubtful that many insects experience the requisite intensities from artificial lighting while outdoors.

Indirect effects of artificial light at night on moths

It is becoming increasingly apparent that effects mediated through other taxa must be considered to predict the impacts of global change. Indirect effects can be strong in ecological communities exposed to artificial light (e.g. Bennie *et al*., 2018b; Sanders *et al*., 2018); however, species interactions remain relatively poorly studied in the context of light pollution (Sanders & Gaston, 2018).

Moths may be indirectly affected by night-time lighting via plants; this could occur if artificial light modifies the quantity and quality of plants, or if ALAN creates a phenological mismatch between moths and the plants they are reliant on. Such effects are most likely to act on the larval stage, which is entirely dependent on hostplants in the majority of lepidopterans, though weaker effects might also be observed in species with nectar-reliant adults. Top-down indirect effects can occur through predation and parasitism, as artificial light may locally concentrate prey and effectively extend photoperiods, potentially benefiting otherwise diurnal parasitoids and predators.

Bottom-up effects via hostplants

Night-time lighting can affect plants through a range of physiological and ecological mechanisms, though the topic has received relatively little attention (for reviews, see: Briggs, 2006; Bennie *et al*., 2016; Singhal *et al*., 2019).

Artificial light can modify the quantity of hostplants available for herbivores. For instance, mesocosm experiments have revealed negative bottom-up effects on aphid abundance due to reduced plant biomass and/or flowering under LED lighting (Sanders *et al*., 2015; Bennie *et al*., 2018b). Anthropogenic lighting can also change the quality of hostplants. For instance, carbon/nitrogen ratios in plants can be affected by lighting, with knock-on effects for herbivores (Vänninen *et al*., 2010; Barber & Marquis, 2011; Bennie *et al*., 2018b). Indirect effects on moth larvae due to ALAN altering the biochemistry of foodplants remain untested. However, negative developmental effects from HPS lighting have been found in *A. sordens* caterpillars, which appear to result from the hostplant being physically tougher, so less digestible, under lit conditions (Grenis & Murphy, 2019).

Outdoor lighting can also alter plant phenology, for instance, causing early budburst in deciduous trees (Ffrench-Constant *et al*., 2016). This could result in phenological mismatch if moth ova use non-photic cues (e.g. temperature) and therefore hatch after budburst. By this time, leaves can be too rich in phenols and tannins to be easily digestible by caterpillars (Feeny, 1970). Artificial light can alter the phenology of, or even suppress, flowering in some plants (Whitman *et al*., 1998; Chen *et al*., 2009; Vänninen *et al*., 2010; Bennie *et al*., 2018a). This could potentially impact upon moth larvae that consume flowers and seeds (Pettersson, 1991), as well as creating a mismatch between the phenology of flower-visiting adults and their nectar sources (Petanidou *et al*., 2014; Macgregor *et al*., 2015).

Top-down effects mediated by parasitoids and predators

Parasitoids can exert strong indirect effects on moths, as these typically cause the death of the host (either at the egg, larval or pupal stage). Night lighting may be predicted to affect parasitoid behaviour and populations in various ways. The potential for ALAN to cause elevated rates of parasitism in insects has already been demonstrated. Low levels of LED lighting (0.1–5 lux) in a field experiment doubled the parasitism rate of an aphid, relative to unlit controls (Sanders *et al*., 2018). The authors hypothesise that the wasps predominately search for prey by day; thus, they can exploit the 'night light niche' under artificial light. Parasitoid wasps display positive phototaxis, so local densities could also

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be boosted around outdoor lighting, leading to more parasitism. Conversely, night lighting can suppress parasitism. Bright LED light (10–100 lux) causes decreased parasitism of aphids, possibly because the wasps are drawn up towards lamps (Sanders *et al*., 2018). Continuous night-time lighting might disrupt key demographic processes of the parasitoids themselves (perhaps via similar mechanisms to those described above for moths), causing local densities to decline. Lighting could also disrupt the synchronicity of the phenology of parasitoids and their hosts if photoperiod is used as a cue for emergence. To date, no research has been conducted on how night lighting affects parasitism rates in moths. The existence of hyper-parasitoids makes these indirect effects even more difficult to predict.

Bat predation of adult moths is commonly observed around street lights (Frank, 1988; Rydell, 2006). Some species of bat exploit the high prey densities gathered around lamps (Rydell, 1992; Minnaar *et al*., 2015; Russo *et al*., 2019). Furthermore, moths can fail to perform their usual anti-predation behaviours (e.g. evasive manoeuvres) in lit areas, rendering them even more susceptible to predation (Svensson & Rydell, 1998; Acharya & Fenton, 1999; Wakefield *et al*., 2015). The elevated rates of bat predation around outdoor lighting might deplete local moth populations.

Birds represent important predators of both adults and larvae; however, the effects of light pollution on moth predation by birds have rarely been tested. Songbird activity can be altered by artificial lighting (Titulaer *et al*., 2012; Dominoni *et al*., 2014), potentially resulting in a longer period suitable for foraging in lit areas. As demonstrated by the famous example of *Biston betularia* Linnaeus (Geometridae), adult moths can be highly vulnerable to bird predation if their crypsis is disrupted (Cook *et al*., 2012). Adults attracted to artificial lamps frequently remain in situ and may fail to show cryptic behaviour the following day, where they are readily predated (e.g. Collins & Watson, 1983). If light traps are run frequently in the same location, songbirds seem to learn that these will produce a high density of prey on the surrounding ground and vegetation at dawn (Randle, 2009). Yet, it is unknown whether this type of bird predation occurs when the light is not near the ground, for instance, around street lamps (where there are no proximate surfaces for moths to settle on).

I22-44 cont.

The abundance of predatory invertebrates can be intensified around outdoor lighting (Davies *et al*., 2012; McMunn *et al*., 2019). Certain spiders preferentially construct webs near light sources (Heiling, 1999), while some diurnal species of jumping spider utilise the 'night light niche' by hunting by lamps at night (Frank, 2009). Social wasps (*Vespula* species) have been observed feeding on adult moths attracted to light (Warren, 1990). However, a field experiment has demonstrated that live moth larvae pinned to Styrofoam squares do not suffer higher rates of predation (predominately from ants, wasps, and spiders) under street lights (Grenis *et al*., 2015) and lit spider webs can have lower rates of adult moth capture compared to unlit webs (Yuen & Bonebrake, 2017).

Mixed results from field-based and correlative studies on moth assemblages

Field-based studies, including both experimental and correlative analysis of observation data, are important for determining whether behavioural and physiological changes due to artificial light at the individual-level (often demonstrated in laboratories) translate to population-level effects in the real world. Yet, field studies have generally provided mixed results on the effects of artificial light on moth assemblages.

An experimental study that installed LED street lights along the forest edge at seven sites in the Netherlands, found no effect on adult moth abundance after 1 year (Spoelstra *et al*., 2015). A separate experiment as part of the same project found increased arboreal caterpillar biomass over several years in response to 7.6 lux from green and white LEDs, relative to red LEDs and dark controls (Welbers *et al*., 2017), which the authors suggest resulted from adult moths being attracted to the lit areas. Conversely, in Hungary, caterpillar biomass was not correlated with varying levels of artificial light (predominately HPS lamps) across 36 urban trees (Péter *et al*., 2020).

In a matched-pairs experiment, moth abundance at the ground level was found to be 0.5 times lower under HPS lamps, compared to unlit sites, while at the height of the light, flight activity was 1.7 higher at lit sites (Macgregor *et al*., 2017). Lit sites also had significantly lower species richness than unlit sites. This provides evidence of a local disruption effect (Fig. 3), as opposed to concentration or trap effects, whereby moths would be drawn in from surrounding areas. In contrast, a before-after-control-impact study found that a change from LPS to HPS street lights led to increased species richness (Plummer *et al*., 2016), which the authors attribute to moths being drawn in from surrounding areas. However, this study had limited temporal replication and was spatially pseudoreplicated.

In East Lansing (USA), macro-moth abundance and species richness were not predicted by levels of light pollution across 32 urban sites (White, 2018), though this could be explained by adaptation to ALAN by moths in urban areas. In the United Kingdom, there was no detectable difference in long-term trends of the abundance of macro-moths at sites that had witnessed an increase in light pollution, compared with sites that had remained dark (Conrad *et al*., 2006). Furthermore, if light pollution were the main driver of moth declines, one would expect urban areas to be most affected; however, since the early 1980s, moth biomass in the United Kingdom has declined more steeply at woodland and grassland sites, compared to those in urban areas (Macgregor *et al*., 2019b).

Two correlative studies have hinted at the importance of light pollution for explaining population trends in European macro-moths. In the Netherlands, diurnal moths show more positive trends than nocturnal moths, and moths that are classed as not attracted to light also tend to be faring better (van Langevelde *et al*., 2018). Yet, the groups that showed a significant difference in trends contained only a small number of the 481 species tested (23 classed as diurnal, and 20 grouped as not attracted to light). Furthermore, diurnal moths could be faring better due to factors not related to light pollution (e.g. climatic changes) and determining the extent to which nocturnal moths are attracted to light is not straightforward. This was based on expert assessment in the study and not measured quantitatively. In Great Britain, the abundance ratio of certain species between gardens with low and medium levels of light pollution was correlated with national abundance trends (Wilson *et al*., 2018). Species that are

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relatively less abundant in gardens with higher levels of light pollution tended to have more strongly negative national trends. In the Czech Republic, it has been noted that many endangered Noctuidae are rare or absent from areas with higher light pollution (Tihelka, 2019). Whilst both studies made efforts to disentangle the effects of urbanisation from light pollution, it is not clear whether this was achieved successfully in either case. Isolating the effects of ALAN from its confounding factors must be a priority for researchers (Hopkins *et al*., 2018)

Artificial light and pest moth populations

The purpose of this review is to document the unintentional impacts on moths from ALAN; however, it is interesting to note that in certain circumstances light has been intentionally used to suppress moth populations. The mechanisms and life stages involved are not always clear but may involve suppression of adult activity, or perhaps interference with specific behaviours linked to crop damage (e.g. oviposition). These control efforts have typically employed bright illumination. The impact of lower levels of ALAN (e.g. analogous to ecological light pollution) remains untested but might be expected to be small since direct artificial illumination of crops is not currently a common control strategy for insect pests.

Illuminating crops in fields and orchards has been reported as a method of controlling moth pests. In field experiments, illumination of cotton fields by incandescent lamps (producing 50 lux at crop height) reduced *Heliothis* oviposition by 85% (Nemec, 1969). Illuminating orchards can significantly reduce the damage made by fruit-piercing adult moths (Nomura, 1965; Whitehead & Rust, 1972; Bhumannavar & Viraktamath, 2013) and this can also limit larval damage by *C. pomonella* (Herms, 1929). Whilst such trials have often been effective at reducing crop damage, they have used high intensities of light and the associated energy expenditure typically outweigh any yield benefits (Herms, 1947). The desire to reduce pesticide use and the efficiency of LEDs may make constant illumination of crops a more viable option in the future (Shimoda, 2018).

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Conversely, it has been suggested that outdoor lighting could increase pest outbreaks of *Grapholita molesta* (Busck; Tortricidae), as this species undertakes key reproductive behaviours between 3 and 500 lux (Li *et al*., 2019).

Lethal light traps have been trailed as a method to directly control populations, with mixed success (Herms, 1947; Cantelo, 1974; Kim *et al*., 2019). Unless a high density of traps is deployed over a large area, lethal light trapping might only be expected to have an appreciable impact on the populations of the least mobile species (Cantelo, 1974; Bowden, 1982; Vaisanen & Hublin, 1983).

Cascading effects and disruption of ecosystem function

The potential impacts of ALAN on moth assemblages and populations could cascade to other taxa with which moths closely interact. In moths, the ontogenetic niche change (Nakazawa, 2015), with herbivorous larvae (antagonistic) becoming pollinating adults (mutualistic), might have important consequences for predicting the indirect effects of ALAN on plant community dynamics. A third fundamental position occupied by moths within ecological networks is as prey for predators and parasitoids (see section on indirect effects above). Despite the significant potential for cascading effects from moths due to light pollution, few field studies have investigated these, with most focusing on pollination. The presence of HPS street lights in field margins is linked to lower rates of pollen transport in moths (Macgregor *et al*., 2017). A field experiment using LED lamps found that lighting reduced nocturnal visits, with fewer species, and reduced pollination success, compared to dark controls (Knop *et al*., 2017). This provides field-based evidence that moth feeding behaviour can be disrupted by lighting, which is in congruence with an earlier laboratory result (van Langevelde *et al*., 2017). However, a similar field study found the opposite result: higher seed set under LED lighting (Macgregor *et al*., 2019a), meaning that the impacts of ALAN on flower visitation by moths and the consequent cascading impacts on plant fitness may be context specific.

It has been suggested that larger moths may be more sensitive to light pollution, as they tend to be more strongly attracted to light, likely due to larger eye size (van Langevelde *et al*., 2011) and also perhaps because they are more mobile (and therefore more likely to come into contact with lighting). This could lead to disproportionate impacts on ecosystem functioning if larger moths are particularly important, i.e. correlated effect and response traits (Larsen *et al*., 2005).

Potential for adaptation in response to anthropogenic light

There has been highly consistent periodicity in light levels throughout evolutionary history, meaning there is significant potential for evolutionary change in response to anthropogenic light (Swaddle *et al*., 2015). The short-term changes in pheromone composition and mating behaviour in moths due to artificial light (van Geffen *et al*., 2015a, 2015b) raises the distinct possibility of divergent selection, and potentially speciation, in moths as a direct consequence of artificial light at night (Tierney *et al*., 2017). If outdoor lighting acts as a dispersal barrier, this may cause effective population fragmentation, speeding up rates of evolution (Degen *et al*., 2016).

The discovery that a species of micro-moth appears to have evolved reduced phototaxis in certain urban areas (Altermatt & Ebert, 2016) provides the first evidence that moths have adapted to anthropogenic light. In theory, this result could also mean trend data from light traps in urban areas are unreliable, as population sizes might become detached from light trap catches. Further work should be conducted to determine whether evolutionary adaptation to light has also occurred in moths from other geographical regions, and in other taxonomic families. The rapid shifts in lighting technologies (e.g. switch from narrow to broad-spectrum lamps) could mean that insects that have successfully adapted to one lighting type are not adapted to others.

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Insects in the arctic do not experience large cycles in the intensity of light and daily activity is typically controlled by temperature (Downes, 1965; Danks, 2004). Species of moth that are nocturnal in Denmark are able to persist successfully in Greenland, where they appear to have acclimated to the radically different photic conditions (Dreisig, 1981). The process of acclimation and/or adaptation involved is not clear, nor is it known how rapidly insects can respond to altered photic regimes, but these findings do suggest that some moths that are nocturnal at lower latitudes can survive in the absence of dark nights. There is evidence that other Arctic fauna entrain their circadian rhythm using diel shifts in the spectral composition of light, instead of changing intensity (Krüll *et al*., 1985; Nordtug & Mela, 1988).

Mitigation of the disruptive effects of outdoor lighting

Finding ways to mitigate the ecological impacts of ALAN is an interdisciplinary challenge. Outdoor lighting carries numerous societal benefits, such as preventing traffic collisions (Wanvik, 2009; Yannis *et al*., 2013), reducing crime (Welsh & Farrington, 2008) and increasing perceived public safety, particularly for marginalised groups (Trench *et al*., 1992; Painter, 1996). Conversely, concerns about the impacts of light pollution on astronomy (Riegel, 1973) and human health (Cho *et al*., 2015) mean that reducing light pollution has the potential to deliver a win–win for both biodiversity and people.

A raft of mitigation measures has been advocated for outdoor lighting, many of which are relatively easy to implement, such as turning off or dimming lights for part of the night, and adding shielding to street lights to restrict the area illuminated (Gaston *et al*., 2012; Davies & Smyth, 2018). It is generally thought that broader spectrum lighting (e.g. LEDs) has the potential for greater ecological impacts than narrow-spectrum lighting (e.g. LPS), as the wider range of wavelengths emitted can affect a greater range of taxa and biological processes (Davies *et al*., 2013; Longcore *et al*., 2018). The energy efficiency of LEDs means that it is unlikely that older lamp technologies will be retained, so adjusting the spectral composition of LEDs to reduce the intensity of the most biologically disruptive wavelengths, while still maintaining the benefits to people, could be a more feasible mitigation strategy (Gaston *et al*., 2012). Whilst no difference has been detected in the number of moths attracted to LEDs of varying spectral profiles (Pawson & Bader, 2014; Supporting Information Fig. S2), longer wavelengths (red LEDs) have been shown to partially mitigate the negative impacts on key behaviours in moths to varying degrees (van Geffen *et al*., 2014, 2015a,b).

Understanding which wavelengths of light moths are sensitive to may be crucial for designing successful mitigation strategies. The eyes of nocturnal moths typically have three maxima in their sensitivity; for instance, *Deilephila elpenor* (Linnaeus; Sphingidae), has photoreceptors with peak sensitivities in the ultraviolet (350 nm), violet (440 nm), and green (525 nm) regions (Schwemer & Paulsen, 1973; Schlecht, 1979). These visual sensitivities have been compared to spectral outputs to predict the ecological impacts of different street light technologies (Davies *et al*., 2013; Longcore *et al*., 2018; Seymoure *et al*., 2019). Yet, adult moths also possess extraocular photoreceptors, including in the brain and reproductive organs (Page, 1982; Giebultowicz *et al*., 1989). The perception of photoperiod appears to rely on extraocular receptors in some adult moths (Saunders, 2008). Transplant experiments have revealed that photoreceptors in the brain are responsible for diapause regulation in the larvae of a hawkmoth and silkmoth (Bowen *et al*., 1984; Hasegawa & Shimizu, 1987), and it is thought that red wavelengths of light are most important for the regulation of diapause (Saunders, 2012). Thus, the disruption of certain biological processes (e.g. those related to circadian rhythm) by artificial light will not necessarily correspond to the visual sensitivity of moths and wavelengths of light that moths are visually insensitive to could still be harmful.

Elucidating the mechanisms by which lighting could disturb moth populations is also likely to be important for designing effective mitigation measures. For instance, if negative effects occur from moths incorrectly perceiving longer photoperiods in lit areas, then turning off the lamps part way through the night may be equally harmful, as the perceived photoperiod remains artificially extended. Conversely, if disrupted adult behaviour around lamps is a significant factor, then part-night lighting might be effective in enabling key behaviours to proceed for some of the night. This may be taxon-specific, as different species fly at different times of the night (Williams, 1939), with crepuscular groups (e.g. Hepialidae) potentially receiving little benefit, compared to species that fly later in the night.

Conclusions and future directions

We have detailed the multitude of mechanisms by which artificial lighting could impact moth populations and how it potentially acts on every stage of the life cycle (Fig. 2). However, we conclude from our detailed review that, as yet, there is limited evidence that light pollution is exerting negative effects at the population level. We believe that some studies have prematurely attributed insect declines to ALAN (e.g. Owens *et al*., 2020), although we acknowledge that the lack of direct evidence could reflect the relatively small number of studies that have examined changes to moth assemblages or population trends in the context of ALAN (to date, 11 studies, as discussed above). This paucity of direct evidence could also reflect the challenges in detecting causal effects. We therefore advocate that the precautionary principle is invoked and emphasise the need for further research into this topic. Crucially, there is a need to consider the effects of light pollution in the context of other drivers of change, such as agricultural intensification and climate change (Fox, 2013); does light pollution represent a major threat, or is its contribution effectively negligible when placed in the context of other anthropogenic drivers?

Commonly, studies have taken the number of adult insects attracted to a light source as a proxy for its ecological impact (e.g. Pawson & Bader, 2014; Wakefield *et al*., 2018; van Grunsven *et al*., 2019). Results of our meta-analysis mean that historic trends in street lighting technology might be predicted to have benefitted moths. Mercury-vapour lighting elicits among the

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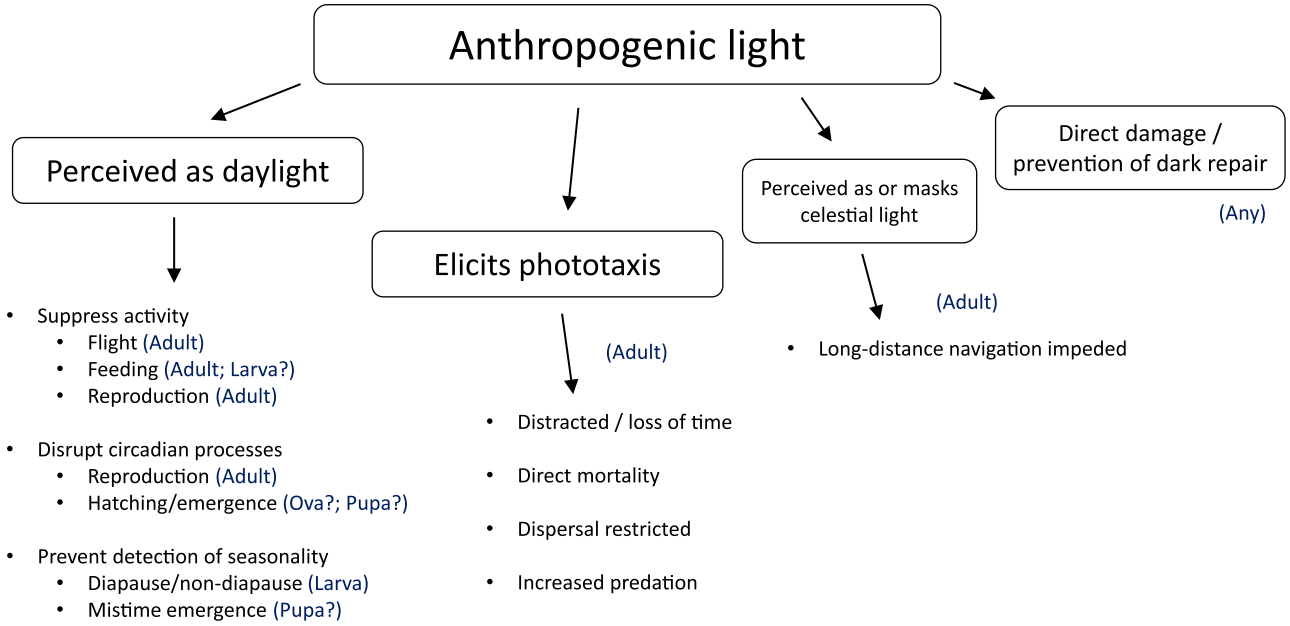

Fig. 4. Potential effects of artificial light on moths, grouped by the mode of mechanism. The life stages that could be affected are indicated.

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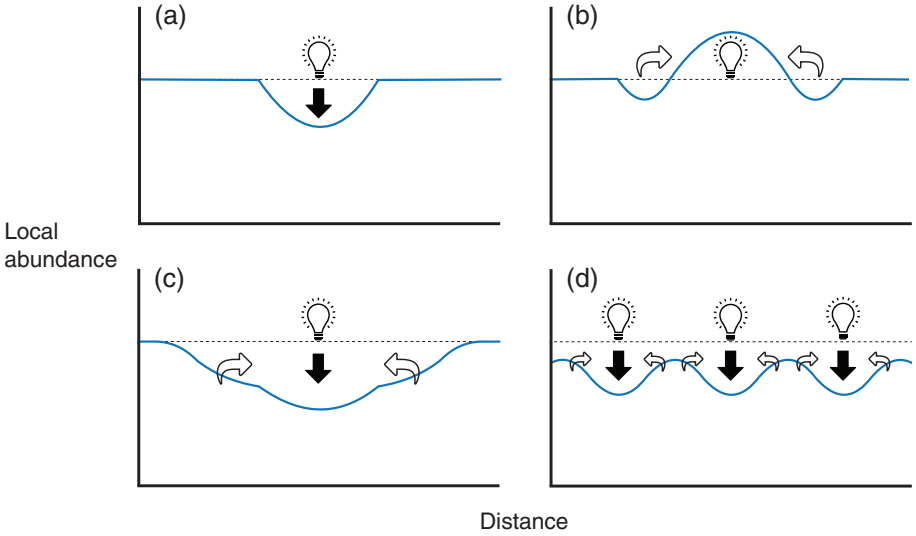

Fig. 5. Hypothesised relationships between local moth abundance and distance from a light source (bulb). Dotted horizontal line show moth abundance in the absence of light. The blue solid line is the hypothesised moth abundance. Filled downward arrows represent local depression of abundance due to light. Hollow sideways arrows show movement due to phototaxis. (a) Abundance suppressed locally due to light (negligible population-level effect). (b) Concentration effect, where abundance boosted around light due to moths being drawn in from surrounding areas, which are consequently slightly depleted (no population-level effect). (c) Strong local depression, combined with moths being drawn from surrounding areas (moderate population-level effect). (d) A large proportion of landscape directly lit, with concentration effects, causing overall population level to be suppressed (high population-level effect).

strongest phototactic response in moths and was commonly used in the United Kingdom during the middle of the 20th century, before being replaced by sodium street lights (McNeill, 1999). Moths are thought to be largely insensitive to low-pressure sodium lamps, so the switch to high-pressure sodium lamps possibly had negative impacts, whilst the ongoing switch from high-pressure sodium to LED lighting is likely to have a minimal, or even positive, effect on moths (in terms of flight-to-light behaviour; Fig. 2). Yet, we are unconvinced that the attractiveness of a light source serves as a suitable proxy for ecological impact, given the many

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Table 2. Outstanding research questions raised by this review.

Direct mechanisms
Over what scales are moths drawn in to (and affected by) lit areas? Do urban areas represent ecological traps for moths?
What are the rates of mortality of moths attracted to street lamps?
Do some moths exhibit negative phototaxis and actively avoid lit areas at night?
Are circadian processes (e.g. sperm release) routinely disrupted by intensities of light typically experienced by moths outdoors at night?
How does outdoor lighting affect oviposition?
Is the activity of nocturnal moth larvae suppressed by anthropogenic light?
Can very low levels of diffuse light pollution ('skyglow') exert negative effects on moths?
Indirect effects
Does light pollution affect rates of parasitism in moths?
Is bird predation, of adults or larvae, elevated in lit areas?
Is larval development in lit areas affected by biochemical changes that occur in foodplants?
Does artificial light engender phenological mismatch between plants and moths (either hostplants and larvae, or flowers and nectar-reliant adults)?
Population-level effects, evolutionary responses, and mitigation
Do behavioural effects and evidence of local disruption, scale up to population-level impacts?
What proportion of moth declines can be attributed to light pollution, relative to other drivers (e.g. climate change, agricultural intensification)?
Does artificial lighting interact with other drivers (e.g. warming due to climate change or urban heat effects)?
Are evolutionary changes in response to ALAN widespread across moth species?
Can policy interventions be effective in delivering win-wins by maintaining benefits to people while minimising disruptive impacts on insects?

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ways that anthropogenic light can affect moths (Figure 1) and caution against making policy recommendations from data that only examine one narrow impact on a single life stage.

It can be valuable to group the effects of ALAN within a mechanistic framework (Gaston *et al*., 2013). For moths, the impacts of ALAN can be broadly categorised into four modes of action: light perceived as daylight, light eliciting phototaxis, light interfering with celestial cues, and light causing direct damage or preventing dark repair (Fig. 4). We consider that the first two modes of action as having the greatest potential for harm to moths.

It is important to consider the scale over which the mechanisms discussed above operate. The proportion of landscapes that are directly lit by anthropogenic lighting is typically relatively small. While diffuse skyglow covers a much greater area, there is currently no evidence that such low levels of artificial light affect moths. If direct illumination does exert strong negative local effects on moths, this could still be negligible at population-level (Fig. 5a), unless: (i) a high proportion of the landscape is directly lit (Fig. 5d); (ii) moths are drawn in from a wide radius, depleting surrounding populations (Fig. 5c; Fig. 3); and/or (iii) a species has limited dispersal.

Whilst moths were the focus of this review, we consider it likely that our findings and conclusions are broadly applicable to most other groups of insects. Importantly, since the majority of the mechanisms discussed above do not involve adult phototaxis (Figs. 1 and 4), then there is the potential for diurnal insects (i.e. those active in the day in their adult stage, such as butterflies) to be negatively impacted by light pollution, for instance, through disruption of the circadian rhythm, or via a nocturnal larval stage.

Priorities for future research

Our review has revealed gaps in our understanding of how artificial light might affect moth populations (Table 2). Despite most moths only living as an adult for a small fraction of their lifespan, relatively few studies have investigated impacts on earlier life stages. Much of the work has been conducted on a small number of moth species (often of commercial importance).

Some of the laboratory studies discussed were not investigating light pollution, thus did not use conditions analogous to outdoor night lighting. For instance, continuous lighting in laboratory cultures typically remains unchanged over 24-hr periods. Yet, even the brightest artificial lighting will not completely mask the diel cycle in this way. As a result, there is a need for more experiments to use photic conditions that may be experienced under street lighting (e.g. van Geffen *et al*., 2015a) to clarify whether the mechanisms involving an entrained circadian rhythm (e.g. sperm release) are affected by low levels of artificial light at night. Low levels of LED lighting can affect two processes controlled by photoperiod in *M. brassicae*: diapause in larvae and pheromone production in adults (van Geffen *et al*., 2014, 2015b); therefore, bright light at night may not be necessary to disrupt processes dependent on circadian rhythm in moths.

The increasing extent and intensity of ALAN mean there is an urgent need for more well-replicated field studies to determine whether the disruptive effects demonstrated in behavioural studies (often with single species), scale up to real-world networks of interacting species under field-realistic levels of lighting. Ultimately, the relative contributions of individual anthropogenic factors, including light pollution, needs to be teased apart from the complex interplay of drivers that are likely to be implicated in the decline of European moths.

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Data availability statement

Data available in article supplementary material

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Supporting information

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Appendix S1: Methods used for network meta-analyses of flight-to-light responses to different light types.

Appendix S2: Studies located for the meta-analyses.

Appendix S3: Treatment estimates used in the meta-analyses.

REFERENCES

Acharya, L. & Fenton, M.B. (1999) Bat attacks and moth defensive behaviour around street lights. *Canadian Journal of Zoology*, **77**, 27–33.

Adkisson, P.L. (1966) Internal clocks and insect diapause. *Science*, **154**, 234–241.

Altermatt, F. & Ebert, D. (2016) Reduced flight-to-light behaviour of moth populations exposed to long-term urban light pollution. *Biology Letters*, **12**, 20160111.

Altermatt, F., Baumeyer, A. & Ebert, D. (2009) Experimental evidence for male biased flight-to-light behavior in two moth species. *Entomologia Experimentalis et Applicata*, **130**, 259–265.

Baker, R.R. & Mather, J.G. (1982) Magnetic compass sense in the large yellow underwing moth, *Noctua pronuba* L. *Animal Behaviour*, **30**, 543–548.

Baker, R.R. & Sadovy, Y. (1978) The distance and nature of the light-trap response of moths. *Nature*, **276**, 818–821.

Baker, R.R. (1987) Integrated use of moon and magnetic compasses by the heart-and-dart moth, *Agrotis exclamationis*. *Animal Behaviour*, **35**, 94–101.

Barber, N.A. & Marquis, R.J. (2011) Light environment and the impacts of foliage quality on herbivorous insect attack and bird predation. *Oecologia*, **166**, 401–409.

Barghini, A. & de Medeiros, B.A. (2012) UV radiation as an attractor for insects. *Leukos*, **9**, 47–56.

Beard, R.L. (1972) Lethal action of UV irradiation on insects. *Journal of Economic Entomology*, **65**, 650–654.

Bębas, P. & Cymborowski, B. (1999) Effect of constant light on male sterility in the cotton leafworm *Spodoptera littoralis*. *Physiological Entomology*, **24**, 165–170.

Bębas, P., Cymborowski, B. & Giebultowicz, J.M. (2001) Circadian rhythm of sperm release in males of the cotton leafworm, *Spodoptera littoralis*: in vivo and in vitro studies. *Journal of Insect Physiology*, **47**, 859–866.

Bell, R.A., Rasul, C.G. & Joachim, F.G. (1975) Photoperiodic induction of the pupal diapause in the tobacco hornworm, *Manduca sexta*. *Journal of Insect Physiology*, **21**, 1471–1480.

Belušič, G., Šporar, K. & Meglič, A. (2017) Extreme polarisation sensitivity in the retina of the corn borer moth *Ostrinia*. *Journal of Experimental Biology*, **220**, 2047–2056.

Bennie, J., Davies, T.W., Cruse, D. & Gaston, K.J. (2016) Ecological effects of artificial light at night on wild plants. *Journal of Ecology*, **104**, 611–620.

Bennie, J., Davies, T.W., Cruse, D., Bell, F. & Gaston, K.J. (2018a) Artificial light at night alters grassland vegetation species composition and phenology. *Journal of Applied Ecology*, **55**, 442–450.

Bennie, J., Davies, T.W., Cruse, D., Inger, R. & Gaston, K.J. (2018b) Artificial light at night causes top-down and bottom-up trophic effects on invertebrate populations. *Journal of Applied Ecology*, **55**, 2698–2706.

Bergh, J.C., Leskey, T.C., Sousa, J.M. & Zhang, A. (2006) Diel periodicity of emergence and premating reproductive behaviors of adult dogwood borer (Lepidoptera: Sesiidae). *Environmental Entomology*, **35**, 435–442.

Bernhard, C.G. & Ottoson, D. (1960) Studies on the relation between the pigment migration and the sensitivity changes during dark adaptation in diurnal and nocturnal Lepidoptera. *The Journal of General Physiology*, **44**, 205–215.

Bhumannavar, B.S. & Viraktamath, C.A. (2013) Biology, ecology and management of fruit piercing moths (Lepidoptera: Noctuidae). *Pest Management in Horticultural Ecosystems*, **18**, 1–18.

Blake, D., Hutson, A.M., Racey, P.A., Rydell, J. & Speakman, J.R. (1994) Use of lamplit roads by foraging bats in southern England. *Journal of Zoology*, **234**, 453–462.

Bloch, G., Hazan, E. & Rafaeli, A. (2013) Circadian rhythms and endocrine functions in adult insects. *Journal of Insect Physiology*, **59**, 56–69.

Bowden, J. (1982) An analysis of factors affecting catches of insects in light-traps. *Bulletin of Entomological Research*, **72**, 535–556.

Bowen, M.F., Bollenbacher, W.E. & Gilbert, L.I. (1984) In vitro studies on the role of the brain and prothoracic glands in the pupal diapause of *Manduca sexta*. *Journal of Experimental Biology*, **108**, 9–24.

Briggs, W.R. (2006) Physiology of plant responses to artificial lighting. *Ecological Consequences of Artificial Night Lighting*(ed. by T. Longcore and C. Rich), pp. 389–411. Island Press, Washington, DC.

Broodryk, S.W. (1971) Ecological investigations on the potato tuber moth, *Pbtborimaea operculella* (Zeller)(Lepidoptera: Gelechiidae). *Phytophylactica*, **3**, 73–84.

Buck, N. & Callaghan, T.V. (1999) The direct and indirect effects of enhanced UV-B on the moth caterpillar *Epirrita autumnata*. *Ecological Bulletins*, **47**, 68–76.

Calatayud, P.-A., Guénégo, H., LeRü, B., Silvain, J.-F. & Frérot, B. (2007) Temporal patterns of emergence, calling behaviour and oviposition period of the maize stem borer, *Busseola fusca* (Fuller) (Lepidoptera: Noctuidae). *Annales de la Société Entomologique de France*, **43**, 63–68.

Cantelo, W.W. (1974) Blacklight traps as control agents: an appraisal. *Bulletin of the ESA*, **20**, 279–282.

Chen, C., Su, Y., Liu, C. & Lee, Y. (2009) Effect of night illumination on growth and yield of soybean. *Journal of Taiwan Agricultural Research*, **58**, 146–154.

Cho, Y., Ryu, S.-H., Lee, B.R., Kim, K.H., Lee, E. & Choi, J. (2015) Effects of artificial light at night on human health: a literature review of observational and experimental studies applied to exposure assessment. *Chronobiology International*, **32**, 1294–1310.

Collins, C.T. & Watson, A. (1983) Field observations of bird predation on neotropical moths. *Biotropica*, **15**, 53–60.

Conrad, K.F., Warren, M.S., Fox, R., Parsons, M.S. & Woiwod, I.P. (2006) Rapid declines of common, widespread British moths provide evidence of an insect biodiversity crisis. *Biological Conservation*, **132**, 279–291.

Conrad, K.F., Woiwod, I.P. & Perry, J.N. (2002) Long-term decline in abundance and distribution of the garden tiger moth (*Arctia caja*) in Great Britain. *Biological Conservation*, **106**, 329–337.

Cook, L.M., Grant, B.S., Saccheri, I.J. & Mallet, J. (2012) Selective bird predation on the peppered moth: the last experiment of Michael Majerus. *Biology Letters*, **8**, 609–612.

Cymborowski, B. & Giebułtowicz, J.M. (1976) Effect of photoperiod on development and fecundity in the flour moth, *Ephestia kuehniella*. *Journal of Insect Physiology*, **22**, 1213–1217.

Danks, H.V. (2004) Seasonal adaptations in arctic insects. *Integrative and Comparative Biology*, **44**, 85–94.

Davies, T.W. & Smyth, T. (2018) Why artificial light at night should be a focus for global change research in the 21st century. *Global Change Bology*, **24**, 872–882.

I22-44 cont.

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Davies, T.W., Bennie, J. & Gaston, K.J. (2012) Street lighting changes the composition of invertebrate communities. *Biology Letters*, **8**, 764–767.

Davies, T.W., Bennie, J., Inger, R., de Ibarra, N.H. & Gaston, K.J. (2013) Artificial light pollution: are shifting spectral signatures changing the balance of species interactions? *Global Change Bology*, **19**, 1417–1423.

Davies, T.W., Duffy, J.P., Bennie, J. & Gaston, K.J. (2014) The nature, extent, and ecological implications of marine light pollution. *Frontiers in Ecology and the Environment*, **12**, 347–355.

De Almeida, A., Santos, B., Paolo, B. & Quicheron, M. (2014) Solid state lighting review—Potential and challenges in Europe. *Renewable and Sustainable Energy Reviews*, **34**, 30–48.

De Ruiter, L. & van der Horn, I.J. (1957) Changes in phototaxis during the larval life of the eyed hawk moth. *Nature*, **179**, 1027.

Degen, T., Mitesser, O., Perkin, E.K., Weiß, N.-S., Oehlert, M., Mattig, E. & Hölker, F. (2016) Street lighting: sex-independent impacts on moth movement. *Journal of Animal Ecology*, **85**, 1352–1360.

Deseo, K.V. & Saringer, G.Y. (1975) Photoperiodic effect on fecundity of *Laspeyresia pomonella*, *Grapholitha funebrana* and *G. molesta*: the sensitive period. *Entomologia Experimentalis et Applicata*, **18**, 187–193.

Desouhant, E., Gomes, E., Mondy, N. & Amat, I. (2019) Mechanistic, ecological, and evolutionary consequences of artificial light at night for insects: review and prospective. *Entomologia Experimentalis et Applicata*, **167**, 37–58.

Dominoni, D.M., Carmona-Wagner, E.O., Hofmann, M., Kranstauber, B. & Partecke, J. (2014) Individual-based measurements of light intensity provide new insights into the effects of artificial light at night on daily rhythms of urban-dwelling songbirds. *Journal of Animal Ecology*, **83**, 681–692.

Downes, J.A. (1965) Adaptations of insects in the Arctic. *Annual Review of Entomology*, **10**, 257–274.

Dreisig, H. (1980) The importance of illumination level in the daily onset of flight activity in nocturnal moths. *Physiological Entomology*, **5**, 327–342.

Dreisig, H. (1981) Daily flight activity of moths in the continuous daylight of the arctic summer. *Ecography*, **4**, 36–42.

Du Merle, P. (1999) Egg development and diapause: ecophysiological and genetic basis of phenological polymorphism and adaptation to varied hosts in the green oak tortrix, *Tortrix viridana* L.(Lepidoptera: Tortricidae). *Journal of Insect Physiology*, **45**, 599–611.

Eisenbeis, G. & Hänel, A. (2009) Light pollution and the impact of artificial night lighting on insects. *Ecology of Cities and Towns*(ed. by M. McDonnell, A. Hahs and J. Breuste), pp. p. 243–263. Cambridge University Press, Cambridge, UK.

Eisenbeis, G. (2006) Artificial night lighting and insects: attraction of insects to streetlamps in a rural setting in Germany. *Ecological Consequences of Artificial Night Lighting*(ed. by C. Rich and T. Longcore), pp. p. 191–198. Island Press, Washington, DC.

Falchi, F., Cinzano, P., Duriscoe, D., Kyba, C.C.M., Elvidge, C.D., Baugh, K., Portnov, B.A., Rybnikova, N.A. & Furgoni, R. (2016) The new world atlas of artificial night sky brightness. *Science Advances*, **2**, e1600377.

Fatzinger, C.W. (1973) Circadian rhythmicity of sex pheromone release by *Dioryctria abietella* (Lepidoptera: Pyralidae (Phycitinae)) and the effect of a diel light cycle on its precopulatory behavior. *Annals of the Entomological Society of America*, **66**, 1147–1153.

Feeny, P. (1970) Seasonal changes in oak leaf tannins and nutrients as a cause of spring feeding by winter moth caterpillars. *Ecology*, **51**, 565–581.

Ffrench-Constant, R.H., Somers-Yeates, R., Bennie, J., Economou, T., Hodgson, D., Spalding, A. & McGregor, P.K. (2016) Light pollution is associated with earlier tree budburst across the United Kingdom. *Proceedings of the Royal Society B: Biological Sciences*, **283**, 20160813.

Fox, R. (2013) The decline of moths in Great Britain: a review of possible causes. *Insect Conservation and Diversity*, **6**, 5–19.

Fox, R., Oliver, T.H., Harrower, C., Parsons, M.S., Tho10mas, C.D. & Roy, D.B. (2014) Long-term changes to the frequency of occurrence of British moths are consistent with opposing and synergistic effects of climate and land-use changes. *Journal of Applied Ecology*, **51**, 949–957.

Frank, K.D. (1988) Impact of outdoor lighting on moths: an assessment. *Journal of the Lepidopterists' Society (USA)*, **42**, 63–93.

Frank, K.D. (2006) Effects of artificial night lighting on moths. *Ecological Consequences of Artificial Night Lighting*(ed. by C. Rich and T. Longcore), pp. p. 305–344. Island Press, Washington, DC.

Frank, K.D. (2009) Exploitation of artificial light at night by a diurnal jumping spider. *Peckhamia*, **78**, 1–3.

Gaston, K.J., Bennie, J., Davies, T.W. & Hopkins, J. (2013) The ecological impacts of nighttime light pollution: a mechanistic appraisal. *Biological Reviews*, **88**, 912–927.

Gaston, K.J., Davies, T.W., Bennie, J. & Hopkins, J. (2012) Reducing the ecological consequences of night-time light pollution: options and developments. *Journal of Applied Ecology*, **49**, 1256–1266.

Gaston, K.J., Davies, T.W., Nedelec, S.L. & Holt, L.A. (2017) Impacts of artificial light at night on biological timings. *Annual Review of Ecology, Evolution, and Systematics*, **48**, 49–68.

Giebultowicz, J.M. & Brooks, N.L. (1998) The circadian rhythm of sperm release in the codling moth, *Cydia pomonella*. *Entomologia Experimentalis et Applicata*, **88**, 229–234.

Giebultowicz, J.M., Ridgway, R.L. & Imberski, R.B. (1990) Physiological basis for sterilizing effects of constant light in *Lymantria dispar*. *Physiological Entomology*, **15**, 149–156.

Giebultowicz, J.M., Riemann, J.G., Raina, A.K. & Ridgway, R.L. (1989) Circadian system controlling release of sperm in the insect testes. *Science*, **245**, 1098–1100.

Grenis, K. & Murphy, S.M. (2019) Direct and indirect effects of light pollution on the performance of an herbivorous insect. *Insect Science*, **26**, 770–776.

Grenis, K., Tjossem, B. & Murphy, S.M. (2015) Predation of larval Lepidoptera in habitat fragments varies spatially and temporally but is not affected by light pollution. *Journal of Insect Conservation*, **19**, 559–566.

Groenendijk, D. & Ellis, W.N. (2011) The state of the Dutch larger moth fauna. *Journal of Insect Conservation*, **15**, 95–101.

Groot, A.T. (2014) Circadian rhythms of sexual activities in moths: a review. *Frontiers in Ecology and Evolution*, **2**, 43.

Grubisic, M., van Grunsven, R.H.A., Kyba, C.C.M., Manfrin, A. & Hölker, F. (2018) Insect declines and agroecosystems: does light pollution matter? *Annals of Applied Biology*, **173**, 180–189.

Guetté, A., Godet, L., Juigner, M. & Robin, M. (2018) Worldwide increase in artificial light at night around protected areas and within biodiversity hotspots. *Biological Conservation*, **223**, 97–103.

Hagan, D.V. & Brady, U.E. (1981) Effects of male photoperiod on calling, pheromone levels, and oviposition of mated female *Trichoplusia ni*. *Annals of the Entomological Society of America*, **74**, 286–288.

Hallmann, C.A., Zeegers, T., van Klink, R., Vermeulen, R., van Wielink, P., Spijkers, H., van Deijk, J., van Steenis, W. & Jongejans, E. (2020) Declining abundance of beetles, moths and caddisflies in the Netherlands. *Insect Conservation and Diversity*, **13**, 127–139.

Hardeland, R. & Poeggeler, B. (2003) Non-vertebrate melatonin. *Journal of Pineal Research*, **34**, 233–241.

Hasegawa, K. & Shimizu, I. (1987) In vivo and in vitro photoperiodic induction of diapause using isolated brain-suboesophageal ganglion

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© 2020 The Authors. *Insect Conservation and Diversity* published by John Wiley & Sons Ltd on behalf of Royal Entomological Society., *Insect Conservation and Diversity,* doi: 10.1111/icad.12447

complexes of the silkworm, *Bombyx mori*. *Journal of Insect Physiology*, **33**, 959–966.

Hayes, D.K., Sullivan, W.N., Oliver, M.Z. & Schechter, M.S. (1970) Photoperiod manipulation of insect diapause: a method of pest control? *Science*, **169**, 382–383.

Hayhow D.B., Eaton M.A., Stanbury A.J., Burns F., Kirby W.B., Bailey N., Beckmann B., Bedford J., Boersch-Supan P.H., Coomber F., Dennis E.B., Dolman S.J., Dunn E., Hall J., Harrower C., Hatfield J. H., Hawley J, Haysom K., Hughes J., Johns D.G., Mathews F., McQuatters-Gollop A., Noble D.G., Outhwaite C.L., Pearce-Higgins J.W., Pescott O.L., Powney G.D., & Symes N. (2019) The State of Nature 2019. The State of Nature partnership.

Heiling, A.M. (1999) Why do nocturnal orb-web spiders (Araneidae) search for light? *Behavioral Ecology and Sociobiology*, **46**, 43–49.

Henneberry, T.J. & Leal, M.P. (1979) Pink bollworm: effects of temperature, photoperiod and light intensity, moth age, and mating frequency on oviposition and egg viability. *Journal of Economic Entomology*, **72**, 489–492.

Herms, W. (1947) Some problems in the use of artificial light in crop protection. *Hilgardia*, **17**, 359–375.

Herms, W.B. (1929) A field test of the effect of artificial light on the behavior of the codling moth *Carpocapsa pomonella* Linn. *Journal of Economic Entomology*, **22**, 78–88.

Hirao, T., Murakami, M. & Kashizaki, A. (2008) Effects of mobility on daily attraction to light traps: comparison between lepidopteran and coleopteran communities. *Insect Conservation and Diversity*, **1**, 32–39.

Hölker, F., Wolter, C., Perkin, E.K. & Tockner, K. (2010) Light pollution as a biodiversity threat. *Trends in Ecology & Evolution*, **25**, 681–682.

Hopkins, G.R., Gaston, K.J., Visser, M.E., Elgar, M.A. & Jones, T.M. (2018) Artificial light at night as a driver of evolution across urban--rural landscapes. *Frontiers in Ecology and the Environment*, **16**, 472–479.

Hori, M., Shibuya, K., Sato, M. & Saito, Y. (2014) Lethal effects of short-wavelength visible light on insects. *Scientific Reports*, **4**, 7383.

I22-44 cont.

Horváth, G., Kriska, G., Malik, P. & Robertson, B. (2009) Polarized light pollution: a new kind of ecological photopollution. *Frontiers in Ecology and the Environment*, **7**, 317–325.

Huemer, P., Kühtreiber, H., & Tarmann, G.M. (2010) *Anlockwirkung moderner Leuchtmittel auf nachtaktive Insekten – Ergebnisse einer Feldstudie in Tirol (Österreich).*

Ismail, I.I., El-Nahal, A.K.M., Kamel, A.H. & Mostafa, T.S. (1988) Effect of light on the development of the angoumois grain moth, *Sitotroga cerealella* Olivier (Lepidoptera: Gelechiidae). *International Journal of Tropical Insect Science*, **9**, 27–29.

Itoh, M.T., Hattori, A., Nomura, T., Sumi, Y. & Suzuki, T. (1995) Melatonin and arylalkylamine N-acetyltransferase activity in the silkworm, *Bombyx mori*. *Molecular and Cellular Endocrinology*, **115**, 59–64.

Justice, M.J. & Justice, T.C. (2016) Attraction of insects to incandescent, compact fluorescent, halogen, and LED lamps in a light trap: implications for light pollution and urban ecologies. *Entomological News*, **125**, 315–327.

Kamimura, M. & Tatsuki, S. (1994) Effects of photoperiodic changes on calling behavior and pheromone production in the oriental tobacco budworm moth, *Helicoverpa assulta* (Lepidoptera: Noctuidae). *Journal of Insect Physiology*, **40**, 731–734.

Kanno, H. (1980) Mating behavior of the rice stem borer moth, *Chilo suppressalis* Walker (Lepidoptera: Pyralidae): IV. Threshold-light-intensity for mating initiation under various temperatures. *Applied Entomology and Zoology*, **15**, 372–377.

Kawahara, A.Y., Plotkin, D., Hamilton, C.A., Gough, H., St Laurent, R., Owens, H.L., Homziak, N.T. & Barber, J.R. (2018) Diel behavior in moths and butterflies: a synthesis of data illuminates the evolution of temporal activity. *Organisms Diversity & Evolution*, **18**, 13–27.

Keena, M.A., Wallner, W.E., Grinberg, P.S. & Cardé, R.T. (2001) Female flight propensity and capability in *Lymantria dispar* (Lepidoptera: Lymantriidae) from Russia, North America, and their reciprocal F1 hybrids. *Environmental Entomology*, **30**, 380–387.

Kim, K.-N., Huang, Q.-Y. & Lei, C.-L. (2019) Advances in insect phototaxis and application to pest management: a review. *Pest Management Science*, **75**, 3135–3143.

Knop, E., Zoller, L., Ryser, R., Gerpe, C., Hörler, M. & Fontaine, C. (2017) Artificial light at night as a new threat to pollination. *Nature*, **548**, 206–209.

Koen, E.L., Minnaar, C., Roever, C.L. & Boyles, J.G. (2018) Emerging threat of the 21st century lightscape to global biodiversity. *Global Change Biology*, **24**, 2315–2324.

Krüll, F., Demmelmeyer, H. & Remmert, H. (1985) On the circadian rhythm of animals in high polar latitudes. *Naturwissenschaften*, **72**, 197–203.

Kyba, C.C.M., Kuester, T., De Miguel, A.S., Baugh, K., Jechow, A., Hölker, F., Bennie, J., Elvidge, C.D., Gaston, K.J. & Guanter, L. (2017) Artificially lit surface of Earth at night increasing in radiance and extent. *Science Advances*, **3**, e1701528.

Lampel, J., Briscoe, A.D. & Wasserthal, L.T. (2005) Expression of UV-, blue-, long-wavelength-sensitive opsins and melatonin in extraretinal photoreceptors of the optic lobes of hawkmoths. *Cell and Tssue Research*, **321**, 443–458.

Larsen, T.H., Williams, N.M. & Kremen, C. (2005) Extinction order and altered community structure rapidly disrupt ecosystem functioning. *Ecology Letters*, **8**, 538–547.

Laughlin, S.B. & Hardie, R.C. (1978) Common strategies for light adaptation in the peripheral visual systems of fly and dragonfly. *Journal of Comparative Physiology*, **128**, 319–340.

Leahy, T.C. & Andow, D.A. (1994) Egg weight, fecundity, and longevity are increased by adult feeding in *Ostrinia nubilalis* (Lepidoptera: Pyralidae). *Annals of the Entomological Society of America*, **87**, 342–349.

Leather, S.R. (1984) The effect of adult feeding on the fecundity, weight loss and survival of the pine beauty moth, *Panolis flammea* (D&S). *Oecologia*, **65**, 70–74.

Lewanzik, D. & Voigt, C.C. (2017) Transition from conventional to light-emitting diode street lighting changes activity of urban bats. *Journal of Applied Ecology*, **54**, 264–271.

Li, X., Jia, X., Xiang, H., Diao, H., Yan, Y., Wang, Y. & Ma, R. (2019) The effect of photoperiods and light intensity on mating behavior and reproduction of *Grapholita molesta* (Lepidoptera: Tortricidae). *Environmental Entomology*, **48**, 1035–1041.

Linn, C.E., Poole, K.R., Roelofs, W.L. & Wu, W.-Q. (1995) Circadian changes in melatonin in the nervous system and hemolymph of the cabbage looper moth, *Trichoplusia ni*. *Journal of Comparative Physiology A*, **176**, 761–771.

Longcore, T. & Rich, C. (2004) Ecological light pollution. *Frontiers in Ecology and the Environment*, **2**, 191–198.

Longcore, T., Aldern, H.L., Eggers, J.F., Flores, S., Franco, L., Hirshfield-Yamanishi, E., Petrinec, L.N., Yan, W.A. & Barroso, A.M. (2015) Tuning the white light spectrum of light emitting diode lamps to reduce attraction of nocturnal arthropods. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **370**, 20140125.

Longcore, T., Rodríguez, A., Witherington, B., Penniman, J.F., Herf, L. & Herf, M. (2018) Rapid assessment of lamp spectrum to quantify ecological effects of light at night. *Journal of Experimental Zoology Part A: Ecological and Integrative Physiology*, **329**, 511–521.

Lum, P.T.M. & Flaherty, B.R. (1970) Effect of continuous light on the potency of *Plodia interpunctella* males (Lepidoptera: Phycitidae). *Annals of the Entomological Society of America*, **63**, 1470–1471.

© 2020 The Authors. *Insect Conservation and Diversity* published by John Wiley & Sons Ltd on behalf of Royal Entomological Society.,

Macgregor, C.J., Evans, D.M., Fox, R. & Pocock, M.J.O. (2017) The dark side of street lighting: impacts on moths and evidence for the disruption of nocturnal pollen transport. *Global Ghange Biology*, **23**, 697–707.
Macgregor, C.J., Pocock, M.J.O., Fox, R. & Evans, D.M. (2015) Pollination by nocturnal Lepidoptera, and the effects of light pollution: a review. *Ecological Entomology*, **40**, 187–198.
Macgregor, C.J., Pocock, M.J.O., Fox, R. & Evans, D.M. (2019a) Effects of street lighting technologies on the success and quality of pollination in a nocturnally pollinated plant. *Ecosphere*, **10**, e02550.
Macgregor, C.J., Williams, J.H., Bell, J.R. & Thomas, C.D. (2019b) Moth biomass increases and decreases over 50 years in Britain. *Nature Ecology & Evolution*, **3**, 1–5.
Martay, B., Brewer, M.J., Elston, D.A., Bell, J.R., Harrington, R., Brereton, T.M., Barlow, K.E., Botham, M.S. & Pearce-Higgins, J. W. (2017) Impacts of climate change on national biodiversity population trends. *Ecography*, **40**, 1139–1151.
Martin, C.H. & Houser, J.S. (1941) Numbers of *Heliothis armigera* (Hbn.) and two other moths captured at light traps. *Journal of Economic Entomology*, **34**, 555–559.
McMunn, M.S., Yang, L.H., Ansalmo, A., Bucknam, K., Claret, M., Clay, C., Cox, K., Dungey, D.R., Jones, A., Kim, A.Y., Kubacki, R., Le, R., Martinez, D., Reynolds, B., Schroder, J. & Wood, E. (2019) Artificial light increases local predator abundance, predation rates, and herbivory. *Environmental Entomology*, **48**, 1331–1339.
McNeill, G. (1999) Street lighting: a developmental and economic history since 1924. *Lighting Journal*, **64**, 37–43.
Merckx, T. & Slade, E.M. (2014) Macro-moth families differ in their attraction to light: implications for light-trap monitoring programmes. *Insect Conservation and Diversity*, **7**, 453–461.
Minis, D.H. & Pittendrigh, C.S. (1968) Circadian oscillation controlling hatching: its ontogeny during embryogenesis of a moth. *Science*, **159**, 534–536.
Minnaar, C., Boyles, J.G., Minnaar, I.A., Sole, C.L. & McKechnie, A.E. (2015) Stacking the odds: light pollution may shift the balance in an ancient predator--prey arms race. *Journal of Applied Ecology*, **52**, 522–531.
Nakazawa, T. (2015) Ontogenetic niche shifts matter in community ecology: a review and future perspectives. *Population Ecology*, **57**, 347–354.
Nemec, S.J. (1969) Use of artificial lighting to reduce *Heliothis* spp. populations in cotton fields. *Journal of Economic Entomology*, **62**, 1138–1140.
Nemec, S.J. (1971) Effects of lunar phases on light-trap collections and populations of bollworm moths. *Journal of Economic Entomology*, **64**, 860–864.
Nomura, K. (1965) Studies on orchard illumination against fruit-piercing moths. I. Analysis of illumination effects, and influence of light elements on moths' activities. *Journal of Applied Entomology*, **9**, 179–186.
Nordtug, T. & Mela, T.B. (1988) Diurnal variations in natural light conditions at summer time in arctic and subarctic areas in relation to light detection in insects. *Ecography*, **11**, 202–209.
Norris, M.J. (1936) The feeding-habits of the adult Lepidoptera Heteroneura. *Transactions of the Royal Entomological Society of London*, **85**, 61–90.
Nowinszky, L. (2003) The orientation of insects by light — major theories. *The Handbook of Light Trapping*, pp. p. 15–18. Savaria University Press, Szombathely, Hungary.
Nowinszky, L. (2004) Nocturnal illumination and night flying insects. *Applied Ecology and Environmental Research*, **2**, 17–52.
Nowinszky, L., Petranyi, G. & Puskas, J. (2010) The relationship between lunar phases and the emergence of the adult brood of insects. *Applied Ecology and Environmental Research*, **8**, 51–62.
Owens, A., Cochard, P., Durrant, J., Perkin, E. & Seymoure, B. (2020) Light pollution is a driver of insect declines. *Biological Conservation*, **241**, 108259.
Owens, A.C.S. & Lewis, S.M. (2018) The impact of artificial light at night on nocturnal insects: a review and synthesis. *Ecology and Evolution*, **8**, 11337–11358.
Page, T.L. (1982) Extraretinal photoreception in entrainment and photoperiodism in invertebrates. *Experientia*, **38**, 1007–1013.
Painter, K. (1996) The influence of street lighting improvements on crime, fear and pedestrian street use, after dark. *Landscape and Urban Planning*, **35**, 193–201.
Pawson, S.M. & Bader, M.-F. (2014) LED lighting increases the ecological impact of light pollution irrespective of color temperature. *Ecological Applications*, **24**, 1561–1568.
Perkin, E.K., Hölker, F., Richardson, J.S., Sadler, J.P., Wolter, C. & Tockner, K. (2011) The influence of artificial light on stream and riparian ecosystems: questions, challenges, and perspectives. *Ecosphere*, **2**, 1–16.
Persson, B. (1971) Influence of light on flight activity of Noctuids (Lepidoptera) in South Sweden. *Insect Systematics & Evolution*, **2**, 215–232.
Petanidou, T., Kallimanis, A.S., Sgardelis, S.P., Mazaris, A.D., Pantis, J. D. & Waser, N.M. (2014) Variable flowering phenology and pollinator use in a community suggest future phenological mismatch. *Acta Oecologica*, **59**, 104–111.
Péter, Á., Seress, G., Sándor, K., Klucsik, K.P., Vincze, E. & Liker, A. (2020) The effect of artificial light at night on the biomass of caterpillars feeding in urban tree canopies. *Urban Ecosystems*. https://doi.org/10.1007/s11252-020-00999-z.
Peterson, D.M. & Hamner, W.M. (1968) Photoperiodic control of diapause in the codling moth. *Journal of Insect Physiology*, **14**, 519–528.
Pettersson, M.W. (1991) Flower herbivory and seed predation in *Silene vulgaris* (Caryophyllaceae): effects of pollination and phenology. *Ecography*, **14**, 45–50.
Pintérné, E.N. & Pödör, Z. (2017) The effect of artificial lights on nocturnal macrolepidoptera (Lepidoptera: Macroheterocera) communities. *Acta Silvatica et Lignaria Hungarica*, **13**, 41–54.
Plummer, K.E., Hale, J.D., O'Callaghan, M.J., Sadler, J.P. & Siriwardena, G.M. (2016) Investigating the impact of street lighting changes on garden moth communities. *Journal of Urban Ecology*, **2**, juw004.
Poiani, S., Dietrich, C., Barroso, A. & Costa-Leonardo, A.M. (2015) Effects of residential energy-saving lamps on the attraction of nocturnal insects. *Lighting Research & Technology*, **47**, 338–348.
Porter, J. (2010) *Colour Identification Guide to Caterpillars of the British Isles: (Macrolepidoptera.).* Apollo Books, Stenstrup, Denmark.
Randle, Z. (2009) *Moth Recorders Handbook*. Butterfly Conservation, Wareham, UK.
Randle, Z., Evans-Hills, L.J., Parsons, N.S., Tyner, A., Bourn, N.A., Davis, A.M., Dennis, E.B., O'Donnell, M., Prescott, T., Tordoff, G. M. & Fox, R. (2019) *Atlas of Britain & Ireland's Larger Moths*. Pisces Publications, Newbury.
Reiter, R.J., Rosales-Corral, S., Tan, D.X., Jou, M.J., Galano, A. & Xu, B. (2017) Melatonin as a mitochondria-targeted antioxidant: one of evolution's best ideas. *Cellular and Molecular Life Sciences*, **74**, 3863–3881.
Rich, C. & Longcore, T. (2013) *Ecological Consequences of Artificial Night Lighting*. Island Press, Washington DC.
Riegel, K.W. (1973) Light pollution: outdoor lighting is a growing threat to astronomy. *Science*, **179**, 1285–1291.
Riemann, J.G. & Ruud, R.L. (1974) Mediterranean flour moth: effects of continuous light on the reproductive capacity. *Annals of the Entomological Society of America*, **67**, 857–860.
Robinson, H.S. & Robinson, P.J.M. (1950) Some notes on the observed behaviour of Lepidoptera in flight in the vicinity of light-sources together with a description of a light-trap designed to take entomological samples. *Entomologist's Gazette*, **1**, 3–15.
Robinson, H.S. (1952) On the behaviour of night flying insects in the neighbourhood of a bright source of light. *Proceedings of the Royal*

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© 2020 The Authors. *Insect Conservation and Diversity* published by John Wiley & Sons Ltd on behalf of Royal Entomological Society., *Insect Conservation and Diversity,* doi: 10.1111/icad.12447

Entomological Society of London. Series A, General Entomology, **27**, 13–21.

Robinson, P.J.M. (1960) An experiment with moths on the effectiveness of a mercury vapour light trap. *Entomologist's Gazette*, **11**, 121–132.

Russo, D., Cosentino, F., Festa, F., De Benedetta, F., Pejic, B., Cerretti, P. & Ancillotto, L. (2019) Artificial illumination near rivers may alter bat-insect trophic interactions. *Environmental Pollution*, **252**, 1671–1677.

Rydell, J. (1992) Exploitation of insects around streetlamps by bats in Sweden. *Functional Ecology*, **6**, 744–750.

Rydell, J. (2006) Bats and their insect prey at streetlights. *Ecological Consequences of Artificial Night Lighting*, pp. p. 43–60. Island Press, Washington, DC.

Sambaraju, K.R. & Phillips, T.W. (2008) Responses of adult *Plodia interpunctella* (Hübner) (Lepidoptera: Pyralidae) to light and combinations of attractants and light. *Journal of Insect Behavior*, **21**, 422–439.

Sanders, D. & Gaston, K.J. (2018) How ecological communities respond to artificial light at night. *Journal of Experimental Zoology Part A: Ecological and Integrative Physiology*, **329**, 394–400.

Sanders, D., Kehoe, R., Cruse, D., van Veen, F.J.F. & Gaston, K.J. (2018) Low levels of artificial light at night strengthen top-down control in insect food web. *Current Biology*, **28**, 2474–2478.

Sanders, D., Kehoe, R., Tiley, K., Bennie, J., Cruse, D., Davies, T.W., Van Veen, F.J.F. & Gaston, K.J. (2015) Artificial nighttime light changes aphid-parasitoid population dynamics. *Scientific Reports*, **5**, 15232.

Saunders, D. (2008) *Photoperiodism in insects and other animals*. In Photobiology (pp. 389–416). New York, NY: Springer.

Saunders, D.S. (2012) Insect photoperiodism: seeing the light. *Physiological Entomology*, **37**, 207–218.

Schlecht, P. (1979) Colour discrimination in dim light: an analysis of the photoreceptor arrangement in the moth *Deilephila*. *Journal of Comparative Physiology*, **129**, 257–267.

Schroer, S. (2019) Impact of artificial illumination on the development of a leafmining moth in urban trees. *International Journal of Sustainable Lighting*, **21**, 1–10.

I22-44 cont.

Schwemer, J. & Paulsen, R. (1973) Three visual pigments in *Deilephila elpenor* (Lepidoptera, Sphingidae). *Journal of Comparative Physiology*, **86**, 215–229.

Seth, R.K., Rao, D.K. & Reynolds, S.E. (2002) Movement of spermatozoa in the reproductive tract of adult male *Spodoptera litura*: daily rhythm of sperm descent and the effect of light regime on male reproduction. *Journal of Insect Physiology*, **48**, 119–131.

Seymoure, B.M., Linares, C. & White, J. (2019) Connecting spectral radiometry of anthropogenic light sources to the visual ecology of organisms. *Journal of Zoology*, **308**, 93–110.

Shimoda, M. (2018) Recent advances in the optical control of insect pests using light and color. *Proceedings of the 2018 International Symposium on Proactive Technologies for Enhancement of Integrated Pest Management of Key* Crops, pp. 87–102.

Shorey, H.H. (1966) The biology of *Trichoplusia ni* (Lepidoptera: Noctuidae) IV. Environmental control of mating. *Annals of the Entomological Society of America*, **59**, 502–506.

Singhal, R.K., Kumar, M. & Bose, B. (2019) Ecophysiological responses of artificial night light pollution in plants. *Russian Journal of Plant Physiology*, **66**, 1–13.

Sinha, R.P. & Häder, D.P. (2002) UV-induced DNA damage and repair: a review. *Photochemical & Photobiological Sciences*, **1**, 225–236.

Skopik, S.D. & Takeda, M. (1980) Circadian control of oviposition activity in *Ostrinia nubilalis*. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, **239**, R259–R264.

Somers-Yeates, R., Hodgson, D., McGregor, P.K., Spalding, A. & Ffrench-Constant, R. (2013) Shedding light on moths: shorter wavelengths attract noctuids more than geometrids. *Biology Letters*, **9**, 20130376.

Soneira, M. (2013) Auswirkungen auf die Insekten-Fauna durch die Umrüstung von Kugelleuchten auf LED-Beleuchtungen. *Wien Leuchtet*.

Song, Z.-M., Li, Z., Li, D.-M., Xie, B.-Y. & Xia, J.-Y. (2007) Adult feeding increases fecundity in female *Helicoverpa armigera* (Lepidoptera: Noctuidae). *European Journal of Entomology*, **104**, 721–724.

Sotthibandhu, S. & Baker, R.R. (1979) Celestial orientation by the large yellow underwing moth, *Noctua pronuba* L. *Animal Behaviour*, **27**, 786–800.

Sower, L.L., Shorey, H.H. & Gaston, L.K. (1970) Sex pheromones of noctuid moths. XXI. Light: dark cycle regulation and light inhibition of sex pheromone release by females of *Trichoplusia ni*. *Annals of the Entomological Society of America*, **63**, 1090–1092.

Spoelstra, K., van Grunsven, R.H.A., Donners, M., Gienapp, P., Huigens, M.E., Slaterus, R., Berendse, F., Visser, M.E. & Veenendaal, E. (2015) Experimental illumination of natural habitat—an experimental set-up to assess the direct and indirect ecological consequences of artificial light of different spectral composition. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **370**, 20140129.

Svensson, A.M. & Rydell, J. (1998) Mercury vapour lamps interfere with the bat defence of tympanate moths (*Operophtera* spp.; Geometridae). *Animal Behaviour*, **55**, 223–226.

Swaddle, J.P., Francis, C.D., Barber, J.R., Cooper, C.B., Kyba, C.C.M., Dominoni, D.M., Shannon, G., Aschehoug, E., Goodwin, S.E., Kawahara, A.Y., Luther, D., Spoelstra, K., Voss, M. & Longcore, T. (2015) A framework to assess evolutionary responses to anthropogenic light and sound. *Trends in Ecology & Evolution*, **30**, 550–560.

Taguchi, T. (2008) Present status of energy saving technologies and future prospect in white LED lighting. *IEEJ Transactions on Electrical and Electronic Engineering*, **3**, 21–26.

Taylor, L.R. & Carter, C.I. (1961) The analysis of numbers and distribution in an aerial population of Macrolepidoptera. *Transactions of the Royal Entomological Society of London*, **113**, 369–386.

Tierney, S.M., Friedrich, M., Humphreys, W.F., Jones, T.M., Warrant, E.J. & Wcislo, W.T. (2017) Consequences of evolutionary transitions in changing photic environments. *Austral Entomology*, **56**, 23–46.

Tihelka, E. (2019) Distribution of endangered owlet moths provides evidence for adverse effects of light pollution on some Lepidoptera (Lepidoptera: Noctuidae). *Entomofauna*, **18**, 415–425.

Tisdale, R.A. & Sappington, T.W. (2001) Realized and potential fecundity, egg fertility, and longevity of laboratory-reared female beet armyworm (Lepidoptera: Noctuidae) under different adult diet regimes. *Annals of the Entomological Society of America*, **94**, 415–419.

Titulaer, M., Spoelstra, K., Lange, C.Y. & Visser, M.E. (2012) Activity patterns during food provisioning are affected by artificial light in free living great tits (*Parus major*). *PLoS One*, **7**, e37377.

Trench, S., Oc, T. & Tiesdell, S. (1992) Safer cities for women: perceived risks and planning measures. *Town Planning Review*, **63**, 279.

Truxa, C. & Fiedler, K. (2012) Attraction to light-from how far do moths (Lepidoptera) return to weak artificial sources of light? *European Journal of Entomology*, **109**, 77–84.

Vaisanen, R. & Hublin, C. (1983) Effect of continuous light trapping on moth populations a mark-recapture experiment on *Hydraecia petasitis* (Lepidoptera, Noctuidae). *Notulae Entomologicae*, **63**, 187–191.

van Geffen, K.G., Groot, A.T., van Grunsven, R.H.A., Donners, M., Berendse, F. & Veenendaal, E.M. (2015b) Artificial night lighting disrupts sex pheromone in a noctuid moth. *Ecological Entomology*, **40**, 401–408.

van Geffen, K.G., van Eck, E., de Boer, R.A., van Grunsven, R.H.A., Salis, L., Berendse, F. & Veenendaal, E.M. (2015a) Artificial light at night inhibits mating in a Geometrid moth. *Insect Conservation and Diversity*, **8**, 282–287.

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van Geffen, K.G., van Grunsven, R.H.A., van Ruijven, J., Berendse, F. & Veenendaal, E.M. (2014) Artificial light at night causes diapause inhibition and sex-specific life history changes in a moth. *Ecology and Evolution*, **4**, 2082–2089.

van Grunsven, R.H., Lham, D., van Geffen, K.G. & Veenendaal, E.M. (2014b) Range of attraction of a 6-W moth light trap. *Entomologia Experimentalis et Applicata*, **152**, 87–90.

van Grunsven, R.H.A., Becker, J., Peter, S., Heller, S. & Hölker, F. (2019) Long-term comparison of attraction of flying insects to streetlights after the transition from traditional light sources to light-emitting diodes in urban and peri-urban settings. *Sustainability*, **11**, 6198.

van Grunsven, R.H.A., Donners, M., Boekee, K., Tichelaar, I., van Geffen, K.G., Groenendijk, D., Berendse, F. & Veenendaal, E.M. (2014a) Spectral composition of light sources and insect phototaxis, with an evaluation of existing spectral response models. *Journal of Insect Conservation*, **18**, 225–231.

van Langevelde, F., Braamburg-Annegarn, M., Huigens, M.E., Groendijk, R., Poitevin, O., van Deijk, J.R., Ellis, W.N., van Grunsven, R.H.A., de Vos, R., Vos, R.A., Franzén, M. & WallisDeVries, M.F. (2018) Declines in moth populations stress the need for conserving dark nights. *Global Change Biology*, **24**, 925–932.

van Langevelde, F., Ettema, J.A., Donners, M., WallisDeVries, M.F. & Groenendijk, D. (2011) Effect of spectral composition of artificial light on the attraction of moths. *Biological Conservation*, **144**, 2274–2281.

van Langevelde, F., van Grunsven, R.H.A., Veenendaal, E.M. & Fijen, T.P.M. (2017) Artificial night lighting inhibits feeding in moths. *Biology Letters*, **13**, 20160874.

Vänninen, I., Pinto, D.M., Nissinen, A.I., Johansen, N.S. & Shipp, L. (2010) In the light of new greenhouse technologies: 1. Plant-mediated effects of artificial lighting on arthropods and tritrophic interactions. *Annals of Applied Biology*, **157**, 393–414.

I22-44 cont.

Visser, M.E. & Holleman, L.J.M. (2001) Warmer springs disrupt the synchrony of oak and winter moth phenology. *Proceedings of the Royal Society of London. Series B: Biological Sciences*, **268**, 289–294.

Wakefield, A., Broyles, M., Stone, E.L., Harris, S. & Jones, G. (2018) Quantifying the attractiveness of broad-spectrum street lights to aerial nocturnal insects. *Journal of Applied Ecology*, **55**, 714–722.

Wakefield, A., Broyles, M., Stone, E.L., Jones, G. & Harris, S. (2016) Experimentally comparing the attractiveness of domestic lights to insects: do LED s attract fewer insects than conventional light types? *Ecology and Evolution*, **6**, 8028–8036.

Wakefield, A., Stone, E.L., Jones, G. & Harris, S. (2015) Light-emitting diode street lights reduce last-ditch evasive manoeuvres by moths to bat echolocation calls. *Royal Society Open Science*, **2**, 150291.

Walcott, B. (1969) Movement of retinula cells in insect eyes on light adaptation. *Nature*, **223**, 971–972.

Wang, L., Liu, X., Liu, Z., Wang, X., Lei, C. & Zhu, F. (2018) Members of the neuropeptide transcriptional network in *Helicoverpa armigera* and their expression in response to light stress. *Gene*, **671**, 67–77.

Wanvik, P.O. (2009) Effects of road lighting: an analysis based on Dutch accident statistics 1987--2006. *Accident Analysis & Prevention*, **41**, 123–128.

Waring, P. & Townsend, M. (2017) *Field Guide to the Moths of Great Britain and Ireland*, 3rd Edn. Bloomsbury Publishing, London, UK.

Warren, A.D. (1990) Predation of five species of Noctuidae at ultraviolet light by the western yellowjacket (Hymenoptera: Vespidae). *Journal of the Lepidopterists' Society*, **44**, 32.

Welbers, A.A.M.H., van Dis, N.E., Kolvoort, A.M., Ouyang, J., Visser, M.E., Spoelstra, K. & Dominoni, D.M. (2017) Artificial light at night reduces daily energy expenditure in breeding great tits (*Parus major*). *Frontiers in Ecology and Evolution*, **5**, 55.

Welsh, B.C. & Farrington, D.P. (2008) Effects of improved street lighting on crime. *Campbell Systematic Reviews*, **13**, 1–51.

White, P.J.T. (2018) An aerial approach to investigating the relationship between macromoths and artificial nighttime lights across an urban landscape. *Journal of Agricultural and Urban Entomology*, **34**, 1–15.

Whitehead, V.B. & Rust, D.J. (1972) Control of the fruit-piercing moth *Serrodes parfifa* (Fabr.)(Lepidoptera: Noctuidae). *Phytophylactica*, **4**, 9–12.

Whitman, C.M., Heins, R.D., Cameron, A.C. & Carlson, W.H. (1998) Lamp type and irradiance level for daylength extensions influence flowering of *Campanula carpatica* "Blue Clips", *Coreopsis grandiflora* "Early Sunrise", and *Coreopsis verticillata* "Moonbeam.". *Journal of the American Society for Horticultural Science*, **123**, 802–807.

Williams, C.B. (1939) An analysis of four years captures of insects in a light trap. Part I. General survey; sex proportion; phenology; and time of flight. *Transactions of the Royal Entomological Society of London*, **89**, 79–131.

Williams, C.B., Singh, B.P. & Ziady, S.E.L. (1956) An investigation into the possible effects of moonlight on the activity of insects in the field. *Proceedings of the Royal Entomological Society of London. Series A, General Entomology*, **31**, 135–144.

Wilson, J.F., Baker, D., Cheney, J., Cook, M., Ellis, M., Freestone, R., Gardner, D., Geen, G., Hemming, R., Hodgers, D., Howarth, S., Jupp, A., Lowe, N., Orridge, S., Shaw, M., Smith, B., Turner, A. & Young, H. (2018) A role for artificial night-time lighting in long-term changes in populations of 100 widespread macro-moths in UKand Ireland: a citizen-science study. *Journal of Insect Conservation*, **22**, 189–196.

Wolff, R.J. (1982) Nocturnal activity under artificial lights by the jumping spider *Sitticus fasciger*. *Peckhamia*, **2**, 32.

Wood, C.R., Reynolds, D.R., Wells, P.M., Barlow, J.F., Woiwod, I.P. & Chapman, J.W. (2009) Flight periodicity and the vertical distribution of high-altitude moth migration over southern Britain. *Bulletin of Entomological Research*, **99**, 525–535.

Yannis, G., Kondyli, A. & Mitzalis, N. (2013) Effect of lighting on frequency and severity of road accidents. *Proceedings of the Institution of Civil Engineers-Transport*, **166**, 271–281.

Yela, J.L. & Holyoak, M. (1997) Effects of moonlight and meteorological factors on light and bait trap catches of noctuid moths (Lepidoptera: Noctuidae). *Environmental Entomology*, **26**, 1283–1290.

Yuen, S.W. & Bonebrake, T.C. (2017) Artificial night light alters nocturnal prey interception outcomes for morphologically variable spiders. *PeerJ*, **5**, e4070.

Závodská, R., Fexová, S., von Wowern, G., Han, G.-B., Dolezel, D. & Sauman, I. (2012) Is the sex communication of two pyralid moths, *Plodia interpunctella* and *Ephestia kuehniella*, under circadian clock regulation? *Journal of Biological Rhythms*, **27**, 206–216.

Zhao, D., Yu, Y., Shen, Y., Liu, Q., Zhao, Z., Sharma, R. & Reiter, R.J. (2019) Melatonin synthesis and function: evolutionary history in animals and plants. *Frontiers in Endocrinology*, **10**. https://doi.org/10.3389/fendo.2019.00249s.

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From: mary h
To: CEQA, CountyParks
Subject: [External] Re: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report (September 30, 2021 - November 15, 2021)
Date: Friday, October 15, 2021 9:18:24 PM
Attachments: image001.png

I23-1 Please call me: 619 490 9386 Mary Harris Alpine Community Planning Group

On Friday, October 15, 2021, CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov> wrote:

> Good morning,
>
> We received a few questions regarding the link for the Alpine Draft EIR and wanted to provide further clarification – If the link is typed in, it must be typed exactly as it is written below (i.e. capitalize the words that are capitalized below). We have also reattached the letter with the link for your convenience, as well as provided the link below. Please feel free to email me if you have any questions and/or concerns and we look forward to your comments!
>
> Draft Alpine Park EIR: http://www.sdparks.org/content/sdparks/en/AboutUs/Plans/public-review-documents.html
>
> Thanks so much,
>
> *Anna Prowant* (She-Her-Hers)
> Biologist and Land Use/Environmental Planner III
> Resource Management Division
> County of San Diego, Parks and Recreation
> 5500 Overland Avenue, Suite 410, San Diego, CA 92123
> (619) 756-4548 (cell)
> www.sdparks.org
>
> For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com.** To receive updates via text, send **COSD COVID19** to **468-311.**



From: mary h
To: CEQA, CountyParks
Subject: [External] Alpine Park
Date: Thursday, October 21, 2021 9:51:06 AM

Dear Ms. Prowant,

I24-1 Please tell me exactly what kind of park the new Alpine Park will be.
I need an answer to those calling the our new park a Sports Complex.

Thank you,

Mary Harris
619 490 9386
Member Alpine Community Planning Group

From: mary h
To: CEQA, CountyParks
Subject: [External] Re: Alpine Park
Date: Friday, October 22, 2021 10:28:03 PM
Attachments: image001.png

I25-1 I appreciate the time you spent listening to my concerns.
Mary Harris

On Friday, October 22, 2021, CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov> wrote:

> Good afternoon Mary,
>
> Thank you so much for chatting with me today! The Alpine Park will be a local park (also called a day-park on the DPR website), but someone from the team (myself, Marcus Lubich, or Johanna Salomon) will reach out to you by early next week to discuss further. Your comments/questions are greatly appreciated and I hope you have a great weekend!
>
> All the best,
>
> *Anna Prowant* (She-Her-Hers)
> Biologist and Land Use/Environmental Planner III
>
> Resource Management Division
>
> County of San Diego, Parks and Recreation
>
> 5500 Overland Avenue, Suite 410, San Diego, CA 92123
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> www.sdparks.org
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> For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com.** To receive updates via text, send **COSD COVID19** to **468-311.**

From: mary h <ranchogirlalpine@gmail.com>
Sent: Thursday, October 21, 2021 9:51 AM
To: CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov>
Subject: [External] Alpine Park

Dear Ms. Prowant,

Please tell me exactly what kind of park the new Alpine Park will be.

I need an answer to those calling the our new park a Sports Complex.

Thank you,

Mary Harris

619 490 9386

Member Alpine Community Planning Group

From: Summer
To: CEQA, CountyParks
Subject: [External] Re: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report (September 30, 2021 - November 15, 2021)
Date: Friday, October 15, 2021 11:44:52 AM
Attachments: image001.png

Hi Anna,

I26-1 Thank you for the information. I am looking forward to this new park and I hope it is built while my 3 year old is young enough to use it!! Alpine definitely needs a park with updated playground equipment (and most importantly, bathrooms!!). The concerns I have about the park are the parking lot and sports fields. The parking area seems really large for our community and will take up alot of space that could be maintained in its natural state. As for the sports fields, Alpine already has so many baseball fields, we do not need more!!!! By my count we have at least 4. Shadow Hills has 3 or more baseball fields and the one behind the library. Creekside has an open field that I believe is also used for baseball and soccer. Wrights field seems like it should be more of an outdoor nature and recreation area. WE DO NOT NEED or WANT MORE BASEBALL FIELDS. I do think a pickle ball field would be a great addition to wrights field because we don't have any other pickle ball fields in Alpine.

Thank you,
Summer Herrin

On Fri, Oct 15, 2021 at 11:28 AM CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov> wrote:

> Good morning,
>
> We received a few questions regarding the link for the Alpine Draft EIR and wanted to provide further clarification – If the link is typed in, it must be typed exactly as it is written below (i.e. capitalize the words that are capitalized below). We have also reattached the letter with the link for your convenience, as well as provided the link below. Please feel free to email me if you have any questions and/or concerns and we look forward to your comments!
>
> Draft Alpine Park EIR: http://www.sdparks.org/content/sdparks/en/AboutUs/Plans/public-review-documents.html
>
> Thanks so much,
>
> *Anna Prowant* (She-Her-Hers)
> Biologist and Land Use/Environmental Planner III
>
> Resource Management Division

County of San Diego, Parks and Recreation

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For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com.** To receive updates via text, send **COSD COVID19** to **468-311.**

November 15, 2021

Environmental Impact Report
Letter in opposition to the proposed Mega-Sports-Complex imposed on Wright's Field

I27-1 Approval of a sports complex dominating Wright's Field borders on CRIMINAL because of the many issues not addressed or mitigated: Destruction of biological resources, wildfire danger, road safety (daily and during wildfire)

Wildfires: Land is classified as a very high fire hazard severity zone, and the project:

I27-2 a) Substantially impairs the emergency response plan or emergency evacuation plan of the area;

I27-3 b) Exposes project neighbors to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, due to concentration of people in an area that cannot safely evacuate.

I27-4 c) Putting a sports complex in a rural area with unimproved lowest-Level Roads endangers residents and exacerbates wildfire risks. Road –no upgrades – no sidewalks no turn lanes, currently dangerous – site of accidents and deaths.

I27-5 d) Lack of infrastructure proposed that exacerbates fire danger and results in ongoing impacts to the environment. Road unimproved, nor is improvement proposed.

I27-6 Aesthetics: DESTROYS scenic vistas - The project conflict with applicable zoning and other regulations governing scenic quality.

a) Proposal has substantial adverse effects on a scenic vista. Proposed mega-Sports Complex Completely DESTROYS views from South Grade.

I27-7 c) Wright's Field is a non-urbanized area of Alpine, widely used 24/7 as a passive natural park. Proposed sport complex substantially degrades the existing visual character or quality of public views of the site and its surroundings, seen from public views experienced from publicly accessible vantage point

I27-8 d) Proposed regional Sports Complex creates a new source of substantial light or glare that adversely affects day and nighttime views in the area.

I27-9 Not yet considered: 1. a significantly smaller park consistent with ALL Alpine County Park polling data.
2. Joint use maintenance agreements for Alpine's FIFTEEN other publicly owned playing fields.
3. Distribute amenities to SAFE locations closer to kids and families.

I27-10 TOO BIG – 300 parking spaces – bigger than the largest commercial parking lot in Alpine (Albertson's)

Road –no upgrades – no sidewalks no turn lanes, currently dangerous – site of accidents and deaths

I27-11 Water

I27-12 Wright's Field currently and for many years has been utilized by the Alpine community on a 24/7 basis as a passive wildlands open park.

I27-13 I do not support the proposed 25-acre county park which comprises a skate park, bike park, multiple soccer field areas, baseball/softball field, basketball court, pickleball courts, 244 parking spots, and much more, at the location adjacent to Wright's Field Preserve. Not only does this not align with the initial 12-15-acre community park concept, it does not respect the area's rural and natural heritage; an important part of what makes Alpine so special. Once gone, it's gone forever.

Further concerns include

I27-14 **1.) Biological resources negatively impacted:** environmental and fiscal impact on surrounding nature/land (namely Wright's Field Preserve)

Proposed mega-Sports Complex contravenes existing State guidelines and law.

- will have a substantial adverse effect, both directly and through habitat modifications, on [multiple] species identified as a candidate, sensitive, or special status species designated by local or regional plans, policies, or regulations, and by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

-- This site has one confirmed endangered butterfly and previously hosted a second endangered butterfly, is thick with owls, bobcats and a host of prey species to support them

-- The currently proposed sports complex will deeply impact Wright's Field as a nature preserve. The field can sustain facilities and programs for hiking, walking, dogs, bikes and horses, but aggressive development of the field's unique native grassland and Engelmann Oak habitats is a dagger to both the field and the surrounding areas as we know it.

I27-15 **Aesthetics: DESTROYS scenic vistas** - The project conflict with applicable zoning and other regulations governing scenic quality.

-- Proposal has substantial adverse effects on a scenic vista. Proposed mega-Sports Complex Completely DESTROYS views from South Grade.

-- Wright's Field is a non-urbanized area of Alpine, widely used 24/7 as a passive natural park. Proposed sport complex substantially degrades the existing visual character or quality of public views of the site and its surroundings, seen from public views experienced from publicly accessible vantage point

I27-16 **Mega Sports Complex Conflicts with local policies** or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

I27-16 cont.

Mega Sports Complex Conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Mega Sports Complex will have a substantial adverse effect on riparian habitat sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.

Mega Sports Complex will have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Mega Sports Complex Conflict with local policies and ordinances protecting biological resources.

Mega Sports Complex Conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan and other approved local, regional, or state habitat conservation plan.

2) Wildfire

Land is classified as a very high fire hazard severity zone, and the project:

a) Substantially impairs the emergency response plan or emergency evacuation plan of the area;

b) Exposes project neighbors to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, due to concentration of people in an area that cannot safely evacuate.

c) Putting a sports complex in a rural area with unimproved lowest-Level Roads endangers residents and exacerbates wildfire risks. Road –no upgrades – no sidewalks no turn lanes, currently dangerous – site of accidents and deaths

d) Lack of infrastructure proposed that exacerbates fire danger and results in ongoing impacts to the environment. Road unimproved, nor is improvement proposed.

I27-17

Mega Sports Complex IS located in state responsibility areas / lands classified as very high fire hazard severity zones, and the project:

a) Substantially impairs an adopted emergency response plan or emergency evacuation plan;

b) Due to slope, prevailing winds, and other factors, exacerbates wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

c) **Mega Sports Complex proposal cannot provide** the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk, resulting in temporary or ongoing impacts to the environment, because of the physical limitations of the site and existing private property and roads.

I27-18

2) Transportation and traffic issues inadequately addressed: It's far from the inhabited town center, lack of safe pedestrian/bike access (kids would have to cross Wright's Field Preserve or go along the roadside), dangerous automobile access on South Grade Road, traffic.
Road –no upgrades – no sidewalks no turn lanes, currently dangerous – site of accidents and deaths
TOO BIG – 300 parking spaces – bigger than the largest commercial parking lot in Alpine (Albertson's)

Mega Sports Complex is inadequate in addressing transit, roadway, bicycle and pedestrian facilities transit, roadway, bicycle and pedestrian facilities
Mega Sports Complex Conflicts Substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) and incompatible uses
Mega Sports Complex Results in inadequate emergency access.

I27-19

3) Noise/light pollution – proposed park contravenes existing guidelines and law: Noise- project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
Proposed regional Sports Complex creates a new source of substantial light or glare that adversely affects day and nighttime views in the area.

I27-20

4) safety/security
maintenance (existing recreational facilities in Alpine are not properly maintained), etc.

I27-21

5) Transportation and traffic –
Mega Sports Complex is inadequate in addressing transit, roadway, bicycle and pedestrian facilities transit, roadway, bicycle and pedestrian facilities
Mega Sports Complex Conflicts Substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) and incompatible uses
Mega Sports Complex Results in inadequate emergency access.

I27-22

6) Utilities/service systems
Mega Sports Complex Requires the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or

telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

I27-22 cont.

Mega Sports Complex does not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

Mega Sports Complex does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments for wastewater.

I27-23

Loss of habitat, fire safety, and transportation remain unresolved issues.

--Mary Hicks
Japatul Valley

From: Don Hohimer
To: CEQA, CountyParks
Subject: [External] Alpine County Park DEIR Public Comments
Date: Monday, November 15, 2021 9:34:29 AM

Comments on the Alpine Park DEIR, November 15, 2021
Don Hohimer, Alpine

I28-1 For 25 years I've chosen to live in Alpine and have considered myself fortunate to hike and ride in the beautiful public open space that we call Wright's Field. As a former teacher and administrator at the adjacent Joan Mac Queen Middle School, I introduced a generation of children to the preserve's biological and cultural heritage as an outdoor laboratory. As past president of Back Country Land Trust, I've worked with countless scientists to document the rare species found throughout the preserve. The human cultural history over the past 100 years has been well documented from Kumeyaay village, homesteaders, ranching, and Wright family. If you know where to look, artifacts are easily found throughout the preserve today. To honor the past, BCLT briefly considered renaming the preserve *Mesa del Arroz* as it was named during the California Rancho era, but to locals it has always been called Wright's Field. Despite possessing rare and endangered habitats, and clay soils that do not percolate, attempts to exploit the land have been frequent: golf courses, sewage treatment plants, luxury homes, Alpine High School, and now a sprawling sports complex. Local experts like myself have regularly been called upon to provide factual evidence to prove what San Diego County staff determined many years ago: Wright's Field's best and highest use is as a passive or natural park. When County Parks acquired the remainder parcel last year, many of us were relieved that acquisition of the entire grassland complex would finally be completed. In a classic bait and switch, we learned 26 acres of native grassland would be destroyed to create a redundant sports complex.

I28-2 Unless the park is designed to be carbon neutral and sustainable now, it will require future carbon emissions for maintenance and upkeep. This conflicts with County climate action plans.

I28-3 The current park design is not sustainable for water use or wastewater management. The planned seven (7) acres of natural turf grass and over 300 new trees and shrubs will require a significant input of water. Estimates indicate that this park will use 10-15 million gallons of

I28-4 potable water per year with an estimated cost of $130,000 annually for irrigation alone. Clay soil across the site provides insufficient drainage. The septic system planned for the site is situated in a headwaters tributary of Alpine Creek with runoff draining into El Capitan Reservoir. Wastewater infiltration basins on the site will be atop clay substrate and will not likely drain

I28-5 sufficiently, causing a vector issue for mosquitoes and algae. DPR's own Water Conservation Plan, adopted in 2010, does not support the intensive water usage proposed, and proposed wastewater management is insufficient. From 1999-2001 I personally witnessed the massive

I28-6 grading project struggling to create flat spaces for Joan Mac Queen Middle School. Two years of work uncovered massive SUV sized boulders, and unworkable muck during the rainy seasons, leading to an extra year of delays. Fields, landscapes, and native plant mitigation were multi-year failures due to the dense clay soils.
-How can the County fail to learn from earlier site selection mistakes and propose grading on an even larger scale for a redundant sports park?

I28-7 Deleterious impacts to listed Endangered Species and Species of Special Concern are unmitigable. Habitat type-conversion and impacts from active recreation on this site will cause irreversible loss of unique habitats and sensitive species of flora and fauna. Proximity to Wright's Field Ecological Preserve will trigger Land Use Adjacency Guidelines due to intensive land use for active recreation abutting existing protected lands within the Multiple Species Conservation Program (MSCP). Significant indirect impacts to preserved lands and covered species therein are not compatible with the spirit of the MSCP Subarea Plan. In a letter to the Alpine Community Planning Group dated October 27, 2006, DPR Director Renee Bahl stated, "As you know, the

I28-7 cont.

County has previously evaluated Wright's Field as a potential site for park and determined that Wright's Field is not suitable for the development of an active recreation park…Our concerns regarding the biological sensitivity of the habitats within Wright's Field have not changed and we do not believe that Wright's Field is suitable for active parkland development."

-How can the County propose mitigation for the destruction of Native Grasslands when your team has previously called such destruction unmitigatable?

I28-8

Our long time partner, San Diego County Parks, has become our latest adversary. Locals like myself strongly support a natural park to complement the existing Wright's Field MSCP Preserve. We also support revitalizing existing athletic facilities at schools or developing new sites for some of the active sports facilities, including an all wheel park, in town center. Welcomed management would include habitat restoration/removal of invasive species, clear trail delineation/signage, and parking that does not displace endangered habitats.

-How can the County morally and ethically destroy an existing natural park and replace it with an artificial one?

-Don Hohimer, Alpine

From: info@castlesteelbuildings.com
To: CEQA, CountyParks
Subject: [External] attn: Anna Prowant..... re. Alpine County Park
Date: Tuesday, October 19, 2021 1:05:48 PM
Attachments: sigimg0

I29-1 Ms. Prowant,
We would appreciate being able to bid on this project when plans and specs. are available. Our section would be metal roofing and shade structures. Would also like to receive a list of general contractors bidding.
Thank you.

Jim Jacobs
Senior Estimator

Office: (619) 589-1856
info@castlesteelbuildings.com

9069 Birch Street
Spring Valley, CA 91977



From: Peggy Katz
To: CEQA, CountyParks
Subject: [External] Alpine Park Project
Date: Monday, November 15, 2021 2:16:51 PM

Dear Ms. Prowant,

I30-1 As a resident and now senior citizen of Alpine since 1978, I have seen many changes in our community and I appreciate the availability of the documents at our library for our review as we embark upon this project. My concerns are regarding issues assessed as or described as being not addressed or having "minimal impact". It does seem that the goal of this DEIR is to push through this project ASAP.

I30-2 The land now designated as Wright's Field Ecological Preserve has immense environmental, geological, historical and archaeological value. One reason it is unique is because of the four sensitive habits (coastal sage scrub, native grassland, vernal pools and Engelmann oak woodland) all represented in a rather small land parcel and in a vital wildlife corridor. It also has been determined that the area is an ancient river that

I30-3 silted upwards, most geologically interesting! There is a prevalence of clay soils which don't percolate and are peppered with cobble as well as somewhat smooth boulders of various sizes and compositions. There may be no other place like it, not only in the county, the state nor the entire country. Thus it deserves preservation and further scientific research.

I30-4 Question: Why would the county not want to vigorously protect and preserve this special site?

I30-5 Many rare and endangered plant species thrive there. The mostly larger rural parcels surrounding the site have all been disturbed by development thus these species are no longer present or minimally present.

Question: Why does the county not seriously embrace species conservation efforts?

I30-6 This area is now designated as being of EXTREME WILDFIRE RISK and residents are encouraged if not mandated to maintain our properties with respect to WILDFIRE mitigation. Because of this persistent FIRE threat and official designation of EXTREME FIRE HAZARD, our homeowners insurance is now very very expensive, difficult to get and always subject to cancellation or further rate increases. Almost all fires here are the result of human activity; lightning strikes in this part of Alpine are rare. Do we really want picnics with BBQs and the associated risk in this area?

Question: Why has the county planned an ambitious complex that would encourage hundreds of vehicles and potentially thousands of people to recreate in this area putting residents at increased FIRE and safety risk with further crowding of our curvy dangerous S. Grade Rd. and inadequate egress to escape a fast moving FIRE disaster?

I30-7 Another concern is our air quality. In the early days of Alpine, the area was historically renowned for having the cleanest freshest air around. It was a therapeutic destination where people afflicted with pulmonary disorders would come specifically to heal and rehabilitate. Now Alpine suffers with too many days of extremely high and unhealthy levels of air pollution, much of it ozone coming from LA county. This is unlikely to be mitigated in the near or distant future.

Question: Why has the county not properly and realistically addressed our air quality problem in the DEIR?

I30-8 With global warming and the role of Carbon being a topic of critical importance, research has emerged showing the necessity of preserving our dwindling grasslands

I30-8 cont.

not only locally but worldwide because of the role grasslands do play in the removal of Carbon from the atmosphere and Carbon sequestration in the roots, thus in the ground. Grasslands do it best. If a tree or shrub burns that Carbon is released back into the atmosphere but when grasslands burn that Carbon remains underground.

Question: Why has the county not considered this in the DEIR as a vital reason against destroying a significant area of grassland in Wright's Field?

I30-9

The majority (80+% I believe) of our resident population really don't want a sports complex or any other major disturbance of the land. We only want a smaller nature-based educational park. Current plans for the entire complex are incompatible with an ecological preserve. You are not preserving a sensitive environment by creating a "drive to" park which invites hoards of people into this critical and rare wildlife corridor.

Question: Why would the county want to further fragment and sacrifice anymore of this sensitive environment for human recreation?

I30-10

I agree that the other community wishes are needed but they should really and appropriately be located closer to a safer area with a higher density population. One location that comes to mind is the old Alpine Elementary school property. Could a long term lease be considered for the site? The move on buildings could be removed allowing room for more sports facilities. There were some tall raised beds present that are handicap accessible or appropriate for older gardeners. There is probably room for shorter beds to be installed. There had been a nice selection of fruit trees as well. Cal State Fullerton has beds on their premises which are rented to community members as well as students who wish to garden. There is usually a waiting list. Many users could walk there for recreation. Residents of rural parcels already have land upon which they can garden should they choose to do so. Noise, lighting and increased traffic would not impact a sensitive environment and the fire risk would be somewhat mitigated. During our many Santa Ana wind events, wind velocities can be quite intense but are usually tamer in town, another concern regarding fire risk.

Thank you for considering my concerns.

Sincerely,
Peggy Katz, University of California Master Gardener
For privacy concerns, POB 729, Alpine 91903
619. 445-4975

Sent from my iPad

From: Peter Krantz
To: CEQA, CountyParks
Subject: [External] DEIR Impact of Alpine Community Mega park
Date: Monday, November 15, 2021 9:36:55 AM

I31-1 As a resident of Alpine for nearly 30 years I ask you to please reconsider the size and scale of this mega park.
In a time when we are in a severe drought how can we bring such a water burden to our community, while asking us to conserve.

I31-2 This land has always had issues with drainage and difficulty "perking" for septic. That is probabbly why it was never developed.
The loss of sensative rural land is not what the people wanted. (Please refer to your own focus groups).

I31-3 I have raised two children in Alpine and they had plenty of places to play, bike and attend structured youth sports.
One has recently bought his own home here in Alpine hopeing to raise his kids with the same upbringing.

I31-4 The negative enviromental impact, road problems, sewer and water issues alone should be enough to stop this mega park.

Thank you for your time.

--
Peter Krantz
Alpine Resident 28 years

From: Annalisa Larm
To: CEQA, CountyParks
Subject: [External] Alpine Park Project
Date: Monday, November 15, 2021 6:32:31 AM

I32-1 Yes, we are in favor of Local Alpine Park.

Best Regards,

Annalisa Larm
1486 Montecito Vista
Alpine, Ca 91901
619 820-9202

Sent from Mail for Windows

Jeff & Alanna Light
2634 Calle De Compadres
Alpine, CA 91901
(619) 339-8222
alannalight@cox.net

November 12, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410,
San Diego, CA 92123

By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

Thank you for the opportunity to comment on the Alpine Park Project's (Project) Draft Environmental Impact Report (DEIR).

I33-1 My husband and I live on Calle De Compadres Cul De Sac at the proposed entrance to the Alpine Park. We have lived in Alpine for over 25 years.

After going through the DEIR, we have questions and concerns, most of which were noted from all of the residents of Calle De Compadres in a letter written April 3, 2021 RE: Notice of Preparation of a Draft Environmental Impact Report on the Alpine County Park Project.

I33-2 Most of our concerns documented such as noise pollution from the dog park, active sports facilities and high volume of traffic and people, parking issues in our cul-de-sac, light pollution and increased fire risk have not been sufficiently analyzed in the DEIR.

LACK OF NOISE BERM BY CALLE DE COMPADRES CUL-DE-SAC

I33-3 Why haven't you mitigated for noise abatement for the residents living on Calle De Compadres? Your "noise berm" stops before the proposed dog parks.

OVERFLOW PARKING/TRAFFIC ON CALLE DE COMPADRES CUL-DE-SAC

I33-4 Why have you not addressed overflow parking on Calle De Compadres or the impact on its residents when park goers use the cul-de-sac for turning around? If the Project charges for parking, visitors will find free parking on Calle De Compadres, negatively affecting the peace and quiet of our neighborhood as well as possibly endangering my dogs and horses which are often pastured by the entrance of the Project.

LOCATION OF DOG PARK/LOOSE DOGS/NOISE

I33-5 Why did you choose the location of the dog parks to be adjacent to South Grade? Not only do you not install a noise berm, but you have added more ongoing noise across the from Calle De Compadres.

I33-6 In addition, have you investigated the impact on traffic, pedestrians and equestrians should a dog get loose and run onto South Grade? Common sense deems the dog park should not be on the perimeter of the Project.

SPECIAL EVENTS PERMITTED TO 10PM/LIGHT POLLUTION

I33-7 How come you are allowing special events to be held until 10pm when we have been told over and over that this park will only be in use from sunrise to sundown? Do you have a limit of "Special Events" that can occur throughout the year? Are you planning to mitigate the impact of additional lighting that will negatively affect the dark skies of Alpine?

CALCULATION OF AVERAGE LOCAL HIGHS

Why did you base your average local highs from data that starts from 1951? With global warming the average local highs are no longer 76.4 degrees.

I33-8 There are multiple days over 90 degrees in the summer and with the addition of artificial turf and thousands of feet of concrete, the playing area on the Project will likely be unusable as global warming continues to increase.

There are already County Parks that are closed in August due to high temperatures. Will this be the case for this Project as well?

WATER

First off, the DEIR estimates annual water needs as 16,471,273 gallons and there is no commitment that Padre Dam will be able to accommodate that need.

But even with that ludicrous amount of water, I question if that amount of water is even enough to keep the real grass playing fields alive and if the above temperatures were considered when evaluating the amount of water needed.

I33-9 Did you include water needed to water down the artificial turf for the baseball field in your calculations? Artificial turf is adversely affected by high temperatures.

Regarding purchasing water from Padre Dam and water usage: According to *weather-and-climate.com*, the average precipitation in Alpine is 10.31 inches a year **NOT** 16 inches per year as per your Project states. How will the change of 4 ½ inches of rainfall impact your calculation for water use and future needs.

Please recheck your current evaluation of water needed, incorporating the increase of Alpine temperatures due to global warming and significantly lower average annual precipitation to get an accurate assessment of the Project's water needs.

According to the San Diego Water Authority, *"The 2021 water year was the driest in California in more than a century."*

My family adhered to past requests from the water district to change landscaping to prosper in our desert-like environment. My lawns our gone and in their place is an artificial turf lawn and hardscaping.

Looking around Alpine I see many others who have adhered to the same request.

Please explain why you want acres of water thirsty sod in the Project when global warming and increasing drought years point to eliminating sod altogether.

I33-9 cont.

For the County to ask for, and for Padre Dam to commit to selling water for a park of this magnitude while telling everybody else to be "water wise" and without having accurate calculations of increased water need is wasteful and hypocritical.

We feel strongly that because of miscalculations of precipitation and temperatures in Alpine, compounded with ongoing global warming, that the projected water needed is incorrect and will cost the taxpayers an insurmountable amount of money as the realization of this situation occurs.

Because of this, expansive playing fields of sod is irresponsible, financially and environmentally.

EXPANSIVE SOIL IMPACT ON STRUCTURES AND ASPHALT PARKING

The soil in for this project is unstable, expansive and has a high shrink/swell behavior. As residents adjacent to the Project, we are highly aware how it negatively impacts foundations and roadways.

I33-10

Here are pictures taken on November 8, 2021 of the asphalt street on Calle De Compadres and two of the properties. The asphalt parking lot will look like this within a few years unless you included an extensive maintenance plan to accommodate this soil.

I33-10
cont.







I33-10
cont.



I33-10
cont.



I33-10 cont.



I33-11

Although the DEIR mentions the volunteer pad, how do you plan on mitigating the foundation for the skatepark park which is entirely concrete, the basketball courts and the pickleball courts?

Much of this expansive soil will have to be removed at an enormous cost and as it is not suitable for building fill, who is going to want it?

CIRCULATION/TRAFFIC

I33-12

I would like to have more information on how the DEIR can possibly state that 500 daily visitors will not have a significant impact on traffic on South Grade and Tavern Road and that no mitigation is needed.

As 25-year-residents living off South Grade Rd., we have seen numerous accidents, near accidents and fatalities.

We watched traffic on South Grade gridlock during the 2003 Fire evacuation.

There is no concrete plan to widen South Grade Rd. to allow emergency vehicles to drive through.

There are no bike paths on South Grade to the project site.

It is unsafe for pedestrians to walk on the street.

There is no public transportation stop to the Project.

I33-12 cont.

As this is a County Park and most people travelling will come to Alpine and take the Tavern Road exit, the first entrance to the park will be on the South end of the Project, not Calle De Compadres.

Have you considered how this will affect traffic if there is no stop sign on South Grade at that exit? Have you looked at putting an additional stop sign by that exit so people can safely enter that entrance?

Increased circulation around the Project will lead to additional injuries and fatalities on South Grade.

This portion of the DEIR needs to be readdressed as any injuries and fatalities due to trivializing the negative impact of an additional 500 visitors a day on an already dangerous two-lane road is negligent.

FIRE DANGER

I33-13

The more people who go to this park, the higher possibility of a human caused fire. Whether it is from a BBQ or smoking, or an accident from the volunteer resident in their home, the dry grasslands that surround the park is extremely flammable and the roads surrounding Wright's Field are barely sufficient for current evacuations. Unless there is a definitive commitment that the roads will be widened, it is negligent to agree to build a park that will attract 500 people a day.

As my husband and I have stated in the past, we would like a smaller nature-based community park.

Where is the option of smaller parks throughout Alpine? Why isn't there an option that eliminates the sod and baseball field?

I33-14

Alpine does not need acres of playing fields, a concrete skateboard park or basketball and pickle board courts. There are playing facilities in Alpine, but most are not maintained.

Both of my children grew up in Alpine and played AYSO, softball and Little League. This was BEFORE the decline of children in Alpine and an elementary school was closed. This was BEFORE the numbers didn't warrant a High School!

I33-15 I anticipate that this Project, if approved, will not only ruin the rural feel of this community, but it too will fall into disrepair once the County realizes the high cost of operation & maintenance as well as lack of anticipated use due to extreme heat.

I33-16 Time and time again you ignore the concerns of residents, the effects of global warming, ongoing drought and the dangers of putting a massive park along a dangerous two-lane road and say that there is no mitigation needed.

This DEIR is flawed and needs to be reanalyzed.

Jeff & Alanna Light
Alpine Residents

From: angielind
To: CEQA, CountyParks
Cc: info@preservealpinesheritage.org; travislyonacpg@gmail.com
Subject: [External] COMMENTS ON EIR ALPINE CA COUNTY PARK PROJECT
Date: Friday, October 8, 2021 6:28:02 PM

Here are my comments:

I34-1 1. Alpine residents already has a county park at Flinn Springs

I34-2 2. The proposed Alpine park is located adjacent to Southgrade road that has no side walks and vehicles travel in excess of 50 MPH routinely. Hence the park is not walkable to and from for the majority of residents including children. This is a huge safety issue for children who want to bike or skate board to the park.

I34-3 3. According to Megan's Law website there are 2 registered sex offenders located across the street from this proposed park for children. One sex offender was convicted of sexual offenses with children under the age of 14. The other sex offender had child pornography. Seems to me it is not safe to have a park across the street from these sex offenders.

I34-4 4. The park will be a magnet for homeless encampments like other county parks in Wright's field which could cause fires due to unauthorized cooking.

I34-5 5. The park is a man made structure that replaces nature with a parking lot, ball fields, skating rink, dog park, etc. Definitely not low impact activities. This will definitely have an adverse impact on song birds (due to noise from the park) and flora and fauna in Wright's field.

Angie Lind
angielind@cox.net
2350 Shaylene Way
Alpine, CA 91901
619-659-3847 Home

From: June Lundstrom
To: CEQA, CountyParks
Subject: [External] Alpine Park Project EIR comments
Date: Sunday, October 10, 2021 2:32:55 PM

Hello –

I35-1 As a resident of Alpine, CA and one who lives close to South Grade Road, I want to express my complete rejection of the analysis and review of the Alpine Park Project EIR with regards to the effects of the proposed park on local street traffic flow and fire evacuation implications. I believe that the EIR completely disregards the fact that South Grade Road will be the primary ingress/egress for the proposed park. South Grade Road is basically a "country" road, with no sidewalks, blind corners and curves and is essentially a residential community road. The amount of traffic that would increase as a result of such a large and elaborate park, with so many facilities, would be abysmal to the local community. More dangerous accidents would occur, without a doubt.

I35-2 Also, as everybody who live in Alpine knows, it is a very high fire danger area. And an auxiarlly effect of the increased traffic is also the danger to slowing down critical evacuations in the event of a fire. Both for people who may be at the park and, critically, for the residents along South Grade Road and adjacent residential areas.

I35-3 These concerns are real and have been completely ignored or disregarded by the EIR. I am very concerned that the project is being give a "green light" for political reasons and not for the good of the neighborhood.

June E. Lundstrom
3584 Blackwolf Dr.
Alpine, CA 91901
408-398-1428

Sent from Mail for Windows

James Mason, MD
2011 Via Dieguenos, Alpine, CA 91901
drstemcell@yahoo.com

Sunday, November 14, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

I36-1 Thank you for the opportunity to comment on the Alpine County Park Draft Environmental Impact (DEIR). As a 28-year resident of the rural town of Alpine, I have multiple concerns regarding the DEIR as it pertains to this proposed park, its scope, need, and development.

I36-2 Of primary concern is the biology of the proposed park (reference DEIR section 4.4 Biological resources). The proposed County park is physically contiguous with the Wrights Field Ecological Preserve which carries MSCP designation. This environment is a unique 80-million-year-old geological river bed now characterized as Lusardi Formation. The resultant ecosystem is a very rare combination of native grassland and Engelman Oak woodland. Native grassland is a rare and diminishing environment is California constituting less than 2% of flora.

I36-3 Within this domain are multiple sensitive and threatened species including Western Spadefoot Toad, Ferruginous hawks, and protected species such as the Quino Checkerspot butterfly. Of note, the food source for larval Hermes Copper butterflies, Rhamnus corcea, exists on the County land as well as Wright's Field.

I36-4 At this location, the grassland (Valley Needle Grass) extends from Wright's Field on the west to South Grade Road on the east. The proposed Alpine County Park as designed will have a devastating impact on the Native Grassland as well as avian foraging habitat. There will be at least a 65% reduction in grassland on the 97 county acres.

This leads to the following questions:

I36-5 1. Given the paucity of native grasslands (VNG) in California, how can this be mitigated? Is it legal to mitigate native grassland with non-native grassland or other?

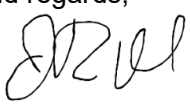
I36-6 2. Previously in 2009 the County determined that this land was non-mitigable for a high school, which is a similar level of development. Given that there has been no major change in the environment, except perhaps even less statewide native grassland, how is it possible that it can be mitigated now?

I36-7 3. Given the heavy non-filtrating clay soil, how will water damage to the fragile ecosystem of Wright's Field, which lies downhill from the county land, be averted?

I36-8 4. Finally, given the damage that will likely occur to the grassland etc. and the difficulty with mitigation, why was a passive natural park alternative not included in the DEIR?

I36-9 I truly appreciate the opportunity to comment and state my concerns regarding the Alpine County Park DEIR.

Kind regards,



James Mason, MD
Tel. 619.302-5534
drstemcell@yahoo.com

From: annie norton <mosaicsbyannie@cox.net>
Sent: Monday, May 2, 2022 3:38 PM
To: CEQA, CountyParks
Subject: [External] Alpine Park Project SCH#2021030196

To Whom It May Concern:

I37a-1 Please accept these following comments as supplemental to the comments I previously sent regarding this project.

I37a-2 There is another very viable **alternative location** to this planned park which would satisfy most, if not all, anticipated requirements without changing the entire town's environment, would better suit the needs of the population due to its central location and diminish and perhaps totally eliminate the costly impacts to safety,

I37a-3 fire hazards, traffic, noise and light pollutions that will undoubtedly occur if this project was to remain in the proposed site. In addition, it is already hooked up to the sewer and the electrical and water already exists.

I37a-4 That site exists today as the **old Alpine School District's Administration site located on Administration Way**. This ample site is located near the CVS building that meets with Arnold Way and Tavern Road. This site has existing ball fields with plenty of additional disturbed land with buildings that could easily be upgraded to incorporate design aspects for the proposed park. Presently this site is not being used. It would be a win-win for our community and for the county to re-purpose already disturbed property that is presently falling into the abandoned category. The Department of Parks actively works with schools so this remedy is quite obtainable.

Please seriously consider this alternative location.

Sincerely,

Annie Falasco Norton

From: Courtney Norton
To: CEQA, CountyParks
Subject: [External] Alpine Park Project (SCH No. 2021030196)
Date: Monday, November 15, 2021 8:25:07 AM

Please confirm receipt.

Courtney Norton

1457 Louise Drive

Alpine, CA 91901

November 15, 2021

Anna Prowant

Biologist and Land Use/Environmental Planner III

Resource Management Division

County of San Diego, Parks and Recreation

5500 Overland Avenue, Suite 410, San Diego, CA 92123

By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

I38-1 Thank you for the opportunity to comment on the proposed Alpine Park Project's (Project) Draft Environmental Impact Report (DEIR). I am a 30+ year resident of Alpine. I grew up playing in Wright's Field Preserve and on the County owned property. The grasslands have shaped who I am today and taught me to love open space. The destruction of this land is simply uncalled for. Once it is gone, it is gone forever.

I38-1 cont. I am disappointed and beyond concerned with how this document was written with complete disregard to the direct impacts this project will have on Wright's Field Preserve.

I38-2 Safe access has not been addressed properly. I am a homeowner in the Alpine Village. My property is 2 miles from the proposed park via Alpine Boulevard and South Grade Road. For me to access the proposed park by foot, I would be putting my life at risk by walking on South Grade to get there. My other option is to walk to Olivewood Lane (a private road with signs stating "No access to Wright's Field"). So trespass, and then hike through Wright's Field to the park. The DEIR fails to mitigate for the increased foot traffic through Wright's Field Preserve (DEIR 4.16-7). How is this equitable for the community of Alpine?

I38-3 Traffic concerns with regards to fire evacuation: I've lived through countless fires that have ravaged the community of Alpine. A majority of the fires have directly affected the community of Palo Verde Ranch. The neighbors in that community have two ways out: on Via Viejas and then in times of emergency via a gate that is opened into Rancho Palo Verde Estates. The lack of analysis (DEIR 4.20.5) in the DEIR on the impacts the proposed park will have on this community are neglectful and dismissive. How can the San Diego Department Parks and Recreations (DPR) claim there is no significant impacts?

I38-4 The community has requested, time and time again, a passive park alternative with off-site amenities. DPR failed to include this reasonable alternative (DEIR 6.1). Please include the analysis of a passive park with off-site amenities.

I38-5 Please make sure that I receive all updates and meeting notices on this project, along with notices of any additional opportunity to review related plans that were not yet released for public comment that relate to the Project at courtney.norton88@gmail.com and the mailing address above.

Thank you for taking my comments.

Sincerely,

Courtney Norton

Kyle Ogle and Dominique Norton
2623 Calle de Compadres
Alpine, CA 91901

November 15, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

Thank you for the opportunity to comment on the proposed Alpine Park Project's (Project) Draft Environmental Impact Report (DEIR). We are disappointed to read that many of the issues and concerns that we raised in our Notice of Preparation Comment Letters dated 4/3/2021 on page 169-170 and April 7, 2021 on page 207-210 were not incorporated in the DEIR.

I39-1 I (Dominique) grew up in Alpine and spent countless hours at the proposed park site and Wright's Field MSCP Preserve (Wright's Field) as a child which fostered my love and appreciation for our environment and shaped the person that I am today. When I was a child, I stood in front of the San Diego County Board of Supervisors (BOS) and pleaded for the protection of what is now known as Wright's Field. I remember vividly attending the meeting in person with my handmade posterboard that said, "Save the Field, protect it for our future generations". Here I am years later, pleading for the continued protection of this land for my children, and our future generations.

Our family purchased our home in late 2020 at the corner of South Grade and Calle de Compadre. We moved our family from Santa Clara to Alpine to escape busy San Fransisco Bay Area city life. We were drawn to the open ruralness that Alpine has to offer. Our property offers everything we were seeking in a new home: quiet open space, beautiful sunsets, and dark skies to enjoy the stars with less traffic, crime, noise and pollution.

I39-2 We were aware that the County Department of Parks and Recreation (DPR) had planned to develop a small passive park across the street from our new home. We were hopeful this park would be done in a way that would honor the space and finally protect the resources in perpetuity, which is what we understood the community, Alpine Community Planning Group (ACPG) supported (picnic tables, small parking lot, trashcans), and previous Supervisor Diane Jacob had promised the community when the land was purchased in 2019. We are extremely unhappy to learn that the County did an about-face and developed a 25-acre active recreation park to "meet their matrix" while utterly disregarding what the community has wanted for

I39-2 cont. decades. We are equally sad to learn that DPR counts active and passive acres equally to meet their metrics yet choice to move forward with the plan to develop an active park despite DPR mission to "...enhance the quality of life in San Diego County by providing exceptional parks and recreation experiences and preserving significant natural resources."

I39-3 The Project site is already enjoyed daily and offers beneficial use to the public. It is 96.6 acres of open space, made up of native grasslands, Engleman oak woodlands, and coastal sage scrub, and is home to listed species and species of special concern. This is already a location we can share with our children in its current state and use it as a teachable moment that they too should learn to respect our resources and fight for the protection of our environment. If not, what world are we leaving them?

I39-4 We know now, more than ever, as a result of the COVID-19 pandemic that the access to open and green space is vital to our physical and mental health, and wellbeing. Peer reviewed literature supports that access to passive open space has higher value than active parks with amenities, especially if the amenities are not maintained. Alpine could continue to benefit from the use of the Project site as a passive park with minimal cost to the County while "preserving significant natural resources." Why do we have to destroy our natural resources to construct a manmade park when literature has clearly stated passive parks offer higher value for human's physical and mental health?

I39-5 The County has a history of not maintaining their existing facilities and regularly fails to construct and retrofit their facilities in compliance with the American Disability Act (ADA). How can Alpine expect that the Project site would be managed any differently than other parks throughout the County that have fallen to disrepair once the parks construction is completed? The specific design of the park is unclear. Does the Project include an ADA accessible playground?

I39-6 We are shocked that a public agency would be more interested in spending $28 million on an active Regional Sports Complex over preserving the Project site, which would result in minimal cost to the County and further DPR's mission. It is discouraging that the County would choose to develop this land over creating a passive park to honor, respect, and maintain the integrity of this space, especially considering the County's priority to preserve open space and develop a sound Climate Action Plan, and Governor Newsom's 30 by 30 initiative. How will this Project be in alignment with relevant federal, state, and local initiatives?

I39-7 DPR has told the community on numerous occasions that the proposed park is a local park intended for the local community of Alpine. However, according to the DEIR the park is designed to be a Regional Park (DEIR page ES-6). This became incredibly clear at the October 20**,** 2021 BOS meeting when DPR requested approval for a resolution to apply for Proposition (Prop) 68 Statewide Regional Park Grant Program funding for use of the construction of a Regional Park in Alpine. Per the material provided for this agenda item (https://bosagenda.sandiegocounty.gov/cob/cosd/cob/doc?id=0901127e80db09ba):

> Page 1 states to be eligible for Prop 68 funding, the proposal must be a "Regional Park" which attracts "visitors from at least a 20-mile radius or a county-wide population". Page

I39-7 cont.

4 states "DPR is applying for grant funds to support the construction of...parks that attract visitors county-wide". There is NO denying this is a destination park expected to attract 500 daily visitors but how will this park then comply with the greenhouse gas (GHG) reduction initiatives to reach our climate goals if it is to attract visitors regionwide which are not adequately analyzed in the DEIR? How will this park comply with San Diego Association of Governments' (SANDAG) Regional Plan, expected to be adopted in December 2021, to increase the use of public transit when no public transit exists to this site?

I39-8

Page 1 states Prop 68 funding is "to support projects that enhance environmental and social equity" however without safe access how will this be achieved? The DEIR fails to address traffic and safe access issues. Rather, cumulative impacts of efforts currently underway to improve safe access to the park were not analyzed and mitigated for in the DEIR. These include the Alpine Loop Proposal being driven by ACPG and Department of Public Works, and the planned improvements to the trails on Wright's Field being pursued by Back Country Land Trust under a SANDAG grant – both of which were stated to improve access to the Project site at recent ACPG meetings. South Grade Road and Calle de Compadres are currently being resurfaced by Department of Public Works. In addition, at a September 2, 2021, meeting held by DPR, DPR stated safe access from the Village (Alpine's town center) is available via Olivewood Lane and stated on multiple occasions that Olivewood Lane is a public road. Olivewood Lane is NOT public, it is a private lane, thus does not offer safe access from the Village. South Grade Road does not offer sidewalks/pedestrian access or bike lanes and unfortunately has seen too many deaths and hit-and-run accidents. How can the County ensure that this project will "enhance environmental and social equity" when it is destroying highly sensitive biological resources while not offering safe access to the park? Should have the above-mentioned improvements been included in the DEIR to assess the impacts and necessary mitigation?

I39-9

Page 2 states "the recreational improvements at Alpine Park...will be located in...unincorporated communities that do not currently have a County park". However, Alpine has access to existing County parks, including Flinn Springs County Park, 10 miles from the center of Alpine and Pine Valley County Park, 17 miles from the center of Alpine. County of San Diego's Parks Master Plan (December 2020, page 144) includes the level of service calculations for the Alpine Community Plan Area which states, "due to its proximity to seven large county parks, Alpine's regional park standard and goal is not only met, but exceeded by 1,339.71 and 1,249.64 acres, respectively." How can the County support the development of an additional Regional Park given the metrics included in their own Master Plan? Why would the County deceive to the community on the scope and intent of the proposal? How can the County justify wasting public resources to build a redundant facility? DPR counts active park and passive park acres equally to meet their matrix of park land to people. Why has DPR not used an opportunity at this Project site to increase local park acres, which is deficient according to

I39-9 cont. their Parks Master Plan, by using the site as a passive park intended for use by the local community?

I39-10 The County Parks Master Plan also states that Alpine is an aging population which does not support the need the Project. In addition, SANDAG's draft revised Regional Plan Table F.3: Total Housing Units by Jurisdiction https://sdforward.com/docs/default-source/2021-regional-plan/appendix-f---reg-growth-forecast-and-lu-scenario.pdf?sfvrsn=d144fd65_2 (expected to be adopted in December 2021) does not show population growth for unincorporated areas of San Diego County after 2035. Future populations projections do not support or justify the scope of the Project. DPR has stated on multiple occasions this is a park for the future population of Alpine. On what grounds is DPR using to justify this claim?

I39-11 Alpine does not need a Regional Park, nor does it need a Sports Complex. Per the State Park's Prop 68 "Final Application Guide for the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 Regional Park Program (RPP)" (page 5, https://www.parks.ca.gov/pages/1008/files/Final_Regional_Park_Program_Application_Guide_10.29.20.pdf), a "Regional Sports Complex" is defined as "athletic fields (...baseball...), athletic courts/course (basketball, "futsal", tennis, pickleball, golf, etc.)". How can a public agency mislead the public on the true intent of the Project, perhaps influenced by this funding source and at the same time deny the Project is a Sports Complex that will attract regional visitors?

I39-12 Renovations to the existing facilities at Joan MacQueen Middle School sport amenities under Joint Exercise of Powers Agreement (JEPA) using Park Land Dedication Ordinance (PLDO) is going before the BOS on November 17, 2021, which would duplicate many of the amenities included in the Project. Numerous letters included in the DEIR's appendix were submitted by members of the community during the Notice of Preparation public comment period, many of which asked DPR to include an alternative in the DEIR which would provide a passive park at the Project site and offer off-site amenities at other locations or to improve existing faculties. DPR failed to include this alternative and quickly dismissed "mini-parks" in the DEIR as a feasible alternative. DPR has told the community on countless occasions that they want their own standalone County facility at this location. DPR has also stated that they do not enter into agreement with other property owners to do exactly what they are proposing at Joan MacQueen Middle School, and at other facilities in Alpine in the past. Why was the passive park with off-site amenities alternative that the public requested to be analyzed dismissed and not adequately included and analyzed in the DEIR? Why is DPR willing to pursue a JEPA and PLDO fund for Joan MacQueen Middle School improvements but not willing use these to locate and develop other sites which would better serve the community while not destroying the resources? How can the County justify the use of public funds to improve amenities at Joan MacQueen Middle School while duplicating amenities included in the Project?

I39-13 Page 4 states that the park is at the intersect of South Grade and Via Viejas (should be Calle de Compadres where the main entrance is located). It further says that "design of the park is based on input received during four public outreach meetings conducted between May 2019 and January 2021". Page 5 states, "if awarded, the grant funding would be applied to the project in order to realize the community's vision". The community learned as a result of the BOS October 20, 2021 meeting that DPR requested a resolution to apply for Proposition 68 funding to construct the Alpine Park Phase I and the Project would be constructed in three phases. However, the DEIR does not define phases for construction but rather states "construction would occur in one phase over 16 months and is anticipated to begin in fall 2022" (DEIR page 3-5). Why does DPR continues to present phased construction in agenda items presented to BOS when the DEIR does not define the Project in the same way? Why does DPR continue to mislead decisionmakers and the public with the specifics related to the Project?

I39-14 The agenda material stated the design "is based on input received during four public outreach meetings". The agenda material also states, "if awarded, the grant funding would be applied to the project...to realize the community's vision". Why does DPR continue to ignore the "community's vision" and dismissed all opposition received to date?

I39-15 From February 2019 when the BOS approved the acquisition of this property until late summer 2020, Alpine had been led to believe that the park at this location would be minimal in size and passive in nature. No one imagined the park would balloon up to 25-acres nor that it would be a Regional Sports Complex Active Park. In late 2019, DPR presented the proposed scope of the park for the first time to the public. Over the 2021 calendar year, we attempted to engage with the Alpine Community Planning Group at monthly meetings to express concerns with the scope and amenities included in the prosed park which were dismissed, and one case ACPG members called the community NIMBYs and ungrateful for the park that the ACPG had been working to develop over the last 20 years. We tried to engage with DPR to express concerns at numerous meetings and on one occasion was told by DPR staff that this Project is a "done-deal and to get over it." DPR has not been receipted of our concerns, as directly affected adjacent neighbors to the Project site. Why has our concerns at multiple public meetings and voiced in our Notice of Preparation comment letter been dismissed? Why were the true impacts to neighbors not adequately analyzed and mitigated in the DEIR?

I39-16 The DEIR states the "...County DPR also held a virtual scoping meeting on March 30, 2021" (DEIR page 1-3) that was posted as a YouTube video which did not offer a forum for public interaction. The DEIR states "Comments received...during the public scoping meeting were used to determine the scope of this Draft EIR. The comments are summarized in Table 1-2" (DEIR page 1-3). To clarify, the comments that were posted to the YouTube video were not incorporated in the DEIR Table 1-2 (copy of comments posted to the YouTube video are included following this letter.) Is a recorded Scoping Meeting posted to YouTube as part of the Notice of Preparation without public involvement in compliance with requirements to hold a scoping meeting under CEQA? How can the public trust that our efforts to participate in this public process was truly taken into consideration to "determine the scope of" the DEIR?

I39-17 The link included in the "Notice of Availability of a Draft Environmental Impact Report for the Alpine Park Project" dated September 30, 2021 and available at https://www.sdparks.org/content/dam/sdparks/en/pdf/Resource-Management/Alpine%20County%20Park_Draft%20EIR%20Notice%20of%20Availability%20and%20Contact%20Information.pdf includes a non-functioning link. A correction email was sent out following this error, but the notice that was mailed was not resent. How can a public agency expect the public to navigate this seemingly overwhelming CEQA process if it does not provide accurate information to the public on how to participate in the process?

I39-18 Generally, the DEIR is written very unprofessionally with numerous inconsistent uses of naming (i.e. Backcounty Land Trust vs Back Country Land Trust) throughout the document. My name is also (Dominique Norton) spelled wrong in the DEIR section that includes comments provided during the NOP. The DEIR is written so vaguely in areas that it is irresponsible to expect the public to be informed as to the actual proposal of the Project and to provide thoughtful comments. For example, the document does not define if septic tanks and leach fields will be used on site or if a connection to the sewer line would be constructed. The DEIR states "for utilities, the project would either connect to the existing sewer system or include a septic system to serve the restroom facilities, administration facility/ranger station, and volunteer pad...it will connect to the existing sewer line within Tavern Road, west of the project site, or the existing sewer line within the northern portion of South Grade Road near the intersection with Alpine Boulevard" (DEIR page 3-3). The DEIR is too vaguely written to understand the proposed

I39-19 option to manage waste and does not define how the use of onsite septic tanks and leach fields will not affect neighboring properties or if it would pollute our groundwater. How will smell from the regular pumping of waste from the tanks be mitigated to not affect neighboring properties or visitors to the Project? As noted in our NOP comment letter, these concerns needed to be analyzed in the DEIR which were not adequately addressed. Impacts and mitigation measures for the construction of the sewer line are not defined in the DEIR. Why was the inclusion of the management of waste so vaguely included in the DEIR? How can the public comment on the impacts and mitigation measures if they are not adequately included in the DEIR?

I39-20 The DEIR does not present various management plans that it will rely on to mitigate for the Project's impacts. For example, the Habitat Conservation Plan (HCP) is not drafted nor has the Incidental Take Permit for Quino checkerspot butterfly been obtained from the US Fish and Wildlife Serve and included for review at during the DEIR comment period. How can the community be ensured that impacts are being fully address without inclusion of the mitigation measures in the HCP as part of the DEIR? Is the omission of these Plans considered deferred mitigation and is that allowed under CEQA? We request to be notified of any public comment period for any and all supporting plans that relate to the Project.

I39-21 The DEIR claims that "The project is consistent with the Alpine Community Plan..." (DEIR page 1-3). This is an inaccurate statement for the following reasons (elements and polices that the DEIR is inconsistent with are noted below, note the policies and recommendation included are

directly related to the Project and reflect their numbering included in the Alpine Community Plan):

1. Element 6 NOISE
    a. GOAL – To provide standards by which the community may determine when noise levels are in excess of what may be considered as damaging and not desirable
    b. POLICIES AND RECOMMENDATIONS
        i. Encourage land use and circulation patterns that will minimize noise in residential neighborhoods.
    c. DEIR is inconsistent with Element 6:
        i. The Project will create noise levels that are in excess of what is "considered as damaging and not desirable" in that the proposed park will not "minimize noise in residential neighborhoods." The DEIR includes some attempt to mitigate for the increased noise impacts by constructing a berm around the Project, but the berm does not wrap around the entire footprint of the Project. Nor will it mitigate for the way noise travels in the vicinity of the Project due to the surrounding hillsides which amplify any noise generated in the area. The residential neighborhoods adjacent to the Project will be directly impacted and thus the mitigations included in the DEIR are not adequate to not be "considered as damaging and not desirable." How can DPR ensure that neighbors will not be impacted by the increased noise caused by the Project?

I39-21 cont.

        ii. The operating hours included in the DEIR is unclear. The DEIR states "The project would be open to the public from sunrise to sunset" (DEIR pages ES-2, 1-1, 3-5) but then states that "the only exception is for official use of the announcer's PA systems or other devices required for proper operation of the intended and approved activities...End all onsite events no later than 10:00 p.m." (DEIR page 4.13-20). Other existing Regional Parks in the area operate from 9:30 am to half an hour before sunset at Pine Valley County Park (https://www.sdparks.org/content/sdparks/en/park-pages/PineValley.html) or from 930-sunset at Flinn Spring County Park (https://www.sdparks.org/content/sdparks/en/park-pages/FlinnSprings.html). The current mitigation included to reduce effects of noise are not adequately mitigated. How will the County modify the operations to mitigate noise impacts to residential neighborhoods?

I39-22

        iii. The DEIR states "the vegetated berm would be of varying height, but would generally build in height from the north to the south in order to obscure direct reviews of the parking lot of users of South Grade Road and adjacent residents" (DEIR page 3-2). However, the berm starts just south of the dog parks which is located adjacent to South Grade Road and directly across the street from an abutting property (our home). The berm therefore does not fulfill the intended purpose to mitigate noise and site

I39-23

I39-23 cont.

from the neighbors directly across the street. How will noise be mitigated to reduce impacts to the neighborhoods surrounding the Project?

iv. As noted in our NOP letter "We did not choose to live next to heavy machinery needed for construction, nor did we choose to live next to constant traffic, idling cars at the proposed four-way stop, increased number of people's voices, endless dogs barking, car alarms going off, amplified music at events held at the pavilion, wheels at the bike and skate park, and all conducted over an abundance of additional concrete needed to complete the park..." The DEIR has failed to address the concerns provided in our NOP letter. What will the noise impacts be during construction to our family and our neighbors and how could these be better mitigated? How will DPR mitigate for the noise that will affect our home (see Figure 4.13-2) which is anticipated at 60-65 decibels? Will we be subjected to noise impacts from 7 am – 7 pm or as late as 10 pm in some cases? How can mitigations be improved to reduce the impacts to the surrounding neighborhoods? How will impacts to the increased noise generated by the Project be mitigated to mitigate for the impacts on local wildlife that rely on the property and Wright's Field?

I39-24

2. Element 9 CONSERVATION
    a. GOAL – Promote the well-planned management of all valuable resources, natural and man-made, and prevent the destruction and wasteful exploitation of natural resources, where feasible.
    b. POLICIES AND RECOMMENDATIONS
        i. Encourage the protection and conservation of unique resources in the Alpine Planning Area.
        ii. Important plant, animal...water, cultural and aesthetic resources in the Alpine Plan area shall be protected through utilization of the Resource Conservation Area designations and appropriate land usage.
        iii. Agencies regulating environmental reports and analyses required by the California Environmental Quality Act (CEQA) may require supplemental studies for projects with land located in RCAs, if necessary.

I39-25

        vi. Utilize all measures to preserve rare, threatened, or endangered plant life; including on-site protection through open space easement...
        vii. Protect the rare Engleman Oak, wherever possible.
        viii. Promote the planting of trees with an emphasis on species with maximum respiration rates...
        ix. In reviewing discretionary permits, special attention shall be given to oak trees and boulder outcroppings.
        xiv. Protect surface and groundwater supplies from pollution.
        xvii. Encourage the use of reclaimed water for agriculture, irrigation, recreation, industry, and other appropriate usages.
        xviii. Conserve water and biological resources of El Capitan Reservoir, Loveland Reservoir, and other water bodies and streams by utilization of

Resource Conservation Area designations. Waste water discharge into water shall be controlled.

xix. Encourage the use of grey water for irrigation as soon as possible.

xx. Encourage new development to install dual water disposal systems so grey water can be utilized for irrigation.

I39-25 cont.

xxi. Prohibit the use of herbicides in the Alpine Planning Area, particularly in the proximity of El Capitan and Loveland Reservoirs and their tributaries.

xxii. Support strict controls over air pollutants.

xxiii. Support the Regional Air Quality Standards (RAQS).

xxv. Support standards for strict controls over light pollution to preserve the dark night sky characteristics of Alpine.

c. DEIR is inconsistent with Element 9:

i. The Project is inconsistent with this element and will cause "destruction and wasteful exploitation of natural resources".

I39-26

ii. The DEIR states that "the Alpine Community Plan designates Resource Conservation Areas (RCAs), which are localities identified as worthy of special efforts to protect important natural resources" (DEIR page 4-1.2). How can the Project be considered to "protect important natural resources" when over 60% of the native grassland is planned to be graded?

I39-27

iii. The DEIR states "A dog park would be included near the north entrance of the park, adjacent to South Grade Road" (DEIR page 3-3). There are huge safety issues with the dog park's location next to South Grade which could lead to deaths of dogs or the public if a dog gets off leash and runs in to traffic (this was the cause of a previous tragedy at this exact location). Research shows health and safety issues are associated with dog parks. How will the rules for the dog park be enforced? How will the neighbors and the Project site be protected from run off to "protect surface and groundwater supplies from pollution?".

I39-28

iv. The DIER states the Project will "Maintain Areas of Native Vegetation Along the Project Boundaries. All boundaries of the Alpine Park shall be planted with areas of native vegetation to provide a transition from existing rural fields and native habitat to the landscaping and development of the County Park. Drought-tolerant and native plants shall be located along the eastern and southern boundaries along South Grade Road, on the western boundary along Wright's Field Preserve, and on the northern boundary." How will the Project's landscaping comply with the Alpine Community Plan and the County's new policy related to the use of natives in landscaping?

I39-29

v. The DEIR states that the "remaining 70 acres for open space/preserve" but how can the impacts and mitigation be evaluated if the Habitat Conservation Plan has not been developed? How will the impacts of the Project be mitigated to no cause spillover effect to the Project's preserve or Wright's Field?

vi. The DEIR states that water "would be provided by Padre Dam Municipal Water District." (DEIR page 3-4) The use of potable water for landscaping is not in compliance with the Alpine Community Plan encouraged use of "grey water for irrigation." How can a public agency advocate for such an irresponsible misuse of this finite resources as the state enters another drought year and reduction of use has been required statewide?

I39-30

vii. As noted in our NOP comment letter "our world is in a climate crisis and water is a finite resource. The proposed park includes water-guzzling manicured turf and landscaping. As new property owners, we are considering when to drill a well for our use and would then share an aquifer with the park. We are concerned that we will lose our well water if the park starts pumping." How will DPR ensure that the aquifer is not affected by toxins produced at the Project?

viii. "Water demand is anticipated to be approximately 16,471,273 gallons per year." (DEIR page 3-4) Who is responsible for covering the cost of this bill?

ix. The Alpine Community Plan states the use of herbicides should be prohibited "...in the Alpine Planning Area, particularly in the proximity of El Capitan and Loveland Reservoirs and their tributaries." How will the use of herbicides and pesticides needed for landscaping be managed as to not run off into local neighborhoods, on to the Project's preserve or Wright's Field?

I39-31

x. The Alpine Community Plan states "support strict controls over air pollutants" yet the DEIR anticipates an increase of 500 people with 480 added daily trips (DEIR page 4.17-7) resulting in increased emissions from regionwide visitations. The DEIR states "Climate data from the Alpine monitoring station (COOP 040136) was used to characterize the varying climate conditions near the project site" (DEIR page 4.3-2). How far away is this site and is it appropriate to used for the Project? The DEIR goes on to state "The ambient monitoring station closest to the project site is the Alpine station (CARB 80128), which is approximately 1.5 miles southeast of the project site. The pollutants monitored at the Alpine station are O3 and NO2. Monitoring values for CO, PM10, and PM2.5 were obtained from the next closest monitoring station, which is the El Cajon-Lexington Elementary School located approximately 11 miles west of the project site" (DEIR page 4.3-6) Ozone, respirable particulate matter, and fine particulate matter are classified by the state as "nonattainment". Ozone is the only pollutant recorded at the CARB 80128 site with respirable particulate matter, and fine particulate matter being recorded at the El Cajon-Lexington Elementary School location 11 miles away (note that the CARB identification number was not provided for this site). How reliable is the data from the sensor that is 11 miles away from the Project? Can DPR collect data on site or at adjacent properties to more accurately

I39-32

provide a baseline prior to construction and operations which will increase the release of pollutants? The DEIR fails to "support strict controls over air pollutants" with

xi. The DEIR continues on to state, "The concentration of ozone at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure." (DEIR page 4.3-3) And states "The EPA (2002) has determined that diesel exhaust is "likely to be carcinogenic to humans by inhalation" (DEIR page 4.3-5) "The closest residences are immediately adjacent to the northeast and south of the project site, across South Grade Road" (4.3-8). How long is duration of exposure critical for residents adjacent to the Project, especially considering that residents are medically fragile children and an asthmatic? How can DPR ensure that the health and wellbeing of all residents in the surrounding neighborhoods?

I39-32 cont.

xii. As noted in our NOP letter "Alpine is a dark sky town. The current proposal includes safety lighting along with light for the volunteer housing. When asked, County Parks stated that ball field lighting is not currently included in this proposal but if that is something Alpine wants it can be incorporated. There will be motion sensor lights that will undoubtedly go off all night long as a result of the active wildlife on the property (owls, coyotes, mountain lions, bobcats, etc.) This light will destroy the dark sky." The DEIR states "All permanent exterior security lighting would be installed such that lamps and reflectors are not visible from beyond the project site" (DEIR page 3-3); however, if the berm is not built fully around the active park, the lighting will be visible by neighbors on the northeastern side. In addition, the times noted in relation to noise states that noise can occur as late as 7 pm or under special circumstances as late as 10 pm. How can the DEIR claim the Project will " preserve the dark night sky characteristics of Alpine" which activities could continue well after sunset? How will the lighting be beter mitigated to reduce impacts to the dark night sky community?

I39-33

3. Element 10 OPEN SPACE
    a. GOAL – Provide a system of open space that preserves the unique natural elements of the community, retains and extends areas of open space that are recognized as valuable for conservation of resources, open spaces uses that promote public health and safety. Open space areas...that harmonize with and help integrate conservation and recreation components, creating a well balanced community of natural plant and animal habitat and humans alike.

I39-34

    b. Findings
        i. ...Open space is an outstanding characteristic of Alpine as a community and, along with the uses and pleasures it affords, comprises the "rural atmosphere" that Alpine residents wish to preserve...The citizens of Alpine appreciate the preservation of the natural features of the land and

historical landmarks as extremely important. Alpine is unique in many respects and many opportunities remain to preserve the topography, major streambeds, ridgelines, and historical sites of our area...The Resource Protection Ordinance is intended to protect...natural and unique formations. Special care should be taken to maintain open space corridors that connect larger permanent open space uses, such as parks.

c. POLICIES AND RECOMMENDATIONS
    i. Encourage the development and preservation of a system of open space for wildlife corridors linking residential areas to permanent open space in the Cleveland National Forest and nearby lakes and wildlife preservation areas.
    iii. Incorporate publicly-owned land into a functional...open space system, wherever feasible.
    viii. Encourage the consolidation of open space easements to preserve resources lands owned by public agencies or in open space areas.
    xi. Enhance health and safety and conserve natural resources through the preservation of open space.
    xii. Provide recreational opportunities through the preservation of open space areas.
    xiii. Preserve and encourage publicly and privately-owned open space easements.
    xiv. Explore all funding sources for acquisition, upkeep, and protection of open space/recreation preserves.

I39-34 cont.

b. DEIR is inconsistent with Element 10:
    i. The Project will fragment the existing wildlife corridor that allows for the migration and movement of native species from Cleveland National Forest to MSCP lands. Why was the property not preserved as a passive open space area that would have "Provide[d] recreational opportunities?"
    ii. Why was the Project not designed as a passive park and thus an extension of Wright's Field and Findel Ranch to create a "functional...open space system" which would have "enhance[d] health and safety and conserve natural resources"?

I39-35

    iii. Why wasn't the Prop 68 funding pursued to the "upkeep, and protection of open space/recreation preserves"?

I39-36

4. Element 11 RECREATION
    a. GOAL – 1. A balanced system of both natural and improved parks with recreational facilities and services that incorporate outstanding natural features for recreational opportunities, enrich the lives of Alpine residents, and meet the needs of the community. 2. Recreational uses that are compatible and do not interfere with the safety and tranquility of private residents.

I39-37

    b. POLICIES AND RECOMMENDATIONS
        i. Establish priorities and encourage the early identification and acquisition of local park sites in order to minimize public costs.

I39-37 cont.

ii. Acquire parkland to develop neighborhood parks to the extent that funds are available.
v. Prior to the expenditure of Park Lands Dedication Ordinance (PLDO) funds of local park development in the Alpine Planning Area, a funding agency, a community services district, or other taxing agency or nonprofit organization must be identified for local park maintenance and operation services.
vi. Development of local park and recreation facilities will continue to be coordinated with local school facilities by establishing joint powers agreements to promote joint development operation and maintenance.
viii. Facilitate a local park acquisition program that will use all possible acquisition and funding mechanisms.
ix. Encourage the acquisition and development of park lands that will protect outstanding scenic and riparian areas, cultural, historical and biological resources...

I39-38

a. DEIR is inconsistent with Element 11:
   i. As noted in our NOP letter, "The project site is adjacent to Wright's Field Preserve, which is managed by BCLT as part of the Multiple Species Conservation Program (MSCP) of the County of San Diego." The County owned property is identified in the MSCP as Pre-Approved Mitigation Area (PAMA) land.
   i. As discussed at length above, why wasn't the Project designed in a way to meet the noted priorities and recommendations for Element 11?

I39-39

The proposed park currently includes a new four-way stop feeding all traffic into the park at the intersection of Calle de Compadres and South Grade Road (DEIR page 4.17-9), exactly where our home is located. The idling cars at this intersection will increase congestion, noise, and air pollution. South Grade Road is an extremely dangerous two-lane unimproved country road. There have been several people who have lost their lives on this stretch of South Grade Road of which one death occurred directly abutting my property and the proposed dog park. Why were the impacts not mitigated for in the DEIR?

I39-40

The County states that there will not be a parking fee to use the proposed park at this time, but there is no guarantee of the future, nor is it specified in the DEIR. Parking onsite would help to reduce street parking, congestion, accidents and fatalities. If a parking fee is instituted, like at many other County parks, patrons will find other locations to park their vehicles to avoid paying the fee. In this situation, it will remain the same with patrons parking on South Grade Road and Calle De Compadres exasperating this major safety issue. The DEIR states that "During operation, 'No Parking' signs may be installed along the shoulder of South Grade Road, if deemed necessary by the County Department of Public Works (DPW) Traffic Division, to prevent potential overflow parking on South Grade Road" (DEIR pages ES-2, 3-5). 'No Parking' signs would be installed along the shoulder of South Grade Road, as deemed necessary by the Department of Public Works." Why is there no mention of "no parking" signs on adjacent

I39-40 cont. neighborhood streets (Calle de Compadres, Nido Aguila, Boulder Oaks Lane, etc). How will overflow parking be mitigated to not impact local neighborhoods?

I39-41 The DEIR states that the Project is "...approximately 1 mile south of the center of the...community of Alpine" (DEIR page ES-2). DPR has stated in public meetings that this is a destination park. DPR made no attempt to improve safe access to the Project. To clarify, the center of Alpine is 2 miles away via Alpine Boulevard and South Grade Road. From the Village, someone could access the Project via Olivewood Lane, private, and via Wright's Field. Why did DPR not account for the impacts of the increased foot traffic and impacts to Wright's Field and provide mitigation for these impacts? The Project will have a spillover effect on Wrigth's Field and will draw exponentially increased usage to Wright's Field. Why is there no mention of impacts or mitigation of these impacts to Wright's Field in Section 4.16?

I39-42 "The quality of the visual character is high because it is an undisturbed rural view that complements the semi-rural residential vicinity, and provides an uninterrupted view of open space." (DEIR page 4.1-2) This park will undeniability change the "visual character" from the public right of ways including South Grade but also fails to address impacts of those who view the Project from public right of ways that look down on the property. "Public views of the project site would be available from South Grade Road; the principal public viewer groups would be motorists and pedestrians within the public road right-of-way..." (DEIR page 4.1-3) Why is there no consideration to the impacts to local neighbors and how the Project could modified to mitigated and reduce those impacts?

"Sources of glare from operation of the project would be from parked vehicles in the parking lot, and photovoltaic (PV) panels that would be installed in the parking lot mounted on overhead structures to power the outdoor lighting...[or] vehicles parked in the parking lots along the eastern portion of the project could result in glare from sunlight reflecting off the glass windshields" (DEIR page 4.1-15). The DEIR does not address impact of glare from public right of ways and neighbors that look down on the Project site or from South Grade. How can mitigation measures be improved to reduce glare from the Project?

I39-43 "In addition, the project would have less than significant impacts related to vehicle miles traveled (VMT), which would be consistent with the goals of Senate Bill (SB) 375 and SANDAG's Regional Plan." 4.3-21) How can the increase if over 500 visitors not result in an increase of VMT, especially considering this is a Regional destination Park?

I39-44 Our concerns stated in our NOP regarding wildfire were not addressed in the DEIR. Alpine is a in a high fire risk area of the County. As a property owner, it is hard to obtain fire insurance as such. This proposed park would increase the fire risk to all abutting neighbors as a result of increased ignition change (onsite BBQs, increased vehicle traffic, irresponsible disposal of cigarettes). This will result in making it even more difficult to obtain and/or keep home owners insurance. The DEIR fails to address the impacts of increased traffic to the need to evacuate by those visiting the Project and those living in neighborhoods adjacent to the Project. How can the DEIR be improved to mitigate for these impacts?

I39-45 On 11/15/2021, I observed a loggerhead shrike on the County owned property. This is a California Species of Special Concern that was not included in the DEIR.

I39-46 We requested in our NOP letter that a smaller nature-based [passive] park be included as an Alternative in the DEIR. We are very disappointed to see the DEIR does not include a passive park alternative nor does it include the evaluation of off-site amenities. This alternative would create little to no impact to the natural resources. Please include a revision to the DEIR that includes the analysis of a passive park with off-site amenities.

I39-47 Please also make sure that we receive all updates and meeting notices on this project, along with notices of any additional opportunity to review related plans that were not yet released for public comment that relate to the Project at dqnorton@gmail.com and the mailing address above.

Thank you for taking our comments.

Sincerely,

Kyle Ogle Dominique Norton

Kyle Ogle and Dominique Norton

Public Comment copied below that was submitted as part of the Notice of Preparation Scoping Meeting YouTube Video; 147 views, March 30, 2021

https://www.youtube.com/watch?v=xyKiPTawDsQ&t=5s

Patrick Williams 7 months ago

The park area measures 28 acres, not including the apparent off park septic drainage field to the north

Frank Landis 7 months ago

Please preserve this video in its entirety as part of the public record on this project. Without a Scoping Meeting and paper handouts, there is no other documentary proof that the County tried to meet the CEQA requirement using this video. Please also preserve the comments here as official comments that go in the record for the project. Thank you.

dqnorton1 7 months ago

The proposed park concept has many components which will cause direct negative impacts to the local neighbors and community of Alpine at large. The impacts include traffic and safe access issues, noise and light pollution, water and septic issues, and impacts to the environment including to the Engelmann Oaks, Quino checkerspot and native grasslands. The proposed park concept will cause spill-over effects on Wright's Field Ecological Preserve and will fragment the MCSP.

I39-48

Patrick Williams 7 months ago

parking area (270+ parking spaces plus utility spaces) amounts to 2.5 acres of parking for "thousands of daily users" per Rhodes and Associates site study.

Courtney Norton 7 months ago

The proposed park concept as it currently stands has many components which will negatively affect the Alpine community and Wright's Field Ecological Preserve. These impacts include biological resources (Engelmann Oaks and Quino Checkerspot Butterflies and the native grasslands), greenhouse gas emissions, transportation and traffic and wildfires.

Please record the comments here as official comments that go into the record for the project. Thank you.

Julie 1016 7 months ago

Alpine community already has a number of indifferently maintained, underutilized parks and recreational facilities designed to provide many of the amenities this project seeks to build. Why add redundant facilities in one large park? As part of the alternative or in parallel negotiations, the County should seek alternate sites (such as Shadow Hills) for the all-terrain bike park, all-wheel park, and the seven acres of sports fields. Multiple distributed sites and options have been identified by the county and by PAH for these larger proposed sports facilities, areas that where

I39-48 cont.

there are fewer impacts, and where they are closer to the people who would use them. These local facilities should be connected by a system of safe walkways, bike paths, and trails. The County should revisit joint use and partnering options with Alpine Unified School District for shared investments in sports field facilities at Shadow Hills Elementary School, Joan McQueen Middle School, and other land-holding/management entities to revitalize and upgrade currently neglected, existing, active-recreational facilities with monies already earmarked and/or raised for such projects, rather than building more of the same facilities.

Alpine County Park: Draft Environmental Impact Report Public Comment Letter

Laurie Nuger
2445 Nido Aguila
Alpine, CA 91901

Date: November 14, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410,
San Diego, CA 92123
CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

I have been a resident of Alpine for 5 years and have enjoyed the beautiful surroundings and quiet rural environment that Alpine is known for. I walk at Wright's Field almost every day with my dog and love the quiet beauty and wildlife. Our family especially enjoys the night sky we are so fortunate to see in Alpine.

I40-1 I respectfully submit the following for consideration and response.

I am in favor of many passive park amenities that will improve the community's enjoyment of a new park, situated within a natural preserve, but very concerned about the impact that this large park scope will bring regarding safety to the community due to access, traffic as well as fire safety. I am also concerned about noise and air pollution, water usage and wildlife and environmental impact.

Traffic and other risks based on current DEIR proposal, which states up to 500 people per day.

Firstly, how is this a community based park if the county is building it to receive 500 people per day. I think all of us would agree 500 people per day is a high use park. This is mostly only seen at high use trails and beaches in San Diego county or city parks. It seems to me that the county is proposing building a "mega park" here in
I40-2 Alpine, on a build it they will come proposition. This is an active wild life area, in an extreme climate most months of the year.
Where is the data or surveys that the county has done to justify the need for a park of this size and scope? What is the cost of maintaining such a park? What is the tax

I40-2 cont. *impact of this project to San Diego at large? What are the additional tax implications to the local community?*

I40-3 **Lack of response in the DEIR regarding bicycle access. Bike access was only mentioned as a reference to the bike 2050 initiative.** A plan for bike accessibility would be an important consideration for providing safer access to this park, large or small. How is the county responding to the Bike 2050 initiative with respect to this or any park proposal?

I40-4 **Sports Field Redundancy and Excessive light and noise pollution in the proposed location.** I live in direct line of sight from the proposed fields and I am concerned about the light and noise disturbances that this proposed park will bring. Additionally, the sports fields are a large part of the environmental and community impact and *I would like to know why the county is not considering other options in our community, where fields could be improved, are being improved, and could mitigate safety and traffic impact of kids getting to and from the park and other costs. Is the county as a whole looking at other options in Alpine to reduce the congestion and traffic safety and redundancy? Why did the* DEIR not provide any data mitigating redundancy and thereby costs in any of the other Alternatives, namely 2, 3 or 4? These concerns have been raised in many of the county led community meetings as an important community topic and the DEIR still does not address these community concerns.

I think there are many residents in addition to myself who were surprised at the county's change in scope as the original county park proposal was a passive park. This original proposal, stated as Alternative 1 in the DEIR is exactly what is reflected in the county's own public outreach data.

I40-5 The community was expecting more of a discussion of options, but even the first Zoom meeting run by the county started with, this is what the county is doing in this parcel, rather than we are exploring the following options. There seemed to be a big jump from lets find out what the community wants to this is what they are getting, during COVID when communication was strained and outreach was limited.

The community deserves additional time to understand the implications proposed here as well as time to provide input to our Board of Supervisors, so they can choose a park that the community wants.

I40-6 Thank you for the opportunity to comment on the Alpine County Park Project's Draft Environmental Impact Report (DEIR).

Respectfully submitted,
Laurie Nuger

From: joyce nygaard
To: CEQA, CountyParks
Subject: [External] Alpine Park Project (SCH No. 2021030196
Date: Monday, November 15, 2021 4:13:43 PM

Hello Ms. Prowant,

I41-1 Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Alpine Park Project. I have lived in Alpine since 1999. Although I now live off of Alpine Blvd. in "downtown" Alpine, when I first moved here I lived just two properties over from the proposed Park. Because of this, I am concerned about some of the conclusions reached in the DEIR, particularly regarding park hours, noise and aesthetics.

I41-2 The County Parks website states that the Alpine Park will be open 7 days a week, from sunrise to sunset. The same statement is reiterated in Section 1.1, Overview, of the DEIR. Yet, page 20 of the Executive Summary states that "quiet hours are from 10 p.m. to 7 a.m." and that "except for special events" all onsite events must end no later than 10 p.m. Page 6 of the Executive Summary states that the project will result in new sources of lighting that could adversely affect nighttime views. Chapter 4 of the DEIR, Section 4.1.3.2 lists County Goal COS-13 "to preserve dark skies that contribute to rural character and to restrict outdoor light in semi-rural lands to retain the quality of night skies." But Chapter 3, Section 3.3.1 states that the proposed parks "outdoor lighting would be solar powered and photovoltaic panels...mounted on six overhead structures over parking spaces." If the park closes at sunset, why the need for so much lighting? Does the sun set at 10 p.m. in Alpine?

I41-3 As stated in my April 7th letter to the County regarding the CEQA for this project (page 211 of the DEIR appendix), I am also very concerned about noise and how it carries in this location. The property is zoned A70, S80, and R-R. Sound levels are limited to 50 dB from 7a-10p and 45 dB from 10p-7a. Data included in the DEIR appendices shows that two skate parks were tested for noise. The park in Lake Forest had a maximum of 15 skaters during test time, with an average sound level of 66.5 dBA and a max of 85 dBA. The park at Ladera Ranch, which is smaller than the skate park proposed for Alpine, had a maximum of 5 skaters and generated sound levels of 59.6 dBA and a max of 74 dBA at 90 feet. These levels were obtained during the day when the skate parks were relatively empty, yet their noise measurements were still higher than the proposed park's zoning allows. Neither of these skate parks is located in a semi-rural area where sound may travel farther with fewer obstructions to block it. The proposed skate park is to be all concrete so sound will be reflected, not absorbed and would be sustained throughout park hours. Readings were also obtained at local soccer games which generated noise levels of 52. dB and 59.9 dB. The DEIR also did not specifically address the sound of basketballs, pickleballs, or baseballs. The mitigation mentioned for noise issues in the DEIR is for the County to enforce its rules for park behavior. Those rules include: dogs must be on a leash, no obscene language, and quiet hours are from 10 p.m. to 7 p.m. How does that mitigate the noise generated by skateboards sliding on rails and clacking on concrete?

I41-4 Figure 4.1-4 of the DEIR shows simulated views of the park property from various areas outside the park. This section states that "the public views of the project site, available from South Grade Road and Wrights Field Preserve would change from expansive rural views to a view of ...recreational development. In fact, "along the southern portion of the project site where the berm would be 12 feet higher than the roadway, the landscaped berm would make up the whole view to the west." As stated in Section 4.1.3.2, County goal COS-11 is preservation of scenic resources, including vistas. But Section 4.1.4.3 states the "visual character of the site would change from the existing wide-open space of vast rural fields to a complex development of several different recreational structures and features large in scale, connected with impervious surfaces in the form of access roads, paths, and parking lots." The DEIR mitigation for this loss of visual character is to plant native vegetation on the edges of the proposed park.

I41-5 In Chapter 6 of the DEIR, Alternative 4, the Reduced Project Alternative is presented as being the Environmentally Superior Alternative with the second fewer negative impacts while still meeting the Project objectives. I agree and while this park is still larger than I originally wanted, I would support this Environmentally Superior Alternative.

I41-6 I would like to recieve all notices relating to this project at jmnygaard@hotmail.com

Thank you,
Joyce Nygaard

From: Kevin O"Connor
To: CEQA, CountyParks
Subject: [External] Attention: Anna Prowant, Opposition to Alpine Park
Date: Monday, November 8, 2021 1:48:44 PM
Attachments: image001.png

Hello Ms. Prowant,

I42-1 I am sending this email as a public comment to the proposed Alpine Park, which I oppose. I am a 30 plus year owner and resident of Alpine and Rancho Palo Verde, which is directly adjacent to the proposed park. My address is 2918 Via Viejas Oeste. There are numerous reasons I oppose the park as described:

I42-2
- It is too large
- There are too many ongoing maintenance and cost issues associated with the proposed plan.

I42-3
- The traffic conditions on South Grade and Tavern Roads are already dangerous (a pedestrian was hit and killed several years ago).
- The plan does not mitigate the already dangerous traffic conditions. The roads have no shoulders in most places, forcing pedestrians, including local school children, to walk in the road bed. Bicyclists also veer into the road, a recipe for another tragic accident. The park, as proposed, will only bring more vehicles onto these unsafe roads.

I42-4
- As an alternative, a small park that complements Wright's field nature preserve would be welcomed by most residents.

Please confirm that you have received my comments and that they will be included with those that are presented in the review phase.

Best regards,

Kevin

Kevin O'Connor, Ph.D.
Dean, Liberal Arts
Saddleback College
(949) 582 – 4788

Liberal Arts Homepage

From: jay Orband
To: CEQA, CountyParks
Subject: [External] Alpine County Park DEIR Public Comments
Date: Saturday, November 13, 2021 3:52:21 PM

I43-1 I would like to say yes to local Alpine Park thank you Jay Orband Alpine resident!

Sent from my iPhone

From: Rebecca O"Sullivan
To: CEQA, CountyParks
Subject: [External] Alpine community park[SUSPECTED SPAM]
Date: Friday, October 1, 2021 11:38:11 AM

I44-1 Good morning. I'm so excited for this project! I do apologize if this question has been addressed. Are there going to be safety measures added to get in and out of the area? This a dangerous curve and people speed like crazy. It would break my heart to hear of a child getting hurt trying to get the park. Also, do you know if alpine has decided to build sidewalks at least on the park side for kids to get there safely from alpine boulevard?

Warm wishes,
Rebecca O'Sullivan

From:	Amanda Pavich
To:	CEQA, CountyParks
Cc:	Miles Pavich
Subject:	[External] RE: Public Comment on Draft Environmental Impact Report on the Alpine County Park Project (SCH No. 2021030196)
Date:	Monday, November 15, 2021 4:57:46 PM

Miles & Amanda Pavich

2422 Nido Aguila,

Alpine CA 91901

November 15, 2021

Anna Prowant

Biologist and Land Use/Environmental Planner III

Resource Management Division

County of San Diego, Parks and Recreation

5500 Overland Avenue, Suite 410, San Diego, CA 92123

By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Public Comment on Draft Environmental Impact Report on the Alpine County Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

Thank you for the opportunity to comment on the Alpine Park Project's ("Project") Draft Environmental Impact Report ("DEIR")

I45-1 We moved to Alpine a year and a half ago with our children expressly for the rural, open spaces, access to nature, and dark skies. We are regular users of active and passive recreation areas/parks. We live across South Grade from the proposed park site, the direct line-of-sight view from our property is the Project acreage.

I45-2 As neighbors who will be directly impacted by this Project, the CEQA issues we are concerned about and previously commented on include: 1- Traffic safety and noise; 2- Use of tax dollars and cost of Project upkeep/ maintenance; 3- Fire Safety; 4- Lighting and Dark Sky Designation; 5- Property value decline due to changed view ; 6- Alternative Park Design.

I45-3 **Our previous comments and questions are included below the concerns and questions we have during this public comment period. After review the DEIR and appendices, we are deeply disappointed that DPR continues to push forth a project that is out of step with the local, county, and state goals for the environment, equity, and preservation.. The DEIR and appendices themselves were largely boiler-plate, with glaring errors and omissions that must be address before this project is approved.**

1. Traffic Safety and Traffic Noise

Simply adding a three-way stop at two locations on South Grade road will not mitigate the impacts of an expected 500 cars per day. Furthermore, if attendees of events allowed at this County Park are like the ones at other County Parks, they will be parking their cars in our neighborhoods and on the roadway to avoid paying the entry fee. What more will be done to mitigate these impacts?

I45-4 *As stated above, we live across South Grade Road from the proposed park site. We travel on this road to and from our home daily. South Grade is a narrow, two-lane country road with dangerous twists and turns where residents travel at high speeds. The current Project details nearly 300 parking spaces and facilities adjacent to and emptying out onto this road, anticipation of large gatherings, tournaments and events, and no safe walkways, sidewalks or horse trails to get to and from the park. The Project's all-wheels park is a tempting destination for local kids, like ours, to ride to without any safe bike paths or trails to get there. County representatives have described this as a "regional destination park," designed to make people travel by vehicle. This, and the amount of people the mega-park is designed to accommodate, will greatly impact the amount of cars on the road and traffic noise we, as neighbors, will experience. In light of the three deaths that have occurred on that road and the very recent hit- and- run of a teenage girl that left her with serious injuries, it seems utterly irresponsible to proceed with ANY PART of this Project until concrete traffic/road plans are proposed and vetted, and analyzed in the EIR. Our own 18-year- old sometimes has to walk that road on his way to work, if he gets called in when we are away from home with the car.*

County representatives have merely stated "we're working closely with other departments on this." Putting out a proposal without a traffic plan demonstrates a lack of understanding of the seriousness of adding large amounts of park traffic to an already dangerous road. Putting enticing play areas to attract local kids-- without a safe way to get them there-- is outrageous. Not providing a safe way for horses to get to and from the park in a horse-community, requiring trailering, also adds to the noise, congestion and safety issues. These traffic safety and noise impacts need to be avoided, or, at worst, mitigated below the level of significance.

2. Cost of Project Upkeep and Maintenance

I45-5 As we stated earlier, Alpine has a number of existing parks with sports field that have been unmaintained. The renovations to Joan MacQueen Middle School's facilities are going before the Board of Supervisors for final approval at their November meeting, this week. Why are redundant facilities being proposed, at massive taxpayer expense and great loss of natural

I45-5 cont. resources, when existing facilities are in disrepair?

Alpine already has several active recreational fields (that utilized public funds to build) that are in disrepair, decay, or closed to the public. As taxpayers concerned with good stewardship of undeveloped land AND our dollars, it seems financially irresponsible to replace open space near an Ecological Preserve with a high-cost park with redundant facilities. The Alpine Community Plan Update (COS 4.5) calls for the support of joint powers agreements for park and recreational facilities. It would be far less expensive to taxpayers to repair and/or upgrade existing recreational assets using Joint-Use or Joint-Maintenance agreements, in order to fulfill County recreational/ park goals.

I45-6 *Active-use facilities and grass fields such as those detailed in the Project are expensive to maintain, and many of these facilities in existing County Parks are currently in disrepair, closed, and/or neglected from lack of funds. County representatives have publicly stated "there are many ways to generate revenue for a park" and some general ideas for how parks generate revenue are listed on the website. However, there is no plan detail for how the upkeep and maintenance costs for THIS SPECIFIC PARK will be generated. With tax revenues falling because of the Covid -19 Pandemic, how will this park be any different, once it's built? What is the taxpayer impact if there are not enough funds to maintain these facilities, and what are the actual costs to the local users of the Park?*

These questions about utilizing Joint Use/ Joint Maintenance agreements to fulfill County goals while managing taxpayer dollars more effectively, as well as a concrete fiscal plan for continued upkeep and maintenance of the Project need to be analyzed in the project EIR.

3. Fire Safety

DEIR Section 4.20 (page 458)

County of San Diego General Plan (page 467)

I45-7 "The Community of Alpine is situated to arguably pose one of the worst Wildland-Urban Interface conditions in the County of San Diego and is in a known location of repetitious major wildfire occurrence. Such locations of repeat occurrence are known as "historical wildfire corridors" Per Rhode and Assoc. 2020

"Potential Choke Points/Entrapments:

Be prepared to shelter community population in Alpine as all evacuation routes may be cut off by fire spread. Farthest east Alpine area of "Old Ranch" is more rural, and

has numerous areas with entrapment potential."

I45-7 cont.

"The Community of Alpine is situated to arguably pose one of the worst Wildland-Urban Interface conditions in the County of San Diego and is in a known location of repetitious major wildfire occurrence. Such locations of repeat occurrence are known as "historical wildfire corridors" Per Rhode and Assoc. 2020

"Potential Choke Points/Entrapments:

Be prepared to shelter community population in Alpine as all evacuation routes may be cut off by fire spread. Farthest east Alpine area of "Old Ranch" is more rural, and

has numerous areas with entrapment potential."

These notes are what we are continuing to inquire about. How can this be accomplished with a large suburban-style park in a rural area?

I45-8

Alpine is a high-risk fire area. Our neighborhood has one exit route for fire evacuation, utilizing South Grade Road. The proposed Project would significantly increase traffic and congestion on that road. The situation could become dire if a fire evacuation was needed while a large sporting event or gathering was going on at the proposed sports fields or pavilion. Additionally, the Project includes BBQ pits/grills, a high fire hazard for all of the houses that surround the proposed Project land, like ours, and for Wright's Field Ecological Preserve. Inclusion of and allowing any type of fire or grilling at this location is utterly irresponsible in light of the sensitive habitat of the adjacent Ecological Preserve and known challenge of a being in high fire-risk area. These impacts must be avoided or, at worst, mitigated below the level of significance.

4. Lighting and Dark Sky Designation

I45-9

Once again, these impacts are not being avoided, but actually INCREASING as detailed in the DEIR, by allowing lighting and amplified sound at the functions (Sec 4.3) permitted at this park from 7am- 10 pm. In section 4.1-2, mentioning the Alpine Community Plan (sec 40) that special consideration is to be given for conservation in "… astronomical darky sky areas." Once again, claims that the Project is in alignment with the Alpine Community Plan, are false. What will be done to align with our rural, dark sky area?

I45-10

Furthermore, it is noted on p.367 that the zoning of the project site (surrounding uses) all fall under Zone 1. Therefore, the applicable base sound level limits (before any corrections for ambient noise levels) are 50 dBA Leq between 7 a.m. and 10 p.m. and 45 dBA Leq between 10 p.m. and 7 p.m. However, in the DEIR's own studies (Table 4.13-6 - page 371) soccer field noise averaged 59 dBA at 115 and skate park noise averaged up to 66.5 dBA at 60 feet. How do these proposed amenities line up with the base sound level limits for this rural area?

I45-11 *We intentionally purchased a home in Alpine because it is a more rural community with an ongoing Dark Sky Designation in process. We have no streetlights. Our home is on a hill and directly overlooks the proposed site, also with a completely dark, natural nighttime view. The Project calls for a 24/7 live-on site volunteer and "safety lighting," and the ball fields to be "lighting-ready should the people of Alpine decide to add it later in the future," according to the County's representatives in the January public meeting. The lighting required by a permanent resident and for parking lot safety alone will eliminate completely the current dark sky; it will also interfere with local wild animal behavior and the natural beauty of the sunsets, dusks, and starry nights. This is in conflict with Alpine's efforts to achieve Dark Sky designation. These impacts should be avoided or, at worst, mitigated below the level of significance.*

5. Home Value Decline Due to Loss of Natural View

I45-12 The DEIR states Impact-AES-2: Substantially Degrade Rural Views from Public Vantage Points During Operation. Operation of the project would transform rural, undeveloped land to a complex regional park with several different development features, substantially degrading the existing rural views available from South Grade Road and Wright's Field Preserve. How Although the berms and trees will shield the parking lot from the street level, we (and the majority of the residents who live adjacent) do NOT live street level with the proposed park. Nothing in the DEIR addresses the loss of this view, how solar panels will be directed so as not to reflect into adjascent property or consequently, property values declining due to the loss of this beloved view and natural sunsets being blotted out with the artificial lighting allowed on site (point 4 above). The question is this: How does the DEIR meet Goal LU-2: Maintenance of the County's Rural Character. Conservation and enhancement of the unincorporated County's varied communities, rural setting, and character, and how does it meet Goal COS-11: Preservation of Scenic Resources. Preservation of scenic resources, including vistas of important natural and unique features, where visual impacts of development are minimized? In Section 4.1.4.2, Since the project will visually block and physically gate the most significant public San Diego County vista in Alpine, the project as planned clearly violates CEQA Appendix G section 1., 2., and 3., and the County of San Diego Guidelines for Determining Significance for Visual Resources (County of San Diego 2007) on page 91. How will the EIR and this project as proposed be able to mitigate the taking of Alpine's most accessible scenic view?

I45-13 *One of the key features of our property is the natural view over the County-owned land and Wright's Field Ecological Preserve. We purchased this home because of the beauty of the natural landscape viewed from our property, and paid a premium for it. The Project as drawn would make our direct view, not mitigated by trees or berms, a large, asphalt parking lot, cars and/or solar panels, bathrooms, and turf fields with chain link fences. If these facilities are allowed to fall into disrepair as in similar County Parks, we would be looking directly at an eyesore. Furthermore, depending on the way the solar panels are installed, they would be reflecting directly onto our property. This will negatively impact our resale value beyond any suggested benefit a park might bring. These impacts need to be avoided, or mitigated below the level of significance.*

6. Alternative Project Design

I45-14 Perhaps most disappointing was the oversight of the inclusion of a smaller, nature-based park as a project alternative, as we requested. This glaring omission was even more troublesome when DPR went before the Board requesting consideration for a grant ONLY AVAILABLE TO PARKS WITH A REGIONAL DRAW. How is this congruent with the statements made time and time again at the community outreach meetings (Jan 2021 esp) this is a park for the LOCAL community? How is this congruent with the State Climate Action Plan?

We would like to suggest, as an alternative to the current Project, a smaller, nature-based park, with a focus on fiscal and environmental sustainability and native plants. We would like the construction to be carbon neutral, and the Native Peoples to be meaningfully included in the process. This minimally-developed park should have little to no impacts to the biological, cultural, and other resources of the project site, Wright's Field Ecological Preserve, and neighboring properties. It should also address traffic and road improvements needed, and able to meet federal, state, and county goals.

I45-15 **We again respectfully request that these potential impacts still not addressed in the DEIR to both our personal property and safety, and those of the larger community, including traffic safety and noise, financial costs and upkeep, fire safety, effect on Dark Sky Designation, and loss of home value, be analyzed and to avoid the significant ones.** Please also make sure that we receive all updates and meeting notices on this project, at ampavich@mac.com and mmpavich@me.com and the mailing address above. Thank you, again, for the opportunity to bring light to these important issues.

Sincerely,

Miles and Amanda Pavich, Alpine Residents

Dr. Amanda Pavich, Ph.D.
DIRECTOR
EastLake Leadership College
A Campus of Southeastern University
(925) 580-1772

From: Parnell Pollioni
To: CEQA, CountyParks
Subject: [External] Automatic reply: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report (September 30, 2021 - November 15, 2021)
Date: Thursday, September 30, 2021 10:09:46 AM

Hi

I46-1 This is my old email address and this box is not checked. Todd Scheuer Alpine's new President can be found at todd.scheuer@alpinelittleleague.com

If you need me my address is parnell@alpinelittleleague.com

Parnell Polioni

From: Michelle Rader
To: CEQA, CountyParks
Subject: [External] DEIR Alpine Park Project
Date: Monday, November 15, 2021 4:52:46 PM

Attention Anna Prowant or Associates;

I47-1 I am writing, again, in response to the SD County DPR proposed Alpine Park Project and the DEIR which has been provided for community review. My hope is that these comments will be taken seriously, as the previous comments submitted by many of us in regards to the park plan have been unceremoniously disregarded.

I47-2 To begin, the development of the county's park plan for Alpine, which was initially billed as a local park for Alpine, has shown itself to be a laundry checklist of features for a county regional park to support the seeking of millions of dollars in grant funds from the state. The county representatives as well as Alpine Community Planning Group have repeatedly stated that this is to be a local park. Yet it is clearly planned and outlined as a regional park in the county's documentation and the grant application materials.

This same double-speak has peppered talk regarding the plan's scope as a sports complex versus local active park. It is clearly a regional sports complex, as defined in numerous descriptions in the county's own websites as well as elsewhere.

I47-3 So who is this Alpine park being built to serve? A park in a largely rural community, served by a rural two-lane roadway, more than a mile from the small village center, and accessible only by car or through nearly a mile of trails in an environmentally and historically sensitive preserve. As planned, this park which was to be a local Alpine park is clearly being built to serve special interests well beyond the heart of Alpine.

I47-4 Rife with errors and omissions, the DEIR grossly underestimates and skirts a great deal of the impacts to the local area, including environmental, traffic, safety and fire, aesthetics, and more. Many of these impacts are unmitigable, as clearly stated in a comments letter from the State Department of Fish and Wildlife, dated April 7, 2021 and publicly viewable in files.ceqanet.opr.ca.gov. This letter provides only a portion of impacts of our concern, but it is enough in my view, without addressing the many other issues which should drive a complete review and revision to the county's park plan.

I47-5 Can we entrust our public lands and the impacts in our communities to your process? Do we have your consideration, as residents in the immediate area of Wright's Field and the Alpine Park Project location? During the past several community input meetings and comment submissions, more than 2/3 of respondents from our community have opposed the park as planned. Is 2/3 not enough to gain your attention and consideration?

I47-6 The scope of the plan and its impacts on the sensitive area is far too extreme and inappropriate. It is time to take a step back and consider the true needs of the local area in which this subject property and park plan resides. Do the right thing for Alpine and return to the drawing board, provide proper outreach and communication with the community, and reconsider the irreversible impacts before it is too late.

Please reduce the scope of this park plan, or reconsider the original plan as a submissive park. The impacts are far too great, and irreversible.

Thank you,

Michelle Rader

November 15, 2021

Via e-mail

Anna Prowant (*countyParksCEQA@sdcounty.ca.gov*)
County of San Diego
Parks and Recreation Department
5500 Overland Avenue, Suite 410
San Diego, CA 92123

Re: Alpine County Park Project and Draft Environmental Impact Report

Dear Ms. Prowant,

I48-1 My name is Denae Ranucci and I am a resident and homeowner in Alpine, CA. I have some major concerns surrounding the DEIR for the Alpine County Park Project that I would appreciate having addressed.

Biology

The proposed mitigation for the Quino Checkerspotted Butterfly primarily consisted of preserving the same number of host plants onto a smaller footprint of land. This butterfly has been known to show territorial behavior according to the Fish and Wildlife Service (https://www.fws.gov/refuge/san_diego/wildlife_and_habitat/threatened_and_endangered_species/Quino_Checkerspot_Butterfly.html). What impacts will this project have by reducing the geographic territory of this endangered species?

I48-2 The Quino Checkerspotted Butterfly also is known to display "hill topping" behavior (https://www.fws.gov/refuge/san_diego/wildlife_and_habitat/threatened_and_endangered_species/Quino_Checkerspot_Butterfly.html). With the visual barrier to the road being of raised elevation. What assurances can be made that "hilltopping" behavior on this barrier, adjacent to the road, will not result in increased butterfly mortality due to vehicle collisions?

I48-3 Also, the DEIR addressed the migration of land-based animals but failed to recognize the importance of the grassland ecosystem on local bird populations. How will the project mitigate reduced territory for bird populations?

I48-4 With water being a scarce resource, the amount of water used both during construction and in continued maintenance is a large concern. Considering that farms and locals are being forced to reduce their water use, where will the project get their water and how will this align with the goal to reduce water usage by the county and the Department of Parks and Rec.?

Aesthetics

I48-5 The plan calls for a barrier to enhance the view of the property along the road but does not note the impact made when looking down onto the project. The view of the land from surrounding hillsides (such as off of West Victoria Drive), will be significantly impacted and is not noted in the report. This needs to be considered and addressed as well.

Traffic

The park has no walking access from the areas of high density in the "village" area of Alpine. Currently the only safe walking access is provided through the adjacent land owned by the Back County Land Trust. These trails are maintained by volunteers, not accessible for those in wheelchairs or with strollers, and still require nearly a mile walk from the only public access point, a point next to Joan MacQueen High School. To get to Joan MacQueen, there is a proposed DG pathway that has yet to be built, to create a walkable route to the town center. This
I48-6 lack of public transportation and walkable access will cause this park to be a car dependent destination. This is not only an environmental inequality social issue, but also will create a traffic issue along South Grade road. The lack of transportation issues and commitment to walkable access has made the traffic section of this DEIR woefully inadequate. What requirements will be made to ensure that the park can be accessed by everyone? The DPR previously disclosed in a meeting that a parking fee would NOT be implemented, however I do not see this anywhere in the DEIR. If a parking fee is implemented, then many who have lower income will not be able to use it. What analysis has been done to ensure that the park will be able to be accessed by the people it is being built for? The only neighborhood that has walking access, directly across the road, have their own private HOA managed lake and park, along with large lot sizes that would reduce or eliminate their reliance and use of a County maintained park.

Fire

As a local homeowner, who cannot get home insurance due to our "fire risk", it astounds
I48-7 me that BBQ pits would be permitted so close to such flammable vegetation. If a fire did start in this park, the spread and potential destruction to surrounding homes would be massive. Please reconsider the inclusion and allowance of such fire dangers in the area.

Discussion of Alternatives

I believe that the proposed alternatives were poorly chosen and do not accurately reflect the best options for this project's goals and location.

The County's Department of Parks and Rec. held a handful of public outreach meetings and were provided input regarding the desires of the community to have a small, passive park during each:

<u>Public Meeting1: May 15, 2019</u>

The top five elements voted for in this initial meeting were: natural areas, restrooms, sidewalks/trails, shade trees, and drinking fountains. With the projects goal, why was an
I48-8 alternative including these, and only these, amenities considered? Has DPR submitted proof of need for any of the amenities added to the design?

<u>Public Meeting 2: August 29, 2019</u>

The same five elements from the first meeting were voted in again in the highest numbers, with the addition of picnic shelters. This theme continues in other responses as the main thing 95% of participants agreed on, was that enjoying nature/outdoors was how the new park should benefit the community. This focus on nature and the outdoors as expressed through DPR's own public outreach is not showcased in the design, nor the DEIR. Once again, a proper alternative with the feedback from the community should have been analyzed. One with a small, passive park.

<u>Public Meeting 3: September 23, 2020</u>

Meeting focused on the all-wheel park design, led by a third party and consisted of individuals who primarily lived out of town. This meeting proves that this park amenity will attract an expanded regional draw, increasing traffic and vehicle miles traveled to this location.

Public Meeting 4: January 14, 2021

Only 6% of the comments recorded from this meeting were in support of the proposed design. Many of the comments expressed concerns that have NOT been addressed in this DEIR. How were these comments/concerns considered in the creation of the DEIR and planning process for the park? Why was the design not reconsidered when hit with such criticism?

Alpine Community Planning Group Special Meeting: April 6, 2021

I48-8 cont.

This meeting was led by the ACPG, but a representative of DPR was present. 20 people showed up to speak, only 2 were in support of the park design. With 18 individuals showing up to express concerns and disapproval, was this public input considered by DPR in anyway? If so, they did not show it, as no major changes were made to their design.

Meetings with Board of Supervisor Staff: June 2021

Meetings were held with representative of Preserve Alpine Heritage, and staff of the Board of Supervisors to speak to others outside of DPR due to the departments lack of response to previous feedback.

I48-9

Overall, there has been public outrage surrounding this park's design and future environmental effects since it's first public proposal. DPR has been told many times what the community wants, so why was a small, passive park not included in the alternatives? Can it be added and properly analyzed to provide an alternative that would still meet project objectives and have the smallest environmental impacts? What other locations were considered for this park? Why were they not used, and can they be disclosed to the public?

Conclusion

I48-10

I believe that this project has been overbuilt. The project purpose, to provide Alpine with a place to recreate, can be done in a variety of ways, but DPR has only planned and moved forward with its idea, not considering outside input. I would like to see the EIR show evidence of a need for the size and many amenities that the park includes. I would also like to see DPR revise its project alternatives to include the use of feedback from the public, including their own outreach efforts. I feel that it is rare for a community to reject an "improvement" such as a park. This rejection is directly related to the value of the land in its present state, as well as the lack of understanding that DPR has for both the project location and it's intended audience. I look forward to seeing my many questions addressed in the EIR and appreciate the opportunity to provide feedback.

Thank you,

Denae Ranucci
denaeranucci@gmail.com
619-733-9359

From: warner recabaren
To: CEQA, CountyParks
Subject: [External] Anna Prowant re "Oppose Giant Alpine County Park"
Date: Monday, November 15, 2021 2:53:49 PM

I49-1 The 'Travis Mega Sports Park' proposal being railroaded into reality ranks as the second greatest boondoggle in California's history. We wanted a small regional park. Despite a DECLARED DROUGHT (and it is LONG TERM) most of approximately 27 acres will be covered in grass. The DEIR report is clear that the area is a non-permeable basin (a unique paleontological feature dating to the Lusardi time!) can not accept stormwater OR THE ADDED IRRIGATION of 16 + MILLION GALLONS for irrigation that must be brought in with new infrastructure along with new brought in sewage infrastructure. The report glances over the damage to the UNIQUE GRASSLAND and ENGLEMAN

I49-2 OAKS that are the purpose of the Wrights Field Preserve by the newly introduced water spreading and killing the trees and converting the grassland.

From: Ronald Ripperger
To: CEQA, CountyParks
Subject: [External] Alpine Proposed Park and Sports Complex
Date: Thursday, November 11, 2021 7:06:31 AM

I50-1 Ms. Prowant, my wife and I live in Alpine in the Alpine Heights region about 3 miles from the proposed park site. We moved here to get away from the "City" and have some part of rural America and to enjoy a bit more seasonal weather. First of all, we don't know all of the history of why Wright's field which is a lovely, peaceful place to walk and enjoy nature is now going to have a large portion of it turned into a busy park. Having a background and strong expertise in Environmental from my previous life it is clear to me that the Initial Study should have turned up many concerns. Traffic as you know is always a big deal and the impacts on any community including the roads

I50-2 and of course noise and emissions pollution. The car pollutants alone for our neighborhood is in direct contrast to your Zero Emissions Initiative I keep receiving emails on. We have enough noise and pollutants from the constant

I50-3 barrage of private planes that use Alpine skies as their practice area each and every day already and don't need to cultivate any more. Lighting if there will be any increases the light pollution in our neighborhood which is not

I50-4 desirable. And, of course, any demand for water that this park will require sure doesn't fit in with our current "climate" of poor water planning on a State level which has left us once again in a "drought". I'd sure like to see the "will serve" letter from Padre Dam Municipal Water District on how they will be able to serve water for your Project. With all the trauma from everyone on "Climate Change", even though the climate has been changing since the beginning of time on our earth, won't the Project add to that carbon impact on several levels? And, if restrooms

I50-5 are to be included in the Project I will lay a bet on the probability of homeless people coming to Alpine for the lovely facilities and nearby brush for living in. I'm sure the residents who live in the immediate neighborhood such as both the Old and New Palo Verde Ranch will not be amused. Also, whether or not the Project has the potential to add to the crime in the area could end up being a factor. And, finally, the initial cost and long term maintenance

I50-6 costs for the Project will need to be paid by someone. I know who part of that someone will be…My vote is no park if I could have the power to change things. Leave Wright's Field alone and keep it natural. Sincerely, Ron & Bobbi Ripperger

I-51 Voicemail Comment: Charles Roberts 10/07/2021

I51-1 Anna, this is Charles Roberts, I live out in Alpine. I received a mailer/flyer for you guys wanna go ahead and put in a park down in a rural area and I don't agree with it.

I51-2 I think it's a cr*ppy location and I think it needs to be on the main street and I'd like to ask you have we considered the property that the Grossmont Union High School District purchased that they're not putting a high school on and maybe implementing it in that area where all the services are there and the main road, Alpine Boulevard, is there and then maybe when a high school comes they can plug into that. It sounds like money better suited. Where you're putting it, I've lived in Alpine 30 years, and it's not the location for what you guys, I don't know how you guys pushed this through, but it's horse sh*t and everybody knows it, except for everybody that doesn't live out here, it's a great thing. Well, I live out here and you need to put it on the main road instead of back in intricate housing development area, well it's not a development, but nonetheless. This is a nonstarter right from the get-go and why you have your name attached to this - I just need to know, are you voted in? Because if you're voted in, and I didn't vote you in, and I don't know if you're a public servant, you have to be, you work for the County and I'm just a concerned tax payer wanting to know why we're gonna put all the public on this small road, south grade, to get to this area. Not a good idea and I don't approve of it. I mean you can go ahead and push it through all you want to, but I'm not, I'm not happy with it. So, there you go, little input.

Jody and Sharon Root
6102 Japatul Vista Lane
Alpine, CA 91901

Anna Prowant
CountyParksCEQA@sdcounty.ca.gov

Re: Alpine Park Project (SCH #2021030196)

I52-1 We have been residents of Alpine for forty-three years and have been involved in community groups including AYSO, Bobby Sox (softball), Kiwanis, Little League, School Board, Etc. We walk Wright's Field three to four times a week and love the trails and views. Our son and his family also live in Alpine and his three children love hiking and climbing in Wright's field.

When we heard about a small nature-based park adjacent to Wright's field we thought, if done well, it could enhance an already existing Alpine asset. When we saw the proposed plan, and the description and justification of the plan in the DEIR, we were appalled at the size and features of the project.

I52-2 We lived across from the proposed park site and saw several attempts to develop the site with homes and a golf course and complex. All failed because of the biological, geological and historical significance of the property, which is down played in the DEIR. The property also failed percolation studies which is also not discussed in the DEIR. We were therefore very surprised that the County was advocating for this project considering the failures of the past proposed projects

I52-3 The Park would be an attractive nuisance for children walking and biking from school or home without the safety of bike lanes or sidewalks. The County is encouraging non-Alpine residents to travel to the site, thus increasing the traffic on a narrow rural road. There have been several fatalities on this road in the past. Alpine residents respect this area, especially Wright's Field, and we question whether non-residents would have the same reverence for this unique protected land and the endangered grass lands found there. This Park, as proposed in the DEIR, has a good chance of ruining the area and jeopardizing one of the unique recreational areas in East County

I52-4 This is the wrong size, scope, and location for this Park and is not what the residents of Alpine want. The cost, both in construction, and maintenance, is not justified. Please reconsider the Park design and size and encourage the Park and Recreation Department to work with Alpine residents and organizations to design a better plan than the four alternatives stated in the DEIR.

Respectfully

Jody and Sharon Root

From: Mary A Smith
To: CEQA, CountyParks
Subject: [External] Alpine County Park DEIR Public Comments
Date: Monday, November 15, 2021 3:24:15 PM

San Diego County Parks/
Anna Prowant

I53-1 My questions and concerns in regards to the Alpine Sports Complex.

My first question is:
From what source are you going to supply water to this High Impact Sports Park?

I53-2 My concern:
As I'm driving home to Alpine on the 8 freeway I come upon a sign in bold letters "Severe Drought Conditions, Conserve Water!"

So we are in a severe drought, will you decide to then use artificial turf?

Artificial Turf will now replace Natural Grasslands and Native Shrubs that feed the wildlife.
I53-3 The artificial turf will bring no benefit to this park. There are field improvements going in at Joan McQueen Middle that will include artificial turf. Joan McQueen middle school is 600 to 700 feet away.
Don't you think this will be enough artificial material?

Who will benefit from this park?
Having a drive to park out in an established residential area is not only concerning it's dangerous.
I53-4 First, the area is developed for residents commuting in and out of large developments on to a 2 lane road. Fire danger is first priority, Traffic and Noise. This Sports Complex has 300 parking spaces….
This Park is not for the local residents!

I53-5 What about the noise pollution and air pollution?
We live in Alpine for the quite and fresh open air.

This is a established area it needs to be considered as a Natural Park not a Sports Complex.

How does the Parks and Recreation Dept. justify building a Sports Park this size in an established area?

I53-6 If Parks and recreation department want to to build a park for Alpine. They should first use the money to repair and improve on the Parks already in place.

I believe the Alpine Planning Group, Parks and Recreation and San Diego County should have done a better job contacting the residents of Alpine. It appears to be a bait and switch Park.

Mary Smith
2202 Rancho Summit
Alpine

Sent from my iPhone

From: Mary Smith
To: CEQA, CountyParks
Subject: [External] Alpine County Park DEIR Public Comments
Date: Monday, November 15, 2021 3:52:59 PM

Anna Prowant
I have reviewed the draft EIR for the proposed Alpine Park project. I have concerns and wish to make comments.

I54-1 Traffic, the roads leading to the park Tavern road and South Grade road are both two lane roads. A park of this size would definitely create heavy congestion.

I54-2 Sewer, putting a park on property that does not have sewer service or perk for a standard septic system is bad idea and a waste of tax payer money.

Thanks for listening
Ron Smith
Alpine resident
2202 Rancho Summit

Sent from my iPad

From: Allen Stanko
To: CEQA, CountyParks
Subject: [External] Alpine park
Date: Sunday, October 24, 2021 12:39:41 PM

To whom it may concern (but I'm afraid nobody is concerned);

I55-1 Many people in Alpine are opposed to the so-called improvements that are planned at Wright's Field. I guess you know better than the people who live in Alpine and you know what's best for us. This is our government at work... spending taxpayer dollars on whatever they want. Perhaps if you actually lived in Alpine for over 20 years, you would know what the people of Alpine want, and it's not something that will attract more out-of-towners to our quaint community.

It is a shame that you are not held accountable to the people of Alpine and you are in a position to make such powerful decisions !

I55-2 How about hanging out on Tavern Road, just south of Arnold Way, when students get out of school at Joan Mac Queen Middle School and have to walk along Tavern Road, where cars are going 50 mph and there is no sidewalk ! How about using some money to fix that situation ? ! ! !

Sincerely,

Allen Stanko

Alpine

From: Allen Stanko
To: CEQA, CountyParks
Subject: RE: [External] Alpine park
Date: Saturday, November 20, 2021 11:53:05 AM
Attachments: image001.png

Hello Anna Prowant !

I addressed you that way because I did not know whether to put Mrs. or Ms. in front of your name. Things have gone crazy in this world and I wouldn't want to offend you in any way.

Feel free to call me Allen.

We here in Alpine do not want our Wright's Field turned into what the problem is in Ramona's Wellfield Park where homeless problems forced the park to close. If we do not have a new-and-improved park to destroy, they will not come. And that's just the way we want it !

THANK YOU.

SINCERELY,

allen stanko

> On November 15, 2021 at 4:43 PM "CEQA, CountyParks" <CountyParksCEQA@sdcounty.ca.gov> wrote:
>
> Hello Mr. Stanko,
>
> I wanted to let you know that we have received your email and thank you for your comments in regard to the Alpine Park Project. Your initial comments will be addressed and made part of public record in our final EIR for Alpine Park. In addition, our team is working on answering your concerns more immediately through a Frequently Asked Questions (FAQ) document that will be made public on our park website, www.sdparks.org.
>
> We appreciate your input and value your opinion as a member of the community. I hope you have a wonderful day.
>
> Thanks so much,
>
> *Anna Prowant* (She-Her-Hers)
> Biologist and Land Use/Environmental Planner III
>
> Resource Management Division
>
> County of San Diego, Parks and Recreation
>
> 5500 Overland Avenue, Suite 410, San Diego, CA 92123
>
> (619) 756-4548 (cell)

www.sdparks.org

For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com.** To receive updates via text, send **COSD COVID19** to **468-311.**

From: Allen Stanko <alman327@cox.net>
Sent: Sunday, October 24, 2021 12:40 PM
To: CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov>
Subject: [External] Alpine park

To whom it may concern (but I'm afraid nobody is concerned);

I56-1 Many people in Alpine are opposed to the so-called improvements that are planned at Wright's Field. I guess you know better than the people who live in Alpine and you know what's best for us. This is our government at work... spending taxpayer dollars on whatever they want. Perhaps if you actually lived in Alpine for over 20 years, you would know what the people of Alpine want, and it's not something that will attract more out-of-towners to our quaint community.

It is a shame that you are not held accountable to the people of Alpine and you are in a position to make such powerful decisions !

I56-2 How about hanging out on Tavern Road, just south of Arnold Way, when students get out of school at Joan Mac Queen Middle School and have to walk along Tavern Road, where cars are going 50 mph and there is no sidewalk ! How about using some money to fix that situation ? ! ! !

Sincerely,

Allen Stanko

Alpine

From: nicole@pacific-ps.com
To: CEQA, CountyParks
Subject: [External] FW: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report (September 30, 2021 - November 15, 2021)
Date: Thursday, September 30, 2021 10:16:05 AM
Attachments: image001.png
Alpine County Park_Draft EIR Notice of Availability and Contact Information.pdf

To Whom It May Concern;

I57-1 In response to the attached plans for a park in Alpine of this size, I adamantly oppose this plan. I live in the neighborhood across the street from this land, and I do not have one neighbor or friend that supports this proposal as it is.

The "park" is not necessary for the residents of Alpine
I believe people are being misled by it being called a "park" in the first place. This proposal is for a sports complex, please call it what it is

I57-2 This is going to disrupt many lives of the residents . . those who live nearby will be impacted with additional traffic, additional noise, additional people, trash, etc. We live in the back of Alpine for a reason, to get a way from all of this

ALPINE does not want this spots complex!!

Thank you,
Nicole Stockmoe

Direct# 619) 540-0559
Fax# 619) 819-8816

CONFIDENTIALITY NOTICE: This message and any attachments may contain confidential information which is legally privileged. The information is intended only for the use of the individual or entity named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution of, or the taking of any action in reliance on, the contents of this information is strictly prohibited. If you have received this message in error, please immediately notify us by e-mail and delete all copies of this message and any attachments

From: CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov>
Sent: Thursday, September 30, 2021 10:01 AM
Subject: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report (September 30, 2021 - November 15, 2021)

Good morning,

The County of San Diego, Parks and Recreation Department is circulating for public review a Draft Environmental Impact Report (EIR) for the Alpine Park Project pursuant to the California Environmental Quality Act. Please see attached for the Notice of Availability and information on providing comments or visit the website at: Public Review Documents (sdparks.org)

Written comments regarding the Draft EIR must be received no later than **November 15, 2021 at**

5:00 p.m. (a 45-day public review period). Comments should be emailed to CountyParksCEQA@sdcounty.ca.gov. For additional questions contact Anna Prowant at (619) 756-4548 or by email at CountyParksCEQA@sdcounty.ca.gov.

Thank you,

Anna Prowant (She-Her-Hers)
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
(619) 756-4548 (cell)
www.sdparks.org

For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com.** To receive updates via text, send **COSD COVID19** to **468-311.**



To: CountyParksCEQA@sdcounty.ca.gov

From: Yolaine M. Stout _ Ystout11@gmail.com

Date: Nov. 13, 2021

Re: My Comments on the DRAFT ENVIRONMENTAL IMPACT REPORT dated September 30, 2021

PROJECT TITLE: ALPINE COUNTY PARK PROJECT

I58-1 **APPLICANT:** County of San Diego Department of Parks and Recreation

Thank you for the opportunity to respond to the draft EIR for the Alpine Park Project, draft Environmental Impact Report dated September 2021.

My concerns over the inadequacies in the EIR are many, however I am limiting my comments to those areas that most concern me.

I58-2 1. **Inadequate description and mitigation measures for the destruction of Tier I plant communities: Specifically, Valley Needle Grassland.**

I58-3 a. **APM-1: Establishment of the Open Space Preserve**
This paragraph is inadequate as it does not provide the size of the preserve. What is the actual size of the proposed preserve?

b. **Table 4.4-4 and Figure 4.4-1**
Both Engelmann Oak Woodlands and Valley Needlegrass Grassland are Tier I sensitive natural communities which require a 2:1 mitigation ratio. In Table 4.4-4 it was determined that only 13.86 acres of "Tier I" communities existed. This is simply untrue and therefore inadequate.

I58-4 The areas marked brown in the legend on Figure 4.41 indicate large swaths of "non-native grassland." These areas appear to be grossly exaggerated in size presumably for the purpose of underestimating the total acreage of the native grassland area. Non-native grasses occur in all native grasslands. In the proposed park area, "non-native grasses" do not occur in such large swaths. What measurements or methods were used to determine non-native grass communities vs native grasses? Were these measurements or methods applied to all the brown indicated areas in Figure 4.41?

In excluding "non-native grasslands" from native grasslands, the truer estimate of the size of the native grassland is 18.55 acres. This satellite view with mapped overlay shows area of native grassland to be impacted: tinyurl.com/area-of-native-grassland . Therefore Table 4.4-4 should indicate that 37.1 acres would be needed to mitigate for the loss of native grasslands rather than 27.73 indicated. Regardless of size, the bigger problem is that there

I58-4 cont.

are no equivalent or higher quality native grasslands in San Diego County. This has been determined by multiple agencies and biologists including the Department of Planning and Land Use for the County of San Diego who, in a letter dated 2/20/2009 in regard to a proposed high school for this site which is in the Wright's Field Pre-Approved Mitigation Area (PAMA) and adjacent to Wright's Field Preserve, stated "Due to the significant and *not mitigable impacts to biological resources* for Alternative B (Wright's Field) and the direct implications to the County's Multiple Species Conservation Plan, the County cannot recommend that this site be chosen for such an intensive land use." How was the determination made that this rare resource is now -10 years later - mitigable? Where is the supposed equal or better quality offsite native grassland located?

2. No offsite Project Alternatives provided:

ES-4 Summary of Project Alternatives

I58-5

All alternatives described in the draft EIR are either onsite or no project. No offsite alternative was provided despite County Parks saying at several public meetings during 2018 in Alpine that there were 10 possible sites for a public park in Alpine – not including the currently proposed site.

One alternative is actually an enlarged proposal with added sports complex that would have even greater environmental impacts. How is this consistent with CEQA § 21002 "that requires feasible alternatives which would substantially lessen the significant environmental effects of such projects?"

The "Reduced Project Alternative" is inadequate as it only reduces the project area by 20%.

3. No impacts provided for possible sewer extensions.

I58-6

Page 3-3 states: "For utilities, the project would either connect to the existing sewer system or include a septic system to serve the restroom facilities, administration facility/ranger station, and volunteer pad. If the onsite connection to an existing sewer line is the option chosen, it will connect to the existing sewer line within Tavern Road, west of the project site, or the existing sewer line within the northern portion of South Grade Road near the intersection with Alpine Boulevard."

In other words, there appear to be three alternatives provided, but impacts are only given for one of them – the onsite septic and leach field treatment system. What are the impacts of the sewer extension? What is the length of the sewer connection to the proposed park from Alpine Blvd? What are the noise and traffic impacts? What are the growth inducing impacts of such a proposal? What are the CO2 emission impacts?

I58-7

I58-8

I58-9 Exactly where would the proposed sewer line go from Tavern Road? (I had requested this in my NOP comments). Will it go along private roads, through Joan MacQueen Middle School and the Wright's Field Preserve which would be the shortest route from Tavern Road? What is the

I58-10 length of that sewer connection to the proposed park? What are the noise and traffic impacts?

I58-11 What are the growth inducing impacts of such a proposal? What are the CO2 emission impacts? How will the destruction of Tier I habitats along that route be mitigated?

The draft EIR is grossly inadequate in this regard.

4. Conflicting and therefore inadequate impacts provided for septic and leach field options.

Page 4.7-19 states that "The second option [other than connecting to existing sewer lines far from the project location] would be a septic system with a filter treatment system and treatment leach field.

I58-12 The location of the proposed leach field on Figure 4.4-4, is in the dry creek headwaters for a tributary through Wright's Field Preserve to Alpine Creek which drains into El Capitan Reservoir, one of San Diego County's largest drinking water reservoirs. Has Padre Dam commented on this? If so, the comments are not included in the EIR. How is this location consistent with the San Diego County Department of Health requirement that leach lines be located "50 feet from the top of the drainage bank" ? See page 9 of Onsite Wastewater Treatment Systems (Septic Systems) Permitting Process and Design Criteria.

"The initial issuance of a hazardous waste facilities permit pursuant to Section 25200 of the Health and Safety Code to an offsite large treatment facility, as defined pursuant to subdivision (d) of Section 25205.1 of the Health and Safety Code." Has such a facilities permit been obtained?

I58-13 **Figure 4.4-1** and other maps show only the leach fields and a short sewer line. It does not show the treatment facility or source of the sewage. **Concept Plan Figure 3.2** Shows one bathroom (marked 3) as at the far south of the proposed park while the leach fields from figure 4.4-1 are in the northernmost part of the proposed park. Where will the sewage from this bathroom go? What is the true length of the sewer line and what are the all the associated impacts from the construction of such a long sewer line onsite? What is the actual length of the sewer line from the leach field area to restroom 2?

6. Inadequate Water Supply Assurances. No comments from responsible agencies.

I58-14 CEQA states in § 21104. STATE LEAD AGENCY; CONSULTATIONS PRIOR TO COMPLETION OF IMPACT that (a) *Prior to completing an environmental impact report*, the state lead agency shall consult with, and obtain comments from, each responsible agency, trustee agency, any public agency that has jurisdiction by law with respect to the project.

I58-15

3.4 The draft EIR states, "Water supplies would be provided by Padre Dam Municipal Water District" and "Water demand is anticipated to be approximately 16,471,273 gallons per year." Where are the comment letters from Padre Dam, the San Diego County Water Authority and other responsible agencies assuring the public that 16,471,273 gallons of water per year are available for a new park?

7. Inadequate estimate of maximum daily construction emissions

I58-16

Table 4.3-5 Estimated Maximum Daily Construction Emissions shows maximum daily emissions for "sewer line installation" for 2022 and 2023 yet nowhere in the EIR is the length of sewer lines for any of the three stated options provided. How can construction emissions be estimated if the length of those lines are not known? How does the public or responsible agencies know if those construction emission thresholds have been exceeded or not?

8. Inadequate mitigation measures provided for significant impacts from construction on inappropriate soils.

According to CEQA Appendix G, a project will have significant impacts if the project would result in any of the following:

2.) Result in substantial soil erosion or the loss of topsoil.

4.) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

I58-17

5.) Have soils that would be incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?

6.) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Below I examine each of these significant impacts:

2.) Result in substantial soil erosion or the loss of topsoil.

I58-18

4.7-13 The draft EIR states that the project would not result in substantial soil erosion or the *loss of topsoil* and that no mitigation would be required, yet the recommendations provided by the geologic consultant on pages 4.7-15 and 4.7-16 state that a minimum of 1-2 feet of topsoil below structural buildings, retaining walls and exterior pedestrian concrete flatwork be removed in order to potentially reach suitable, stable soils. In addition, in order to create level areas for ball fields, ball courts, parking areas and many other features, much topsoil must be removed.

I58-19

The park concept plan also shows numerous trees will be planted. Trees do not grow in clay (which is why it is naturally a native grassland and not a forest.) A substantial amount of clay (topsoil) must be removed and replaced with soil that will support trees and their root systems. *The draft EIR is woefully inadequate because it will result in the loss of massive amounts of topsoil loss due to grading, excavation, digging and removal involving the vast area of the concept park plan. The draft EIR does not describe the estimated amount of topsoil that will be lost due to these activities.* How much topsoil will be removed? What are the traffic, noise and

I58-20

emission impacts of such removal? Additionally, the clay contains massive amounts of stones and boulders. What are the traffic, noise and emission impacts of stone crushing and removal?

4.) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

Bosanko Stony Clay which underlays almost the entirety of the proposed park area *is highly expansive*. Expansion rates at sample test sites performed by Ninyo & Moore indicate expansion indices in 3 of 5 sites as high (94-105). The 2 tests with medium expansion indices (TP 15 and TP 11) are on the outer edges of the proposed site. **4.7.2.3** In section 4.7. on Geology and Soils of the draft EIR, it is stated, "Shrinking or swelling of foundation soils can lead to *damage to foundations and engineered structures*, including tilting and cracking," due to the expansive soils (Bosanko Stony Clay) that underlie the entirety of the project area. The evaluation of the soils by Ninyo & Moore who tested the topsoil agreed that the soil "possesses

I58-21

a medium to high potential for expansion." In addition, the USDA describes Bosanko Stony Clay of all slopes as having "**severe"** limitations for septic tank effluent disposal and "**severe"** shrink swell and runoff for a public sewerage system. Also, according to this same report, Bosanko Stony clay has "severe" limitations for play areas, picnic areas and even paths and trails.

Despite the testing for expansive soils by the County's own consultants, Ninyo & Moore, as reported in their Geotechnical Evaluation and despite the USDA's own findings for Bosanko Stony Clay and despite the draft EIR stating on page 4.7 that "the project is located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), and does not conform with the Uniform Building Code, the draft EIR boldly declares on page 4.7-18 Threshold 4: "*The project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.***"** And that ***"No mitigation is required."*** This is misleading and false.

The draft EIR indicates that it will follow the recommendations set forth by Ninyo & Moore in order to "diminish potential risks" and to ensure the project would not exacerbate existing onsite conditions or *the existing expansive soils onsite.* Is "not exacerbating existing conditions" and "following recommendations" considered mitigation? Ninyo & Moore recommend that only 2 feet of topsoil be removed under structures, yet their own test pits do not perc even at 3 feet due to the high clay content. Joan MacQueen Middle School, which was built on the same Bosanko Stony Clay not far from the proposed park site, levelled the entire area down to approx. 15' on their eastern edge. They STILL did not reach below the clay. To this day, the school must put up with boggy lawns and playing fields, poorly growing trees and other clay related issues. I can't imagine a worse location in Alpine for an active park. Does the County realize the cost alone of removing vast amounts of clay, rocks and boulders on the site? Will taxpayers be willing to cough up even more millions for this incompetent boondoggle? What are the financial impacts of this project?

I58-22

5.) Have soils that would be incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater.

As stated the project is underlain by Bosanko stony clay, which is rated as "severe" for septic tank effluent disposal due to permeability rate (USDA 1973). On page 4.7-20, the draft EIR declares that the project would *not* involve soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems yet one of the stated options for sewage disposal is an onsite wastewater treatment area involving pipes and leach fields. The location of the leach field and connecting sewer line is shown on **Figures 4.4-2 and 4.4-3.**

I58-23

In the Geotechnical Evaluation in Appendix F, Volume 2 of the draft EIR, consultants Ninyo & Moore conducted multiple percolation and infiltration tests (7) throughout the site. See Appendix C pages 1-7 of their report. The location of the leach field appears is at Test hole IT-2. Even at a depth of 3.8 feet, water did NOT percolate or infiltrate at 14 of 18 counted 10 min intervals. The remaining 4 intervals showed very minimal infiltration or percolation. Clearly this site is wholly inadequate for a leach field! Similar results were obtained by ALL of the remaining tests throughout the proposed park area. These results are consistent with multiple percolation tests conducted on this site since the 1970s.

I58-23 cont.

Again, the draft EIR defers mitigation to complying with "existing regulations" and would not result in a significant impact related to onsite soils, while at the same time declaring that no mitigation is required! Existing regulations already state that septic systems cannot be built in soils that do not percolate. Doing so would obviously result in raw sewage build up that would dangerously affect health, property and wildlife.

Why is the septic option even being considered for this site? Is the true purpose of this "park" location to expand growth inducing sewer lines?

6.) Directly or indirectly destroy a unique paleontological resource or site or *unique geologic feature.*

The Conservation Element of the County of San Diego General Plan also provides policies for the preservation of unique geological features. This is such a site.

According the 1980 Geologic map of the Alpine Quadrangle, San Diego County, California, USGS. Wright's Field including the site of the proposed park is marked. KTf. KTf is described as "Older [= Pleistocene or Pliocene] Alluvium (poorly sorted, boulder alluvium with distinctive granite 'Kcm' [=Corte Madera Granite] and gabbro clasts, possibly debris flow deposit; dissected remnants of once more extensive deposit).

I58-24

"Alluvium" is a deposit of clay, silt, sand, and gravel left *by flowing streams in a river valley* or delta. Distinctive granite is different from the common granite seen throughout Alpine and in the hills surrounding Wright's Field.

Dr. Patrick L. Williams, geologist, who commented on this EIR notes in Volume 2 Appendix B under Notice of Preparation also notes.

" The uniqueness of the site had captured my attention. Not only is the park area a striking native grassland, nearly devoid of woody "chaparral" species, but the entirety of the property's grassland is decorated with exotic boulders of a very large and very ancient riverbed, which, per SDSU faculty cannot be associated with a provenance because the mountains of their origin have long since disappeared. The field itself was an active riverbed until about eighty-million years ago, at which time the river's flow was captured into Sweetwater Canyon. Such a site is not only unique in southern California, it is extremely rare in the world. The County property and Wright's Field is a geological heritage site and deserves to be formally recognized as such."

Any reasonable person can observe that the rocks in Wright's Field are not rough field rocks, but tumbled, smooth river rock. They can also observe that there are many different kinds of rocks that are distinctive from the predominant exposed magma granite boulders and rocks in

neighboring hills. The presence of vast quantities of clay is consistent with Wright's Field and the proposed park site being that of an ancient riverbed. Additionally, the shape of this area that consists of these kinds of rocks and clay shown on government maps take the form of a river. The draft EIR focuses on potential impacts to paleontological resources, but neglects to examine the area as a unique geologic feature. Why was this legal consideration completely ignored? The draft EIR is wholly inadequate in examining the site as unique geologic feature.

I58-25

Bottomline:

Rather than DESTROY this incredibly unique biological, geological, archaeological and historical resource, the County of San Diego has an obligation to research, protect and celebrate it. The County of San Diego Parks and Recreation has in its mission statement to also "preserve significant natural resources." Why is it attempting to destroy one for the sake of the other? At what cost? No financial feasibility study was included. The EIR is wholly inadequate and - to be frank – egregious. Due to constraints, I do not have time to point out the numerous other inadequacies. It is my hope and the hope of thousands who have come to cherish Wright's Field over the years that the Board of Supervisors does the (W)right thing and denies this project.

I58-26

Please keep me notified of all future meetings, publications and reviews of this project.

Thank you,

Yolaine M. Stout
Ystout11@gmail.com

From: Darcy Stumbaugh
To: CEQA, CountyParks
Subject: [External] Alpine County Park DEIR Public Comments
Date: Monday, November 15, 2021 11:47:02 AM

I59-1 Dear Anna Prowant, I'm contacting you to strongly oppose the current plans for a 25 acre park on Wright's Field in Alpine. I am a part-time resident of San Diego and have been visiting Wright's Field for over 20 years to enjoy the rare plant community and wildlife diversity. It is already a destination park for me. The county acquisition of acreage for a buffer and gateway access to this treasured ecosystem was hailed as a success at the time, and we've waited a long time for this park to be completed- an area for parking, and some picnic tables and shade for visitors to Wright's Field. That is all that is desired for this park. It was thought that the

I59-2 county's acquisition would help protect the portion of Wright's Field that has intact native plant communities, not pose a threat to it with concrete construction and irrigation and increased human activity. The current proposed park would have devastating negative impacts to sensitive wildlife and plants in Wright's Field, this natural community is the last of its kind and must be protected and restored. All of the proposed amenities are things that can be built, or already exist and are in dire need of maintenance, at existing nearby county parks,

I59-3 and the financial interests of a few land developers should not be confused with the needs of the community. Wright's Field is my favorite wild space to visit in San Diego county, it has been for over 20 years, I care immensely for the wildlife and botany in that space, and it is not in any way possible that accurate wildlife and botanical surveys of the area would find that the current proposed park would cause anything but irreversible damage to the existing ecosystem there, which includes the endangered San Diego thornmint and Hermes copper butterfly.

I59-4 Outside of my area of expertise I would also recommend including the perspective of the Kumeyaay tribe, who have pre-existing claims to the land, and the historical use of that land by Spanish missionaries and as part of the Camino Real, especially when proposing excavation that would no doubt reveal artifacts of cultural and historical significance. Thank you for considering my comments.

Signed, Darcy Stumbaugh

From: Kyla Thomas
To: CEQA, CountyParks
Subject: [External] Park
Date: Monday, November 15, 2021 4:59:43 PM

Dear Anna Prowant,

I60-1 I think a small nature park should be presented as an alternative to a huge sports complex. Most Alpine residents are against the park as it is currently planned.

Thank you for the opportunity to be heard,
Kyla Thomas
3790 Carveacre Rd.
Alpine, CA 91901

From: Debbie Van Hyfte
To: CEQA, CountyParks
Subject: [External] Re: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report (September 30, 2021 - November 15, 2021)
Date: Thursday, September 30, 2021 6:26:35 PM
Attachments: image001.png

Hi Anna,

I61-1 Please remove my name from your email list; I've moved out of state.

Thanks,
Debbie Van Hyfte
debbie.vanhyfte@gmail.com

On Thu, Sep 30, 2021 at 9:58 AM CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov> wrote:

> Good morning,
>
> The County of San Diego, Parks and Recreation Department is circulating for public review a Draft Environmental Impact Report (EIR) for the Alpine Park Project pursuant to the California Environmental Quality Act. Please see attached for the Notice of Availability and information on providing comments or visit the website at: Public Review Documents (sdparks.org)
>
> Written comments regarding the Draft EIR must be received no later than **November 15, 2021 at 5:00 p.m.** (a 45-day public review period). Comments should be emailed to CountyParksCEQA@sdcounty.ca.gov. For additional questions contact Anna Prowant at (619) 756-4548 or by email at CountyParksCEQA@sdcounty.ca.gov.
>
> Thank you,
>
> *Anna Prowant* (She-Her-Hers)
> Biologist and Land Use/Environmental Planner III
>
> Resource Management Division
>
> County of San Diego, Parks and Recreation
>
> 5500 Overland Avenue, Suite 410, San Diego, CA 92123

(619) 756-4548 (cell)

www.sdparks.org

For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com.** To receive updates via text, send **COSD COVID19** to **468-311.**

From: VIRGINIA WALKER
To: CEQA, CountyParks
Subject: [External] Alpine Park
Date: Friday, November 12, 2021 6:49:04 AM

Dear All Supervisors,

I62-1 I am very much against the park you have planned for Alpine. It seems you are just throwing everything into this park and not taking any consideration of what the community of Alpine really would like in this area. We don't need playing fields in grass or turf. The ones we have are not used, so why are we adding more? We have fields at the Alpine School in town that don't seem to be used much. We also have fields at all our schools. No we don't need any more fields.

I62-2 Having a skate park at this location is crazy. We don't need this big of a skate park and not in this location. The skate park at Kennedy Park in El Cajon is not very big and it is in a location that is safe to access, and doesn't bother the neighborhood. The location of this skate park in Alpine would not do that. It would create noise and traffic issues for the neighborhood. There is a piece of land for sale right now, right next to the community center. There would be plenty of parking there and an easy access for the kids. No, it would not be as big or elaborate as the one you have planned, but it would be safe for the kids. We don't need big and elaborate for our small community. We just need something safe for our kids.

I62-3 I also, like many others that live in Alpine, don't believe in having you dig up our grasslands. There is very little of this type of land left in our area. It would be a lot smarter to set the area up in a nature park that can be walked with signs that tell about the area and its history. People would come to walk and relax and enjoy nature, and this park would be next to a nature preserve. Wow, what an idea. Think of the learning that could take place. Our Alpine Community would benefit from this type of passive park, since eventually everything in our area will be built on. What a wonderful place to come and walk, or ride your horse on trails, that is not far from home and would be a good place to relax.

I62-4 Mr Anderson, first you ran your campaign on being truthful and honest which you haven't been. Also you made the comment that it would be a "park to take your grandkids to". Yes you would be able to say, " Hey Kids, I worked to get this park built. I destroyed native grasslands in doing so, and did so much digging and construction in the area, that the nature preserve next door has lost all its animals because there are too many people here. All the birds and creatures have had to find a better place to live." Won't your grandkids be so proud of you! Wouldn't it be a much better to say," Hey kids, let's go visit the park near Wrights Field! We can walk the trails and look for native species that are hard to find anywhere else in San Diego. I worked to keep this area as natural as possible so that you and your children can come and enjoy this area to see how it once was a long time ago." So which do you think is a better legacy to leave behind? We don't need these elaborate parks, we need nature to help us relax and shake off a hard days work. Not noise and cement.

I62-5 Please supervisors, do not push for this park. Here we are looking at turning all our lawns into desert landscapes because we cannot afford the water bill and you are looking at putting all this grass in that will have to be watered. What crazy thinking is that! People need the water not the grass. The Alpine community wants to keep its grasslands just like they are. It doesn't need any water.

I62-6 Yes create a park, but a native park. Keep our grasslands!

Thanks

Virginia Walker

Alpine resident for 20 years

From: Chris E. Wiley
To: CEQA, CountyParks
Subject: [External] RE: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report (September 30, 2021 - November 15, 2021)
Date: Thursday, September 30, 2021 10:47:52 AM
Attachments: image003.png
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image010.png
image012.png

I63-1

Anna,

We will get this out to Alpine Chamber members immediately.

Thank you,

Chris Wiley | Branch Manager
Primary Residential Mortgage, Inc.
1411 Rock Terrace, Suite B | Alpine | California | 91901
Office: 619-722-1303
www.primeres.com/alpine| cwiley@primeres.com

****While shopping for a home, please do not apply for any additional credit, add any new debt, or pay off any debt without consulting me****

From: CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov>
Sent: Thursday, September 30, 2021 10:09 AM
Subject: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report (September 30, 2021 - November 15, 2021)

Good morning,

The County of San Diego, Parks and Recreation Department is circulating for public review a Draft Environmental Impact Report (EIR) for the Alpine Park Project pursuant to the California Environmental Quality Act. Please see attached for the Notice of Availability and information on providing comments or visit the website at: Public Review Documents (sdparks.org)

Written comments regarding the Draft EIR must be received no later than **November 15, 2021 at 5:00 p.m.** (a 45-day public review period). Comments should be emailed to CountyParksCEQA@sdcounty.ca.gov. For additional questions contact Anna Prowant at (619) 756-4548 or by email at CountyParksCEQA@sdcounty.ca.gov.

Thank you,

Anna Prowant (She-Her-Hers)
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
(619) 756-4548 (cell)
www.sdparks.org

For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com**. To receive updates via text, send **COSD COVID19** to **468-311**.

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Dr. Patrick Williams
PO Box 1437
Alpine, CA 91903

November 15th 2021

Letter 2/2

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov
RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

I64-1 Thank you for the opportunity to comment on the Alpine County Park (ACP) Draft Environmental Impact Report (DEIR). For background I hold a doctorate in Earth Science from Columbia University and a bachelor of science in Biology and Geology from Evergreen State College. I have lived in Alpine for 11 years. From 2014 to 2021 I served as a BCLT director and supervising land manager and director for operations for the Mountain Empire including Long Potrero Preserve and Clover Flat Preserve. During that time the majority of our habitat management work was reviewed annually by very senior staff at USFW and CDFW. I left BCLT board this year along with an employee (Jon Green) and another board member (Renee Owens) as a result of board conflicts over the size and active sports focus of the proposed ACP.

I64-2 I have worked as a professional geologist for 30 years. I take a deep personal and professional interest in Wright's Field Preserve (WFP) and the County-purchased portion of the overall grassland landscape. The grassland is associated with the ≥80 million-year-old sedimentary Alpine Lusardi Formation (ALF). Amongst all known locations, the context and landscape of the Lusardi Formation is best preserved at the site of the proposed ACP. The ALF is the subject of an upcoming field trip of the San Diego Association of Geologists, and description of the Lusardi in Alpine as an entirely unique geological feature is outlined in an letter from Emeritus SDSU Geological Sciences Professors Dr. Patrick Abbott, Dr. Gary Girty and myself, provided by email earlier today. Conflicts in recognition of Lusardi on site, and lack of appreciation for the extreme difficulty and associated inflation of construction cost, storm-water management, erosion management, expansive soils management and flatwork replacement requirements and the cost of construction monitoring, materials handling, construction cost, and absence of investigation of the ACP site's geological uniqueness are substantial oversights. It is the presence and geological history of the Lusardi Formation that makes water infiltration difficult and generates a geological hazard in association with the nearly impermeable highly expansive clay soils of the site.

I64-3 It was extremely disappointing to find no consideration in the DEIR of any alternative for a passive nature-based park, which has been the most strongly supported alternative in all County outreach meetings and polls. I implore the County to produce a final EIR that contains this option and that all Park options be taken to the Board of Supervisors so that they can choose a park that the community wants. I was particularly concerned that my detailed comments in a 1500 word response to the NOP input were discarded in a 34 word response (DEIR Volume I, page 58) concluding with an incomplete sentence fragment that I "expressed concerns regarding geology (as it relates to

I64-3 cont. boulders on site)". The refusal to take highly challenging engineering site conditions seriously is a major failing throughout the history of this project, and continues to be at issue in this DEIR.

I64-4 Please find below my letter responds to the following DEIR headings:
4.1 Aesthetics and Visual Resources
4.4 Biological Resources
4.7 Geology and Soils
4.8 Greenhouse Gas Emissions and Climate Change
4.13 Noise and Vibration
4.19 Utilities and Service Systems
(Water; Connection to County Sewer; On-site Sewer Treatment
4.20 Wildfire

DEIR Section 4.1 Aesthetics and Visual Resources

The ACP site is the Town of Alpine's most valuable publically accessible aesthetic and visual resource. As those of use who regularly visit the property know, dozens of groups meet at the County property, walking from South Grade Road to take family portraits and wedding photos. Photographers know the light and 50-mile-views provide light, local interest (Engelmann Oaks and grassland) and vanishing points for spectacular photography. It is immediately apparent that loss of Alpine's most valuable publically accessible visual resource is not mitigated in this DEIR. How does the DEIR meet **Goal LU-2**: *Maintenance of the County's Rural Character. Conservation and enhancement of the unincorporated County's varied communities, rural setting, and character*, and how does it meet **Goal COS-11**: *Preservation of Scenic Resources. Preservation of scenic resources, including vistas of important natural and unique features, where visual impacts of development are minimized.* In particular the view of the unique 80-million-year old Lusardi geology landscape seen below:

I64-5



Photo 1. View west across ACP site from South Grade Road. *This view will be blocked by the park.*

Section 4.1.4.1 The principal public viewer group for this site are the residents of Alpine. How does the DEIR evaluate the sensitivity of public viewer groups is not the highest sensitivity as suggested at all outreach meetings and polls which all were majority in support of a passive nature-based park for this site?

I64-6

Section 4.1.4.2 Since the project will visually block and physically gate the most significant public San Diego County vista in Alpine, how does the project as planned not violate CEQA Appendix G section 1., 2., and 3., and the County of San Diego Guidelines for Determining Significance for Visual Resources (County of San Diego 2007) on page 91? How will the EIR and this project as proposed be able to mitigate the taking of Alpine's most beloved publically accessible scenic view?

DEIR Section 4.4 Biological Resources

What detailed means does the ACP project use to mitigate the taking of nearly 65% of Project site Valley Needlegrass Grassland (VNG)? The total amount of VNG on County property is 22.1 acres (table 4.4-1). The amount of VNG proposed to be removed by park construction is 13.9 acres (table 4.4-3) thus the ACP project as proposed removes 63% of VNG on the County property and a net 22.3 acres of associated avian foraging habitat (Section 4.4-17 "Birds"). This is problematic since it is not possible to mitigate VNG by kind in the project area or sub-region.

I64-7

Has the County field-checked mapping of VNG? In our own reconnaissance of VNG, "non-native" grassland (NNG) and "disturbed flat-topped buckwheat" (DFTB) habitat areas within the 25 acre ACP footprint, coverage of VNG is found to be substantial in many of the brown-shaded NNG and DFTB map areas illustrated on Figure 4.4-1 (DEIR Volume I page 159). Will the County update or redo this mapping to provide habitat evaluations that can be corroborated to be accurate?

The following questions arose during my reading of DEIR Section 4.7:

- Is it legal to mitigate the taking of VNG by substitution of non-native grassland?
- Is it legal to delay mitigation via MSCP for avian prey and nectar habitat take for sensitive species (e.g. Ferruginous Hawk) and protected species (e.g. Quino Checkerspot Butterfly)?

I64-8

- Have the total local and regional consequences of permanent removal of 22.3 acres of avian foraging habitat been studied (DEIR Volume I page 484), particularly for Ferruginous Hawk? For example has the effect of removing primary foraging habitat in the close vicinity of a substantial concentration of complementary nearby nesting resources along permanently flowing Viejas Creek just 600 meters away and permanently flowing Sweetwater River just 1600 meters away been studied in preparation of the DEIR?

I64-9

- Have hawk and falcon nesting populations and breeding success been evaluated in the ca. 50 acres of potential woodland nesting habitat that is located within 1500 meters of the proposed ACP?

Taking of native VNG habitat is communicated as a very serious matter in the County's own documents: "Native grasslands are now quite rare and occur [only] in the hills south of Poway, Wright's Field in Alpine, parts of Camp Pendleton, Ramona, and Rancho Guiejito east of Valley Center." Furthermore the County previously asserted that development of the site of the proposed Alpine County Park could not be mitigated for a high school recently proposed for the site of the proposed Alpine County Park:

I64-10

I64-10 cont.

(DPLU/ DPW/ DPR dated 2/20/2009 "Due to the significant and not mitigable impacts to biological resources for Alternative B (Wright's Field) and the direct implications to the County's Multiple Species Conservation Plan, the County cannot recommend that this site be chosen for such an intensive land use. Study Area B is located within the County's Wright's Field Pre-Approved Mitigation Area (PAMA) and adjacent to Wright's Field Preserve, an integral part of the County of San Diego's South County Multiple Species Conservation Program (MSCP) Subarea Plan.").

I64-11

How can the County justify its role in development of property that was not allowed to be developed for housing with far lower habitat loss and water and sewer needs or a high school with comparable loss of habitat (22.3 acres instead of 27 acres per 2009-02-20 County DEIR response for Alpine High School). The proposed 25 acre active use park will remain a divisive Alpine community and mountain region conservation focus for many years to come, particularly if the County moves forward with removal of 13 acres of VNG habitat and 22.3 acres of avian foraging habitat as planned for construction of a park centered on organized sports recreation in a town that is already blessed with several parks, abundant recreation opportunities and (if maintained) a more-than-adequate inventory of sports fields.

A park of this size and impact, at a location that the County previously stated development could not be mitigated, is a glaring contradiction.

DEIR Section 4.7 Geology and Soils

Site Context, Description and Mapping.

I64-12

The Geotechnical Report (Report) **(DEIR Volume II, Appendix F**) fails to identify, discuss, find context, origin or geotechnical implications of the Lusardi (sedimentary) Formation on the proposed construction site of the ACP. This is a major lapse and conflict. Failing to research and identify a primary mapped geological unit on a subject study site fails standard of practice for geotechnical engineering in California. While the DEIR Volume I text repeatedly describes the project area as "Lusardi boulder and cobble conglomerate" (e.g. p. 38, 232, 234, 251, 488) the Report does not describe site or published evidence of the presence of the Lusardi Formation at the site except as shown on Figure 3 of the Report (the most recently published regional geological map of Todd, 2004) and to say in section 7.2.2. that the Lusardi Formation was not encountered at the site. Bulk material descriptions from the Report's description of 15 soil pit excavations is restricted to identification of "topsoil" and "decomposed granitic rock". No description of carbonate "K" horizons is given despite spoils of least one pit being characterized by nearly 50% carbonate content (TP5). With the exception of test pit 2 (TP2) all soils encountered in are described as monotonous clay, sandy clay or clayey sand. TP6, TP7, TP8 and TP10 contained a 4-foot depth of monotonous clay material. This continuity of volume of moderately to highly expansive "Bosanko stony clay" material does not indicate site soil is a weathering product of the local crystalline bedrock (Alpine Tonalite) but given mapping (Todd, 1980, 2004) is more probably the weathering product of arkosic Lusardi formation. This omission is all the more significant with the report's finding of extremely low infiltration rates and high soil expansion potential across the majority of the site, and County mapping of potentially expansive Bosanko stony clay soil on the project site (e.g. https://www.sandiegocounty.gov/dplu/docs/Geologic_Hazards_Guidelines.pdf (see page 14 and

I64-12 cont.

Figure 6) Omission of investigation of major unit identification, origin, geometry and character and sidestepping of the very substantial geological unit discrepancy is a substantial failure of the project's geotechnical report and undermines the geology, soils, soils engineering and grading sections of the Alpine Community Park DEIR.

I64-13

Standard of Practice.

The geotechnical report fails to achieve standard of practice for site evaluation (see **scope of services Appendix F - page 768).** At the EIR level, the report should include a review of topographic maps, geologic and soil engineering maps and reports (if available), stereoscopic aerial photograph review, and other published and non-published references; e.g. aerial photographs can be useful in identifying potential gravitational spread and flow features, atypical vegetation etc. Several sets of stereoscopic aerial photographs that pre-date project site area development taken at different times of the year are particularly useful in identifying anomalous vegetation and geomorphic features.

Expansive soils

DEIR Volume II Appendix F, Conclusion 9 (page 775) : "…expansive soils are not suitable for reuse as compacted fill beneath buildings, for retaining walls, or exterior concrete pedestrian flatwork."
DEIR Volume II Appendix F, Section 9.13 Storm Water BMPs (page 791) : "Based on the geologic contact between the topsoil and the underlying granitic rock, attempts to infiltrate stormwater are anticipated to result in lateral movement, ponding, and/or mounding of stormwater and perched water conditions. Additionally, due to the presence of medium to highly expansive soils onsite, such conditions are anticipated to adversely affect surrounding improvements.

The DEIR analysis and engineering direction for construction of a large active-recreation facility on a site with demonstrated deep and highly expansive soil formation derived from the Alpine Lusardi Formation and decomposed Alpine Tonalite Formation across most or all of the project area appears to be incomplete and inadequate. A comparable project to elucidate these dificulties is the 1999 Joan MacQueen Middle School (JMMS) excavation in which multiple change orders were required due to finding of deep boulder and clay substrate across the full area of a comparable site.

I64-14

- Was the JMMS excavation and change order history requested from AUSD?
- Will there be a independent evaluation of specific impacts to construction and operational costs imposed by challenging site geotechnical conditions?
- The DEIR and Geotechnical Report refer to County Guidelines for construction in sites with highly expansive soils per UBC and state the impacts would be less than significant, the DEIR does not adequately address these Expansive Soils as a County Geologic Hazard - (Project site is specifically located in mapped areas subject to County Guidelines for construction on sites with Geologic hazards):

https://www.sandiegocounty.gov/dplu/docs/Geologic_Hazards_Guidelines.pdf

I64-15

DEIR states on **Vol 1 page 241** in relation to the requirements for **Expansive Soils** that "The project is located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), and does not conform with the Uniform Building Code.

I64-16

- Is it an oversight that grading instructions in DEIR Volume II Appendix F are not as required per the SDC grading ordinance linked below?
  https://www.sandiegocounty.gov/content/dam/sdc/dpw/PERMITS_FORMS_CHARTS_DRAWINGS_MANUALS_TEMPLATES_GUIDES/propgradord.pdf

I64-17

- Does the Project expect to receive inspector approved UBC and SDC grading design exceptions for depth of compacted non-expansive fill beneath footing pavement and other flatwork?
- Will specific depths of non-expansive fill be required beneath any ballfields or other play areas?
- Since construction on expansive soil sites is possible under UBC guidelines has the County evaluated cost of excavation and replacement of the upper 2-4 feet of soil beneath all buildings and pavements?
- It is not clear from DEIR discussions and evidence whether there are sufficient non-expansive soils present on site that can be excavated and reused to accomplish the project design. Has the County for a presumed large volume of hard crystalline boulders and ripped granitic bedrock in the grading plan?
- If excess large rock materials are present will they be crushed on site to provide non-expansive substrates?

I64-18

- Since substantial rock crushing will very likely be required to produce non-expansive fill material and to reduce transportation greenhouse gas (GHG) impacts should sound and vibration from this activity be included in DEIR section 4.13?
- If the large amount of required non-expansive substrate cannot be generated on site it would need imported. Has the potential GHG impact of this transportation been accounted for in DEIR section 4.8?
- Have potential GHG transportation impacts of removing surplus expansive soils and importing suitable foundation base been accounted for in DEIR section 4.8?

I64-19

Note that the mitigation guidance for site construction does not refer to, or meet requirements of the County Grading Ordinance or Geological Hazard Guidelines linked above. County grading ordinance requires that three feet of compacted non-expansive fill be placed beneath all structural features unless specifically allowed by an inspector-approved engineering study, and that at least two feet of compacted non-expansive fill be placed beneath all pedestrian flatwork including skate parks, sidewalks, curbs, drains etc. The import of two to three feet of screened non-expansive fill for all flatwork and structures does not appear to be accounted for in the DEIR.

I64-20

Storm water.

DEIR volume II, Appendix F, section 9.13 Storm Water Best Management Practices

"As previously discussed, the site subsurface soils at the project site had factored infiltration rates ranging from a *no infiltration condition to very slow variable infiltration rates*. Based on the geologic contact between the topsoil and the underlying granitic rock, *attempts to infiltrate stormwater are anticipated to result in lateral movement, ponding, and/or mounding of stormwater and perched water conditions*. Additionally, due to *the presence of medium to highly expansive soils onsite, such conditions are anticipated to adversely affect surrounding improvements*. Accordingly, we recommend that the project consider the use of pavement edge drains and cutoff curbs along the sides of infiltration devices to reduce the potential for lateral

I64-20 cont. migration of water. *Additionally, we recommend that permanent infiltration devices incorporate an overflow pipe that is connected to an appropriate outlet*."

I64-21 With juxtaposition of paved and carpeted areas, field design requirement of local drainage of grass playfields, and shallow "infiltration" caps on remaining clay and bedrock substrates the ACP infiltration area appears to be restricted for a large, active use park. Below are a series of questions that may help clarify the intensive planning required for a site characterized by moderately to extremely impervious soils and shallow crystalline bedrock substrates. Further, all soils (and probably most sub-soils to an unknown depth) are described in Appendix F as very expansive and if wetted are likely to " adversely affect surrounding imrpvements."

I64-22 How did the DEIR evaluate and engineer mitigate for the impervious soils that characterize the entire proposed construction area? Will the ACP be required to obtain a permanent storm-water release permit? Is there any other means for mitigation of storm-water and substantial irrigation runoff at a site that has "no infiltration condition to very slow variable infiltration rates?" If expansive fills and substrates are allowed to become saturated (e.g. by irrigation, stormwater infiltration and by construction disturbance creation of hydrological "fast paths" from the surface into existing clays) the site may become unstable (see excerpted text below). Language of the geotechnical report indicates that curbs channels and catchment ponds should be lined to prevent infiltration, and that retention ponds need to have overflow provisions for excess runoff.

I64-23 Since storage, evaporation and runoff are the only water management utilities at this site, will not excess storm-water and irrigation exit the site carrying water-borne road-oil, fertilizer, pesticide and herbicide will leave the site via overflow pipes to street drains, streams and reservoirs?

I64-24 This last point is a clear indication that essentially all storm-water will leave the site since all "infiltration ponds" need to protect against infiltration, and all ponds, curbs and edge drains need to be lined, and infiltration ponds are required to have outlets for storm-water runoff. It appears that all storm-water and most irrigation water will run off the site from 6 acres of irrigated turf, 8-10 acres of irrigated landscaping/gardens and the balance of 9-11 acres of hard and impermeable surfaces (totaling 25 acres). Can the County show that storm-water will be fully accommodated by storm-water retention pond(s)? In the dozens of storm-water references in the DEIR it is not disclosed that soils of the site do not accommodate infiltration such that engineering design requires overflow from lined retention pond(s) which themselves will only empty by draining or evaporation and all site contaminants will run off or collect in retention ponds. Evaporation in San Diego is averages 60 inches per year (https://semspub.epa.gov/work/01/554363.pdf). Storage of runoff in retention ponds will thus concentrate any contaminants.

Actual extreme storm runoff, for example 2" rain accumulation in 48 hours (two acre-feet = 652,000 gallons = 87,000 cubic feet) would require an equivalent retention pond of an Olympic-size swimming pool (and would still need to be drained of storm water). Precipitation events twice this size are not rare in San Diego (see weather.gov extreme weather inventory page 3 to 53, linked below), i.e. retention of a 4" rain event requires a retention volume of 1,300,000 gallons, 174,000 cubic feet etc.

https://www.weather.gov/media/sgx/documents/weatherhistory.pdf

https://www.sandiegocounty.gov/content/dam/sdc/dpw/WATERSHED_PROTECTION_PROGRAM/watershedpdf/WPO.pdf

I64-25

These questions arise from DEIR storm-water discussions (**e.g. Section 4.10 page 319**)

- Has management of retention ponds been evaluated in operational cost estimates for the ACP?
- What are the specific MEP BMP storm-water parameters for ACP, i.e., what erosion and contaminant increases will be permitted downstream of ACP?
- Over what period will down stream erosion and water quality be monitored?
- Will the ACP SWQMP be able to meet SDC WPO LID requirements for site design and management, that is, area, depth and infiltration parameters of placed pervious materials?
- Will the ACP SWQMP meet SDC WPO LID requirements for active runoff controls and accumulated toxics management?
- Since grassland has co-evolved with impervious site soils to slow runoff from the site, how does the ACP SWQMP compare to replaced natural conditions for managing the rate and quality of storm runoff into the nearby El Capitan Reservoir of the City of San Diego water supply system?
- Will pre-construction runoff and water quality measurements be obtained at intervals downstream of the ACP?
- What agreements, easements, and licenses have been completed for proposed BMP construction, location, maintenance, or changes to drainage character?

I64-26

Crushing of granitic boulders and excavated bedrock.

Appendix F section 9.1.3 Excavation Characteristics:

"During our subsurface evaluation, we observed outcroppings of rocks at the surface and encountered decomposed granitic rock with corestones in varying states of weathering. Onsite excavations will encounter very difficult excavation conditions due to the presence of bedrock materials, boulders, and/or corestones. The contractor should be prepared for the use of heavy ripping, rock breaking, rock coring, and/or blasting techniques to perform onsite excavations. Additionally, onsite excavations will generate oversize materials that should be screened, rock picked, crushed, removed, or otherwise processed from the excavated materials prior to reuse as compacted fill."

I64-27

The following bullets illustrate one aspect of the Alpine Lusardi Formation and focus attention on reasons that characteristic of constrctuon site geological formations can be critically important inputs for evaluations of construction effort and associated costs and to operational challenges and cost

- (Personal recollection of site conditions during construction of Joan MacQueen Middle School): "I distinctly remember visiting/monitoring the Joan MacQueen Middle School (JMMS): site every week in 1999 during excavation and grading. The soils were made up of boulders, often massive in size, embedded in a variety of clay substrates (white, grey, red) which turned to goo when it rained. What a construction mess it was! Then in 2000-2002, (the) first few rounds of landscaping with native plants failed miserably because of the drainage. The "Jeffersonian Lawn" became a mud hole which was unusable and needed to be roped off all winter. Even one of (the) large boxed specimen Engelmann Oaks couldn't survive"

- The presence of large stream-trasported boulders (up to and in excess of 10 feet in diameter) is a uniform characteristic of all occurrences of the Lusardi Formation in Alpine and elsewhere. Grading of boulders and liquefied clay after rains is noted from construction observation at JMMS (personal communication above) as generating substantial change-orders during rough grading of the JMMS site. It is not known if mitigation was performed for expansive soils at the JMMS site, however it I note that impermeability and rapid erosion characterize all the exposed and shallowly covered native soils at JMMS.

I64-27 cont.

Screening and crushing of all rock material larger than 3 inches in size will be a major cost to this project. Processing of this material on site will require a large rock crusher and very likely will also require substantial blasting to reduce the size of materials to a size that can accommodate processing to provide the substantial engineered fill needed to replace site rock materials and expansive soils. Bullets set out below are intended to elucidate major costs and corollary impacts for reduction of oversize materials.

- Since 20% or more of site substrate is believed to consist of hard, intact granitic bedrock and crystalline boulders and cobbles larger than 3 inches in diameter, have costs and collateral impacts to construction noise, vibration and GHG been evaluated for both crushing and removing this material?
- Is there understanding in the engineering and cost estimating for of the site grading plan that site boulders will range up to 10 feet in diameter as experienced during the 1999 excavations for Joan MacQueen Middle School? (see below).
- Is large crystalline rock material planned to be buried in perimeter landscape berms?
- Is burial of oversize material a significant design purpose of the perimeter landscape berms?
- Have the County or County's consultants requested excavation design, budget and change-order records for nearby Joan MacQueen Middle School to more objectively evaluate potentially very large construction cost over-runs and costly or potential inability to achieve compliance with SDC storm-water ordinances?

I64-28

DEIR Section 4.8 Greenhouse Gas Emissions and Climate Change

Does the DEIR have a greater legal basis or opinion to skip analysis of ACP user contributions of greenhouse gas from additional car and bus trips to the ACP from the region (20 mile radius as applied for in the Prop 68 regional park application)?

Is it a County-wide determination that the court ruling striking down part of the 2018 CAP EIR, exempts the DEIR from analysis of an ACP operational impact significance determination? The DEIR asserts that "the court did not find fault with the CAP's 26 GHG reduction measures. Therefore, while the 2018 CAP may not be used for project impact significance determination, the relevant GHG reduction measures of the 2018 CAP may be used to mitigate project-specific GHG impacts (County of San Diego 2021a)". It feels like this separation of construction from operational GHG contribution is arbitrary.

I64-29

I64-30 DEIR (sections 4.8, 5.3.3) deal with greenhouse gas issues and the County concludes that the only impact of significance to the DEIR is construction, and while very significant, (excavation of 48,000 cubic yards of soil = 3000-5000 dump truck loads), doesn't the County avoid the spirit and intention of the CAP, with its exemption park visitor travel in asserting that "the 2018 CAP may not be used for project impact significance determination?" so the DEIR addresses only construction related greenhouse gas emissions and asserts that operation related emissions will be negligible, completely ignoring the fuel required to bring up to "thousands of visitors per day" (Rhodes Associates 2020).

I64-31 Does analysis of visitor greenhouse gas contribution look something like this: auto emission per mile is 0.8 lbs of carbon dioxide. 500 daily round trips from El Cajon/Lakeside (25 miles RT, much closer than the 40 mile RT radius in the Prop 68 ACP regional park grant application) would generate 1800 tons (3.6 million lbs) of additional greenhouse gas per year. This would seem a minimum estimate of annual GHG contribution over the life of the park?

DEIR Section 4.13 Noise and Vibration

I64-32 On page 42 the DEIR introduces that public gatherings (sports, holiday, private gatherings will be allowed by to operate by permit with lighting and a public address (PA) systems between the hours of 7 am and 10 pm. How does this relate to DPR statements conveyed and recorded in outreach meetings indicating that the park has no plans to install event lighting or allow sound systems. Has the County studied impacts to avian and bat foraging by event noise and lighting? Impacts to wildlife and neighborhood comity are likely to be very great for events ending up to 5 hours past sunset and opening as early as sunrise.

Page 362: "The existing noise environment in the project vicinity is generally quiet. The primary sources of noise are traffic on South Grade Road. Other noise sources in the project are birds and landscaping activity."

I64-33 Page 367: It is noted that the zoning of the project site and the surrounding uses is a mix of S-80 (open space), R-R (rural residential), and A-70 (limited agricultural use), which all fall under Zone 1. Therefore, the applicable base sound level limits (before any corrections for ambient noise levels) are 50 dBA Leq between 7 a.m. and 10 p.m. and 45 dBA Leq between 10 p.m. and 7 p.m.

I64-34 Note that in the DEIR's own studies (Table 4.13-6 - page 371) soccer field noise averaged 59 dBA at 115 feet and skate park noise averaged up to 66.5 dBA at 60 feet.

Does DPR envision an enforcement mechanism for San Diego County Code Section 36.404 Noise Limits?

I64-35 The DEIR project impact conclusion reads as follows:
"Threshold 1: Implementation of the project would result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies."

I64-35 cont.

- Can the proposed ACP operate under the moderate sound level limits permitted by present zoning?
- Is there a legal precedent in San Diego County for change of permitted land use in excess of prior sound level limits?

DEIR Section 4.19 Utilities and Service Systems

Water

Estimated annual water use, Alpine County Park:

- Recommended average-annual water use for turf grass in a dry climate is 1 inch per week.
- One inch of water over an acre is 27,150 gallons, thus 6 acres of recommended water use is about 163,000 gallons a week. 52 x 163k —> 8.5 million gallons/year (1.35 million cubic feet) at ten cents a cubic foot the annual water bill for six acres of grass would be about $135,000.

I64-36

- One inch of irrigation per month over 8 acres of landscape features (berm, and green space) amounts to 55,000 gallons per week along with sanitary facilities and a residence could require up to another 20,000 gallons per week respectively for a grand total of 238,000 gallons per week and 12,400,000 gallons per year, or two million cubic feet and an annual water cost of about $200,000.

Per DEIR **Table 4.19-5**.(page 445) Projected Water Demand for the Project shows anticipated annual use is actual 16,471,273 gallons, supporting the preceding analysis and estimate.

4.19.4.3 Project Impacts and Mitigation Measures: Threshold 2 (page 447, 450)
Impact Determination (page 451)

Impact-UTIL-2: Insufficient Water Supplies Available to Serve the Project During Operation. Due to the potential increase in water demand as a result of implementation of the project, PDMWD (Padre Dam) cannot guarantee that at some point in the future, supply of imported water would not be diminished. Therefore, given this uncertainty regarding available water supply, which is necessary for operation of the project, potential impacts are considered to be significant.

I64-37

- Are ACP investments in expansive turf and landscape planting (on a site with no ground water retention capacity) justified if San Diego County water supplies could be diminished due to (for example) calls that the Colorado River water supply be redirected for agriculture or to meet cross border water supply treaties?

Septic

Options for Septic Management:

- A traditional septic drain field (not viable due to percolation constraints);
- Connection to County Sewer District (outside of urban limit line), up to $5M to connect at ca. $500/ft plus pumping station, possible legal issues because Supervisors are in charge of code and County previously disallowed connection to Stagecoach Ranch (1993) and Singer Apollo Group (2009-2020);

I64-38

- On site treatment, questionable “infiltration” of liquids and trucking of solids

Wastewater generation:
Table 4.19-4. (page 445) Projected Wastewater Demand for the Project
DAILY 8630 gallons
ANNUAL 3,150,000

ADDITIONAL REFERENCE MATERIAL
Alpine-Lakeside Sewer Master Plan:
https://www.sandiegocounty.gov/content/dam/sdc/dpw/SAN_DIEGO_COUNTY_SANITATION_DISTRICT/Sewer%20Master%20Plan/Alpine%20Lakeside%20Sewer%20Master%20Plan%2001%2012%2012.pdf

I64-39 1.3 "The County Board of Supervisors serve as the Board of Directors (Governing Board) for the San Diego County Sanitation District, of which the Alpine SSA is a part."

2.1 "The Alpine SSA boundary is also described as the Town Center boundary in the Alpine Community Plan, amended April 17, 2002. Topographically, the study area varies considerably ... The Alpine SSA and Sphere of Influence boundary, affirmed September 2, 2010, as part of the LAFCO Municipal Service Review Update, includes both developed and undeveloped areas and encompasses approximately 950 and 2,100 acres, respectively." (ACP IS ENTIRELY OUTSIDE of EITHER THE ALPINE SSA OR THE ALPINE SOI AND SO IS NOT INCLUDED IN ANY PRIORITY FOR SEWER HOOKUP)

The only parcel with sewer service outside the current bounds of the Alpine Sanitation District is Joan MacQueen Middle School.

Note that park is outside both the *Alpine sanitation district* and *sphere of influence* boundaries.

Notes:

I64-40 Cost: ACP is at least 4000 feet from the closest potential Alpine SSA septic hookup the north along South Grade Rd intersection with Manzanita View Rd. Septic main extension from outside of Alpine SSA or "sphere of influence", if allowed is a 4000' (Manzanita), 6000' (Alpine Bl) to 10,000' (Tavern) sewer line likely requiring pump stations for any significant rises of along the route. Estimated cost for this Alpine SSA extension, if it were allowed, is between $2M and $5M (@500/ft). For comparison onsite septic treatment is believed to also cost about $2M for construction.

DEIR SECTION 4.19.4.3 **Project Impacts and Mitigation Measures**

I64-41 Indicates two septic management schemes, either hookup to existing sewer at Tavern Road (crossing the WF preserve? appears to be more than 10,000 feet so on the order of $5M @ $500/ft); or in South Grade Road or near Alpine Boulevard (appears to be more than 6000 feet so potentially more than $3M)

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ON SITE SEPTIC

I64-42 On-site septic drainage is greatly limited due to critical geotechnical limitations of both *Lusardi formation* clay-boulder substrate and granite bedrock underlying 100% of the proposed park site.

In other words there is probably insufficient septic percolation anywhere on the proposed 25 acre park site.

I64-43 A septic liquids "drain field" is technically possible north of the park site within a 2.5-acre depression coincident with the headwater basin of the North Branch of Alpine Creek This depression may coincide with the infiltration area of a local aquifer which is pumped for domestic water by the surrounding residences.

Required septic flow
https://www.epa.gov/sites/production/files/2015-06/documents/2004_07_07_septics_septic_2002_osdm_all.pdf

https://www.epa.gov/sites/production/files/2015-06/documents/septic_1980_osdm_all.pdf

I64-44 The size of septic drainfields for non-residential installations like hotels, restaurants and parks vary widely in the wastewater volume used per person per day depending on the type of facility, the number of visitors to it, how long they stay there, and what activities they pursue. Wastewater volume designs need to account for different kinds of usage and visitor numbers.

For a *picnic park* the range of wastewater usage/person/day is 5-10 gallons.

Rhodes Associates bases their fire study on the anticipation of "several thousand per day in developed recreation sites. Septic is always designed for greatest anticipated use. Taking the high average of 10 gallons/person/day septic capacity (for up to 3000 persons/day) would be 30,000 gallons/day. Range of drainage field area for this flow is 30,000 square feet (0.7 acres, possibly smaller depending on soil percolation rate).

REFERENCE TO DEIR

4.19.4.3 Project Impacts and Mitigation Measures

I64-45 The DEIR appears to underestimate Septic flow requirements to 5000 gallons/day if there is to be on site septic treatment (see calculation above and Table 4.19-4. (page 445) which estimates 8630 gallons of septic effluent per day) estimating a flow rate of just 5000 gallons/day is below the minimum advisable capacity and the County's own estimate (see above). This could be a real problem for on site treatment if park usage exceeds what is asserted by the DEIR.

- Does the DEIR "on site treatment" septic flow of 5000 gallons per day require that site visitor numbers would be limited to 500/day?
- Is it possible to permit septic infiltration into a shared aquifer?

I64-46 **DEIR Section 4.20 Wildfire**

"*The Community of Alpine is situated to arguably pose one of the worst Wildland-Urban*

Interface conditions in the County of San Diego and is in a known location of repetitious major wildfire occurrence. Such locations of repeat occurrence are known as "historical wildfire corridors"
Per Rhode and Associates Proposed Alpine County Regional Park
I64-46 Fire and Emergency Operational Assessment 8/17/20 (RA20)

References to the DPR fire consultants report are miss-spelled 21 times (as "Rohde" instead of "Rhode" and the Rhode Associates 2020 report (RA20) is not appended as an Appendix. Findings of RA20 are devastating for this park site and omission of that report is a red flag for this DEIR and does not allow full and complete review of all site hazards and conditions.

Relevant points in DEIR: **County of San Diego General Plan** (page 467)
I64-47 Policy S-3.1. Defensible Development. Require development to be located, designed, and constructed to provide adequate defensibility and minimize the risk of structural loss and life safety resulting from wildland fires.

Policy S-3.2. Development in Hillsides and Canyons. Require development located near ridgelines, *top of slopes*, saddles, or other areas where the terrain or topography affect its susceptibility to wildfires to be located and designed to account for topography and reduce the increased risk from fires.
I64-48 (Site is at *Top Of Slope* relative to Santa Ana winds directed from the east – the most likely wildfire scenario)

- How does Park planning respond to increased fire risks created by the design site at a "top of slope" relative to the prevailing Santa Ana wind direction?

Policy S-3.5. Access Roads.
Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently. This policy cannot be met and is a critical hazard per RA20.
I64-49

- How does Park planning respond to increased fire risks created by the lack of ability to provide safe access for fire equipment and concurrent civilian evacuation? Can staff elaborate on all RA20 fire scenarios and response plans as they relate to the proposed Park site, and to adjacent areas of southeast Alpine and as the Park relate to Alpine as a whole.

It is incredible that wildfire has not burned across the area of the County's Alpine property and Wright's Field Preserve since the *1970 Laguna Fire*. During the *2018 West Fire,* scene command was certain the fire would run west across the grassland and extend indefinitely into neighborhoods in that direction. This terrible outcome was inhibited, but not prevented, by firefighting. The primary reason the fire was brought under control was a drop in wind and
I64-50 temperature. It is certain that a large increase of potential ignition sources will be introduced by smoking materials of youth (and other park users) crossing and assembling in grassland while coming and going from the proposed park attraction. Near certainty of eventual occurrence of a fire ignited auxiliary to the transit of "*thousands of daily park users and hundreds of daily users of adjoining land"* (RA20).

I64-51 A real question arises whether a park at this site should remain open during even modest wind events. I feel strongly that park-caused increases of fire hazard to adjoining habitat areas and extended neighborhoods needs to be more deeply and critically evaluated in the EIR process.

EXCERPTS FROM FIRE EVACUATION PLAN (RA20, Appendix A)
Alpine South-East Wildland-Urban Interface Fire Emergency Response and Evacuation Plan

"Potential Choke Points/Entrapments:
Be prepared to shelter community population in Alpine as all evacuation routes may be cut off by fire spread. Farthest east Alpine area of "Old Ranch" is more rural, and has numerous areas with entrapment potential."

"Access:
…All evacuation routes may be compromised during major fire"
I64-52 *…Be vigilant for possible closure by fire of I-8, and therefore plan to shelter-in-place all civilians within the community of Alpine. Continue to use air support to protect shelter-in-place operations within the community."*

"Evacuation Trigger Point:
Evacuate entire plan area for a major Santa Ana/east wind-driven fire spreading west of Hwy 79 or south of I-8, or southwest of Boulder Creek Rd and Eagle Peak.
End evacuation and switch to shelter-in-place when fire spreads west of West Willows off-ramp, or south of Anderson Rd/Boundary Truck Trail. For a west wind driven fire, start evacuation when fire crosses into the drainage east of the South Grade Rd and Arnold Way intersection. Evacuate for any fire starting within the plan area and escaping initial attack with high winds and rapid rates of spread. Evacuate in stages to avoid severe traffic congestion."

I64-53
- With the RA20 scenarios and considerations quoted above, is the County willing to assume expressed liability for increased congestion in this, arguably, most-hazardous fire evacuation location in San Diego County?

Fire Egress Traffic 300-500 homes in park area are already cited as likely "shelter in place" by RA20.

Wind driven fire is certain to impact the proposed park site and surrounding neighborhoods in the foreseeable future. A significant fire bearing down from the east during a Santa Ana wind pattern will require evacuation of about 500 homes and up to 1000 vehicles onto South Grade Road. I attached a "Fuels Map" to the NOP, which I drafted for my interest in fire fuels distribution across Palo Verde Ranch, Ranch Palo Verde and neighborhoods immediately
I64-54 upwind in a Santa Ana firestorm approaching the proposed park site from the East (e.g. Laguna Fire 1970).

Parking for up to or potentially more than 300 additional vehicles at Alpine County Park is now proposed. Since the park is directly downwind from a large mass of old growth chaparral, 200 wood homes and extensive mature (up to 50-year-old) landscape planting, fuels to the east will take many hours to burn out.

I64-55

- Can the park be cited as a planned evacuation shelter if air quality conditions could, by themselves, lead to mass casualties at the park site and lead to a secondary evacuation from the those attempting to shelter at the park?
- Can the potential of this occurring be evaluated by independent wildfire experts?

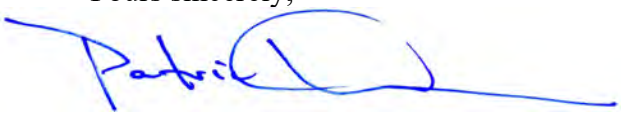
I64-56

Taking the worst case, which is the most conservative evaluation, of a fire occurring during the daytime on a weekend, within a high time-of-use for the park and area roads, up to 300 vehicles would exit onto South Grade Road, slowing normal traffic (which is up to a few vehicles per minute) and eventually backing up at controlled intersections. A line of 300 cars is almost exactly one mile in length (https://www.quora.com/How-many-cars-make-up-a-mile), thus without any cars entering South Grade Road from the adjacent communities, cars could be backed up to Tavern Road or to Alpine Boulevard. With the addition of cars entering from surrounding homes traffic could quickly back up in both directions to such a degree to produce hazard of a mass casualty event. Evaluation of various fire traffic scenarios including "worst-case" scenarios must be an integral part of EIR traffic studies for the proposed Alpine County Park, and to date the DEIR does not evaluate fire scenarios for the proposed park.

I64-57

Thank you for taking my input. I appreciate your consideration of this extensive letter response to portions of the Alpine County Park Draft Environmental Impact Report. I look forward to a constructive dialogue with DPR. I am available to discuss any of the above materials at your convenience. Please continue to email all notices relating to this project at geoplw3@gmail.com

Yours sincerely,



Dr. Patrick L Williams
PO Box 1437
Alpine, CA 91903
(508) 274-9618

From: Jean and Carl Wirtz
To: CEQA, CountyParks
Subject: [External] Alpine County Park
Date: Thursday, November 11, 2021 12:06:03 PM

I65-1 As a 21 year resident sof Alpine it would be nice to see some recreational facilities, especially pickleball, in Alpine. The closest public courts are in Lakeside. Certainly the population of Alpine and the surrounding area would justify some courts for one of the fastest growing sports in the country. The field as is seems pretty hard to use for biking unless you are a hard core rider which limits the population.

We do think that all of the ball fields, etc. should be scaled back since there are already several facilities at the schools.

Thank you for your consideration.

Jean and Carl Wirtz

Sent from Mail for Windows

Virus-free. www.avast.com

From: Pamela Yeiser
To: CEQA, CountyParks
Subject: [External] Project Title: Alpine Park Project (SCH No. 2021030196)
Date: Friday, October 15, 2021 11:52:55 AM

Hello Anna,

Thank you for taking the time to address public concerns.

I66-1 Where will the water come from for the proposed project?? I am all for an bit of safe parking and passive trails, but
I66-2 this is way to much. Please don't destroy the views of the grassland our community values & treasures. It is not replaceable.

-pam yeiser
4097 Via Palo Verde Lago

From: Carrie Zub
To: CEQA, CountyParks
Subject: [External] Alpine park
Date: Friday, October 29, 2021 1:54:10 PM

I67-1 I've been a resident in Alpine for 47 years. I grew up in Pella Verde which has to Lake Park tennis courts restrooms barbecue. Most homes and Alpine are on a larger scale and do you have Pools or Areanas, basketball courts. Alpine is it affluent neighborhood kids are in paid activities whether it be through school or their local communities that are not hanging out at parks anymore not here anyway. Why does every thing our eyes touch need to be built out can't there be one space where you can use your imagination . We have the casinos which have already brought a rougher crowd to our neighborhood stealing mail items missing vagrants drug use but putting a park in the middle of the most affluent area and Alpine as a matter of fact an aging area of Alpine put seniors at risk for theft speed no regard for our town you're bringing them right into the heart of our town. I worry that we will have to lock her doors because of a park that nobody needs nobody wants. Who has time to go to a park anymore let me let me start their when's the last time you said OK honey let's go to the park give me a fucking break go to the beach go to Balboa Park go to Seaworld it's not like we live in the area that we have no access Beautiful activities we do so go do them but who has time for building this park is a dream of like Walt Disney we do not need a park we need open space for imagination for playful experiences for rocks and sunsets not concrete and structures. Respectfully yours Carrie Zub

Sent from my iPhone

From: Daniel August <danaugust19@hotmail.com>
Sent: Saturday, February 25, 2023 3:35 PM
To: CEQA, CountyParks
Subject: [External] comments for proposed Alpine Park

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countyparksCEQA@sdcounty.ca.gov

February 25, 2023

Attn: Ms. Prowant

I68-1 I have lived my entire life in Alpine. I am 38 years old now and have always loved my hometown.

I choose to live here because I love being in the rural Alpine community. I love the wildlife, the beautiful spaces and surrounding mountain vistas. I also love the peace and quiet afforded with living in a country atmosphere.

If I wanted to live in the city, there are many to choose from, but I love my hometown. I do not feel that a huge mega park proposed on S Grade Rd will be favorable to our community. Many concerns are traffic on our rural narrow roads with (no shoulder or narrow shoulder), noise, lighting and high fire risk.

I68-2 Our family has been in many of the fires in this community. We do not wish to have additional fire risk from a park of this size.

I68-3 We already have 11 baseball fields and sites for 6 full size soccer fields at school property. Why do we need more at this proposed park?

I68-4 What we have always needed in this town is a high school, which we have never gotten. This regional park is not really for Alpine it is for San Diego County. If it was at a more suitable location, I do not think that the community would be opposed.

At this time, I believe that the most appropriate park for this location would be a nature- based park, with picnic tables, and approximately 30 parking spaces (instead of 275), pet and child friendly.

Daniel August

2772 Via Dieguenos

Alpine, CA 91901

Danaugust19@hotmail.com

From: russ-dawn@sdcoxmail.com
Sent: Saturday, February 25, 2023 2:28 PM
To: CEQA, CountyParks
Subject: [External] comments due for proposed Regional Park below

February 25, 2023

Attn: Ms. Prowant

I69-1 My husband and I have been full time Alpine residents since 1975. We are both real estate Brokers and have been operating our own real estate office since 1979 in downtown Alpine. We have always supported planned growth in our community; however, the location of this proposed Regional Park is the wrong location.

I69-2 We are making our comments for the Alpine Regional Park proposal regarding the Draft Recirculated Environmental Impact report. Project objectives are deficient because this plan for a Regional Park in a rural portion of Alpine is not a community park but a Regional proposed Park.

I69-3 How can tearing up 20-25 acres of natural preserve not be impactful to natural vegetation, wildlife, wildfire in an area that is rural residential?

I69-4 Utility impact is still significant (See ES 36) regarding water demand and PDMWD cannot guarantee that supply of imported water would be diminished. And yet your mitigation for this issue is "MM-UTIL-2: Confirm Water Supply Availability for Development of the Project Prior to Issuance of Building Permits. Water availability shall be confirmed prior to issuance of building permits. The confirmation of water availability by PDMWD shall be provided in written form by PDMWD."

I69-5 How can you justify per your own DEIR report that 16,471,272.8 gallons of water is to be used for the park per year? That is an absorbent amount of imported water and not a conservation measure for our drought ridden County. While the taxpayers are expected to pay for this wasted water on landscaping for 8 acres. We are already burdened with high water bills to live here.

4.20 Wildfire Summary of Significant Impacts

I69-6 "There would be no significant impacts related to wildfire" is not an accurate statement because implementation of the project would result in significant impacts related to wildfire. This area is labeled high fire risk. With the volume of people/visitors coming into our remote rural community (per your projected amount of 500 people coming per day and that is 3500 per week). This puts us at higher risk of fire for not only the proposed park, but Wrights Field (202 acres) which is labeled a Neighborhood Park and the surrounding rural neighborhoods. It is very challenging for Alpine residents to secure fire insurance as it is. The fire insurance policies are exorbitantly high already.

I69-7 My husband and I see this for what it is. You, as the County, are supposed to be representing our community's best interest and yet this proposal is in the wrong location for the projected size of this proposed Regional Park. Your DEIR report is weak on mitigating the real concerns and issues of this rural community. Lighting, fire, traffic, safety for our residents and children as well as biological and preserving our rural atmosphere.

I69-8 Our family is supportive only of Option 5 Passive Park Alternative. However, the proposal that you have offered does not meet the needs of the Alpine Community as a whole. The community has expressed a need for a Passive/Nature based Park (with no lighting), child and pet friendly. Also, to include a picnic area, hiking and horseback riding with perhaps 30-

I69-8 cont.

50 parking spaces. The other options would and could be more desirable if they were located closer to the freeway and in the higher density zone to meet safety standards for bicyclists, pedestrians and children. A better choice location would be more accessible to mass transit too. Our windy, narrow, rural roads do not support Alternatives 2-4.

Sincerely,

Russ and Dawn August

Brokers

Alpine Premier Properties

1411 Rock Terrace

Alpine, CA 91901

619 445-6246

Russ-dawn@sdcoxmail.com

Comment Letter I70

From: Brad Bach <bbach619@gmail.com>
Sent: Friday, February 24, 2023 1:58 PM
To: CEQA, CountyParks
Subject: [External] Alpine Park Development Project

Dear Anna Prowant,

I70-1 Thank you for the opportunity to write to you offering my comments regarding the Alpine Park project.

I70-2 I have been a resident of Alpine for 20 years this coming August and have loved the Wright's Field / S.D. County Parkland and I do use it on a very regular basis. I was able to attend the initial planning meeting held at the Alpine Community Center and observe the comments being made at that meeting. Most of the direction was coming from teen and preteen boys that seemed to be in favor of any and every development option that could be thought of. It didn't seem like a very good idea to let the project direction be too heavily swayed by this narrow demographic so I am glad to see that thoughtful alternative options have been introduced.

I70-3 Of the choices offered my preference would be option #4. Given the overall impacts to the area I am very happy to see the skate and bike parks removed. Some major concerns of mine are thereby relieved. These include, fire dangers (resulting from smoking products, and other flammables), noise, potential for injury, excessive traffic into and out from the site, and the

I70-4 likelihood of numerous unsupervised youths. I also would hope to see very limited installation and use of lighting.

Respectfully submitted,

Brad Bach
Alpine resident.

From: Rowbear <saulgau@cox.net>
Sent: Wednesday, February 15, 2023 1:55 PM
To: CEQA, CountyParks
Subject: [External] "East Otay Trail Alignment Study"

I71-1

I write in opposition to this proposal.

As I understand it, this will carve a "park" out of a section of Wright's Field. Alpine already has a park and it is Wright's Field, which is well-used by Alpine residents who wish to experience the environment of nature. Putting in a concrete facility is not in tune with the natural environment.

This project will greatly contribute to the urbanization of Alpine, which is a rural community. Such a serious alteration to Wright's Field should be put to a vote of the people. Let them decide.

Robert Barrett
2532 Camino del Vecino
Alpine, California 91901
619-249-1

From: Rick Bizzoco <rbizzoco@gmail.com>
Sent: Thursday, February 2, 2023 6:20 PM
To: CEQA, CountyParks
Subject: [External] Alpine Park

County of San Diego
Parks and Recreation

Parks and Recreation

I72-1 The last thing we need is the county government to step in and say we need to develop this area into a park for the people. We have enough of that destructive change for constructive purpose with housing construction alone. One of the worst examples is the County permitting apartments to be the front face of Alpine, to the detriment of the entire concept of Alpine as a village in the mountains. This is particularly evident in that the area around the once pristine Alpine Creek Shopping Center surroundings is now an "Apartment City." We should leave the Wright's Field property as is. I was part of the Back Country Land Trust when we all pitched in financially and individually and saved that property. It was agreed at that early time that Wright's Field would be held and kept as Wright's Field permanently, undeveloped. That was the promise we of the Back Country Land Trust made many decades ago when we acquired the property as a group. We should leave what is left of that land "as is." This might not be aligned with the County view of your role as a governing body, but it is right in my view as a 45 year resident of Alpine. I have seen unending destruction of all areas of Alpine by building house after house after house, as well as large developments at a fast pace. Now the County of San Diego comes in and says----- 'you need more----- we will do it whether you like it and whether you want it or not. It is your future, Alpine's future.' At this point, before it is too late, you, the County of San Diego, need to put the brakes on your lofty "Park" development right now! It is the worst project the County ever came up with. It completely undermines our idea of living in a "mountain town" in every way and in the worst way possible.

Rick Bizzoco
Alpine Resident

Comment Letter I73

From: Adah Bohmfalk <asbohmfalk@yahoo.com>
Sent: Tuesday, February 28, 2023 3:05 PM
To: CEQA, CountyParks
Subject: [External] RE: Alpine Park Project (SCH No. 2021030196)

Adah Bohmfalk
1330 Arnold Way
Alpine, CA 91901

Date: Feb 28, 2023

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Ave, Suite 410, San Diego, CA, 92123
By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

I73-1 Thank you for the opportunity to discuss the Alpine Park Project's Draft Environmental Impact Report (DEIR). I have lived in Alpine for over 20 years and I have become a good and educated steward of the land I use and the land around me. I have studied and learned about the intricate ecosystems here, the impact of the components of ecosystems and I have seen what happens when those systems go awry. Everything matters; from the dark night skies, to the wild creatures that need the night, to the plants and the very ground beneath our feet.

I73-2 I am concerned that an undeveloped open park that requires minimal development has not been proposed for this site. Why has this not been proposed as a valid and valuable option? I believe, as most of the folks here do, that Wright's Field and its surrounding land is a wild gem and one of the defining best assets of our town. And it is already a park. It's an amazing piece of nature that we are privileged to have and it would be best to share it as it is. Yes, we would benefit from a few improvements to make it more accessible and safer, but even this must be done with care and concern for the entire ecosystem. It would be most appropriate to use the field as a nature center with the goal of educating young and old alike to enjoy, appreciate and protect the natural world around us. It would be beneficial to improve the existing parking area and make it easier for people to walk and enjoy nature, but this acreage should be saved and used to educate our next generations about nature's delicate balances and the beauty of working ecosystems and to simply let nature be nature on a beautiful uninterrupted parcel of wild land.

I73-3 How far are we willing to go to get this project done in spite of the findings? Any project, no matter the size, the scope, the purpose, must begin with exploration. If that exploration exposes significant issues, the project must be adjusted to these new-found limitations. If any of those issues prove to

I73-3 cont. be insurmountable, the project must be scrapped. We are at a crucial point now as we look at installing playing fields, lights and infrastructure to support a formal sports park in Alpine; this simply is not feasible. We must be aware that the socio-environmental conflict here is simply too great and we must reckon with environmental issues getting tossed aside in the name of 'progress'.

A very few of those issues will be examined here; they are not the only ones.

I73-4 What is the plan for mitigating the project's inevitable permanent destruction of flora and fauna which keep the area in balance? What will the further loss of corridors mean to all that lives on this land? What will happen when the predators cannot reach their prey? Section 4.4 states that the project does not maintain wildlife corridors, yet no mitigation is required. The ecosystem will respond to the further separation of prey and predator by becoming more unbalanced. We all know that when predators cannot get to their prey, the pest population booms. It is widely understood that disruptions in the predator/prey balance create problems to the very ecosystem they share. It's not just the animals in a live-or-die natural space; it's the plants, the trees, the very ground; all are affected. In addition to the flora and fauna, how will the neighbors on the 'prey side' protect their property from potentially massive increases in pest damage? And the homeowners on the 'prey side'; what is the plan for mitigating the loss of pets' lives and property damage? The health of the entire ecosystem hangs on these seemingly small and supposedly temporary losses. The plants here must also be protected and the policies/recommendations 'where feasible' and 'wherever possible' are not good enough.

I73-5 In Alpine, we place great value on what's natural, what's normal; what 'nature intended'. Alpine is a dark sky town. We want to see the dark of night, we want to see the stars in that darkness, and that darkness is essential to the life being lived in this area right now. This land is a huge piece of darkness in the night. Lighting it up in any way will not just further damage the way in which prey and predator animals coexist, it will damage the very environment they live in. How will the excess lighting be made to fit into Alpine's character? How will that lighting be mitigated? We cannot simply add 'darkness'.

I73-6 Perhaps the greatest factor discovered during the exploratory phase of creating a park at Wright's field is the fact that the land cannot be percolated. Attempting to tie into existing plumbing at the school or from behind Albertson's will simply further damage the balances, the ecosystems, that are the greatest part of the beauty of Alpine.

I73-7 Why must a heavily-developed park be located here at all? It is on a dangerous road in a quiet town. There is no need to pull people from surrounding communities where they have their own heavily-cemented skateparks and play places. The entire area here in Alpine is a beautifully balanced and natural ecosystem and there are real questions about its future to be asked at this point in the project.

I73-8 Thank you for your consideration. I appreciate your time and attention and hope you will fix any and all unmitigated impacts in the final EIR. I stand with many many others who want to keep the beauty we have and hope that you will see that our mission to save the land for the future of peace and quiet is an honorable one and worth pursuing. Please include me as a recipient in all notices and matters relating to this project at asbohmfalk@yahoo.com.

Sincerely,

/s/ Adah Bohmfalk

From: Jacob Bolz <jtbolz85@gmail.com>
Sent: Tuesday, January 31, 2023 7:50 AM
To: CEQA, CountyParks
Subject: [External] Alpine Park Project[SUSPECTED SPAM]

To Whom It May Concern,

I74-1

Thank you for your continued support of this project. I have attended the public meetings over the last several years that have outlined the park and the effort that has gone into designing and implementing the Alpine Park.

I want to be a positive voice in support, I have been very impressed with the plan and amenities this park will provide. I am aware there is a small but very vocal contingent that does not understand that project and thinks that all of Wright's Field 98 acres will be developed. This project will improve the land use, improve the traffic flow, and create a safe place for the Alpine community to gather.

I have spoken with several businesses including the Alpine Ride Shop which is very active in the youth community of skaters and riders and this park would provide a safe atmosphere for the youth to gather and recreate in Alpine.

Please don't give up on developing this park, it has met resistance, but overall there is so much support for this project, it should move forward as soon as possible.

Sincerely,

Jacob Bolz

From: Judie Boyer <judiebrenn@cox.net>
Sent: Monday, February 13, 2023 11:46 AM
To: CEQA, CountyParks
Subject: [External] Alpine Parks Sports Complex

Sent from my iPhone
Dear Ms Prowant,

I75-1 My family and I along with others strongly oppose the scope of the $28 million all in one Sports Complex next to Alpine Wright's Field Ecological Preserve. We live close to Wright's Field Ecological Preserve and feel this is a poor choice of where to put a Sports Complex. Currently, as is, Wrights Field is a great asset to Alpine Community residents as well as to other San Diego residents. The Preserve is presently one of the few widely used and enjoyed by many every day as a place where they can come for quiet and nature at its best. The proposed sports complex would greatly impact the habitat and environment of the Preserve and surrounding area and take away from the many who are presently coming to enjoy the Preserve and all it has to offer.

I75-2 I feel the Sports Complex would be detrimental and greatly impact traffic on South Grade Road. There have been many accidents and even fatalities on South Grade Road and I fear that the increase in traffic on South Grade would greatly increase the number of accidents and fatalities. Traffic is sometimes already a problem on this two lane road.

I75-3 I also am concerned for the area residents who would need to use South Grade in emergency situations. For some, this road is the only route to exit if they need to evacuate their homes. Many of the surrounding areas near Wright's Field

I75-4 Ecological Preserve are in high fire risk zones and close to forest boundaries. There is also the concern the new Sports Complex would have a negative impact on water consumption.

I75-5 Alas, I am not opposed to a smaller nature based "enhanced" passive park at Wright's Field that minimizes the impact on the habitat and environment of the present day beautiful rural park which so many presently enjoy. I feel that the allocated $28 million budget could be better utilized to build a Sports Complex near Alpine's town center or schools that doesn't heavily impact Wright's Field and the surrounding area, with a small part of the budget going toward developing an enhanced smaller nature based park at Wright's field.

Thank you for giving of your valuable time to address these pertinent issues and concerns!

Best regards,
Judith Boyer
Alpine, CA

From: Cecil, James <JCecil@suffolk.com>
Sent: Monday, February 20, 2023 1:00 PM
To: CEQA, CountyParks
Subject: [External] Alpine park

Afternoon,

I76-1 We Alpine residents do not need or want the big changes the County is trying to impose on our areas around and near Wrights Field!
We have several other facilities in the area , some at church's that the County can contract with for public use and enjoying.

Cancel the proposal to develop these areas around Wrights Field in Alpine !

Sincerely,
James & Janis Cecil
5637 Alpine Blvd.
Alpine,CA 91901

Jim Cecil

James Cecil
Senior Superintendent

D | +1 (619) 906 2886
C | +1 (619) 520 9133
F | +1 (619) 659 9480



suffolk.com



Comment Letter I77

From: Jan Charvat <jch@cox.net>
Sent: Wednesday, December 21, 2022 5:22 PM
To: CEQA, CountyParks
Subject: [External] Alpine Park Project comments

Hello,

I77-1 thank you for allowing us to comment on the updated proposal for a community park in Alpine along South Grade Road. I've been living in Alpine since 2001 and very much enjoy its rural character. I am therefore not in favor of a large new construction, even a park. Alpine's population is not growing in any significant way due to the area being largely "zoned out", meaning that not many empty parcels are available for new residential construction. At least, that's my understanding of the situation here. As a result, the number of children is decreasing as they age, become adults and move away. Alpine never received a High School since it never reached the minimum number of prospective students required for such a project. Also, Alpine Elementary School and the Kindergarten closed a few years ago due to shrinking attendance numbers.

I77-2 The plans for a parking lot (in all alternatives except "no change" and "passive park") that would accommodate up to 250 cars is hugely over-dimensioned for Alpine's size and needs. I doubt we'd ever see more than half of those spaces used.

I77-3 Looking at the Alternatives in the updated proposal, I vote as follows:

#1 choice - Alternative 5 (Passive Park)

2nd choice - Alternative 3 (Reconfigured Project), since it moves the park to a lesser-used corner of the land and does not block access to the existing trails during the park's "closed hours". I don't like the plan to block access to existing trails "on the other side" of the park from South Grade Road when the park is closed.

I77-4 I am OPPOSED to Alternative 2 (Sports Complex): in my opinion. it's too large for what Alpine needs today or in the future.

Thank you for your consideration.
Jan Charvat

From: Jerry Conway
To: CEQA, CountyParks
Subject: [External] Re: Alpine Park Project Public Comment
Date: Tuesday, February 7, 2023 3:16:33 PM

Yes ma'am, that is the sum of the remarks I made.

I78-2 Only thing else I would add is that I doubt the Alpine community is in favor of all those proposed changes to that land, because when I went to the meetings, when they first came about, the majority of the people wanted to keep it a walking, hiking, horse riding area.

Thanks, Jerry
Sent from my iPhone

On Feb 7, 2023, at 12:28 PM, CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov> wrote:

Good afternoon Jerry,

I hope you're having a great week thus far! Thank you for the conversation previously - we wanted to reiterate your comments back to you to ensure these are your comments (listed below). We will include this in the public record so that it can be formally responded to as part of the record.

I78-1

- Did the Alpine Planning Group recommend this project?
- If the project goes through the way it is proposed, would the boundaries of the proposed preserve land have a fire buffer?
- Will there be fencing along the preserve boundary?

Thanks so much in advance!

All the best,

Anna Prowant (She-Her-Hers)
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
(619) 756-4548 (cell)
www.sdparks.org

For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com.** To receive updates via text, send **COSD COVID19** to **468-311.**

<image001.png>

From: Gay De Gero <gedegero@gmail.com>
Sent: Monday, February 27, 2023 6:15 PM
To: CEQA, CountyParks; Gay De Gero
Subject: [External] County of San Diego Department of Parks and ... Alpine Community Park DEIR 12-16-22 Response

Saturday, February 27, 2023

Anna Prowant
County of San Diego
Park and Recreation Department
5500 Overland Avenue, Suite 410
San Diego, CA 92123
countyParksCEQA@sdcounty.ca.gov

Reference: Alpine County Park Project ("Project") and Draft Environmental Impact Report (DEIR")

Dear Ms. Prowant,

I79-1 Overall, this DEIR does not meet the goals for an Alpine Community Park in a reasonable and feasible manner, in my opinion. This applies to the size of the park, the alternative park ideas, the precarious environmental issues facing Alpine and the state of California, the activities/amenities, the maintenance costs, the mitigations and the oversight of the mitigations.

I79-2 Not to be ignored is the purchase by the County from the Apollo Group in Texas which became the Wright's Field Partnership on the day of the sale. All of this was not all made public to my knowledge. I have also worried about a possible conflict of interest with George Barnett and Travis Lyon both having seats on the Back Country Land Trust and the Alpine Community Planning Group which were instrumental in approving and supporting the big park project. Their resignation was called for by Yolaine Stout, a true guardian of Wright's Field. Was it ethical to have them on both boards? Any conflict of interest?

I79-3 The Park proposed in this DEIR does not respect nor meet the objectives nor preferences of residents (Public Outreach Meeting #2) for an Alpine Community Park. The most preferred were :walking, jogging, nature, mountain biking, restrooms, dog park, shade trees, picnicking with picnic shelters, sidewalks, multi use trails and paved parking. . But this option was ignored and not included in this DEIR. Since #1 is No Park and #5 does not meet the objectives that leaves

I79-4 no more passive alternative which would be in line with the results of the survey of Alpine residents. This could have been accomplished within a 10 - 15 acre more passive alternative park plan using already disturbed land when possible rather than the 0.23 acre passive alternative #5 which does not meet the criteria. So why was it included? The alternative I suggest would be far less cost to build and maintain. The money savings could be used for other park

I79-5 projects in need of funds. According to the chart on p. 6-53 Alternatives #2,3 and 4 all increase the negative impact to all categories. According to the Executive Summary, " Areas of Known Controversy/Issues Raised by Agencies and the Public Section 15123 of the State CEQA Guidelines requires the summary of an EIR to include areas of controversy that are known to the Lead Agency, including issues raised by agencies and the public. The County DPR circulated a Notice of Preparation (NOP) to solicit agency and public comments on the scope and content of the environmental analysis, beginning on March 8, 2021, and ending on April 7, 2021. The NOP is included as Appendix A. A total of 33 comment letters were received during the NOP public review period. The primary issues raised were related to aesthetics;, air quality, biological resources; air quality;, cultural resources;, greenhouse gases (GHGs);), geology and soils;, hazards and hazardous materials;, hydrology and water quality;, noise; utilities;, public services;, transportation;, tribal cultural

resources; , utilities, and wildfire; and as well as the alternatives. A summary of all comments received is included in Table 1-2 of Chapter 1, Introduction, and all NOP comment letters are included in Appendix B of this EIR." Which brings me to a quote from this DEIR, "The cost to maintain the Park are still being determined." What? The County and we, the people, are expected to approve a Park for which we do not know the cost??? Totally unreasonable!!! I certainly don't run my household budget this way.

I79-6

And the funds to maintain the park, though undetermined yet, are to come from 'day use fees and reservations?" This is the first time I've heard of these items and certainly would not be enough to really maintain a 26-29 acre park with all the amenities that are planned. I thought the Park was 'free.' Right?

I79-7

And by Public Outreach Meeting #3 the incorporated activities and amenities had been chosen. By whom? And then there was no looking back despite the loud cry to revisit the size and an overwhelming amount of activities and amenities which were definitely not part of a public decision. To me this felt like bullying and left me hopeless and helpless. I have doubts about the time and effort I'm putting into this response. It seems to me to be about personal, political legacies than we, the people, the residents, the public. I have seen no iota of listening or flexibility on the part of those who are supposed to represent us and what we want.

I79-8

The size of the proposed Park and the activities/amenities are more than the Community Park Alpine wanted. And the location is on a very dangerous road. This problem seems not to be of concern to the people pushing this for the Park. They are overlooking the speed with which people drive and the deaths that have occurred on this road. I don't consider this respectful to the public and not in good faith for the safety of the residents of Alpine. This site should never have been chosen, in my opinion.

I79-9

In addition, California is experiencing drought conditions. To accept this DEIR would be a slap in the face of all Californians and certainly those of the East County. Our reservoirs are at all time lows and some are dry. How could the County consider the water use for the proposed park reasonable and feasible? The smaller park, using far less water, would be more feasible and reasonable to me.

I79-10

Which brings me to Mitigation and Mitigation Oversight. The list for the proposed Park mitigations is necessarily long. Whereas the smaller Park concept would require far less disturbance and less, if any, mitigation. And certainly more easily monitored. As opposed to this EXAMPLE in this DEIR:

I79-11

" For Impact-BIO-4: Significant Impacts on Western Spadefoot MM-BIO: 4 Western Spadefoot. The County will mitigate for impacts on one western spadefoot breeding pool, approximately 157 square feet in size, by creating three permanent basins, encompassing a minimum of 471 square feet, to support western spadefoot breeding. These constructed basins will be created within clay soils on the permanently protected lands on the County's parcel, no closer than 100 feet from the western edge of Alpine Park. Basins will be constructed within approximately 262 meters of the core breeding population on Wright's Field County of San Diego Department of Parks and Recreation Section 4.4. Biological Resources Alpine Park Project Recirculated Sections of Draft EIR 4.4-39 December 2022 to maximize opportunities for western spadefoots on Wright's Field to naturally expand into these newly constructed basins. No basins will be constructed within the areas proposed for QCB habitat enhancement activities. Hydrological analysis will be conducted prior to site selection to map the micro-watersheds in potential sites and ensure the constructed basins fill naturally with rainwater. Basins will be constructed to allow for maximum inundated depths of approximately 18 to 24 inches (20 to 60 centimeters), with the goal that they remain inundated long enough to increase the chances for breeding to be successful during dry years. Conversely, the newly constructed basins shall be designed in such a way that they support standing water for only several weeks following seasonal rains and aquatic predators (e.g., fish, bullfrogs, crayfish) cannot become established. Because ponding duration is so critical to the success of this effort, additional studies may be needed to estimate infiltration rates, soil profile, depth of clay soil layer, etc. The County will conduct these studies, as needed, to estimate the ponding duration within constructed basins. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing pool(s), as feasible. The County will develop a Western Spadefoot Habitat Mitigation and Monitoring Plan to describe requirements for the constructed basins, how basin sites are chosen, what activities will be conducted during the installation of the new basins, adaptive management, maintenance activities, access controls (e.g., fences), and what

I79-11 cont.

monitoring and reporting activities will occur and when. The data for the micro-habitat hydrological analysis will also be presented within this plan. The Western Spadefoot Habitat Mitigation and Monitoring Plan will be provided to the CDFW and USFWS for review and comment. The new basins will be constructed concurrently with Alpine Park, and western spadefoots observed within the project footprint will be relocated to suitable basins outside the project footprint. Monitoring of the newly constructed basins will be conducted during the wet season (approximately December through April) at approximately weekly intervals, beginning with the first significant rain event each year for 5 years following completion of basin construction. The County's biologist will map the spatial extent of the basins, document the inundation depths of the basins and breeding outcomes, and determine if adaptive management is needed to increase survival and recruitment within the constructed basins. Notes will be made if egg masses or larvae are observed. One nocturnal adult survey will also be conducted in each of the 5 years when a breeding event is occurring in order to document the foraging/mobility patterns of western spadefoots in the area of the new basins. The County will also monitor the core breeding population on the Wright's Field Preserve, using the same methods described above (i.e., basin mapping, weekly checks, nocturnal survey) to document the population dynamics of the entire population over time. Monitoring/survey data will be provided to CDFW and USFWS by the monitoring biologist following each monitoring period; a written report summarizing the monitoring results will be provided to CDFW and USFWS at the end of the monitoring effort each year. Success criteria for the monitoring program shall include evidence of a ponding duration that is suitable for western spadefoot reproduction within at least one of the constructed basins during at least one of the 5 years of monitoring. After exclusionary fencing has been installed around all initial proposed ground-disturbing construction, but prior to initiation of initial ground disturbance, the spadefoot biologist will conduct at least three nighttime surveys for spadefoots within the fenced area. Surveys will County of San Diego Department of Parks and Recreation Section 4.4. Biological Resources Alpine Park Project Recirculated Sections of Draft EIR 4.4-40 December 2022 continue until no more spadefoots are captured and relocated out of the fenced footprint and/or upon the recommendations of the spadefoot biologist. These surveys will be conducted during appropriate climatic conditions and during the appropriate hours (i.e., nighttime, during rain events in breeding season) to maximize the likelihood of encountering spadefoots. If climatic conditions are not highly suitable for spadefoot activity, spadefoot habitat in the project footprint will be watered to encourage aestivating toads to surface. All spadefoots found within the project area will be captured and translocated by the spadefoot biologist to the nearest suitable habitat outside of the work area. Upon completion of these surveys and prior to initiation of construction activities, **the spadefoot biologist will report the capture and release locations of all spadefoots found and relocated during these surveys to CDFW and USFWS ."**

This is only one of many mitigations which involve oversight by personnel. And there is no mention of who would monitor the compliance of the biologists.

I79-12

Given the issues aforementioned, I am surprised that this DEIR is satisfactory, reasonable and feasible to the DPR and for the Board of Supervisors approval. I disagree.

Respectfully and dismayingly submitted,

Gay Ellen de Gero
30 year Alpine resident.
619 659 0457

Annotations of documentation.

Purchase:
https://www.10news.com/news/local-news/county-to-buy-preserve-98-acres-of-wrights-field-in-alpine

I79-13

"County Supervisors approved a $1.62 million purchase for 98 acres of land off of South Grade Road, with the intent to build a community park on part of the property and leave the rest alone as a public open space. ...George Barnett, the Director of the Back County Land Trust, says they would love to see a park built on the site because Alpine doesn't have a large community park within the city."How many towns in the whole world can say they have a 300-acre park in the middle of it?" he asks. "Maybe 10. That's how unique this is." Ethically necessary or acquired?

"DPR has been working with the Alpine Community Planning Group and other stakeholders to find a suitable park location within Alpine since the 1990s. Many locations were evaluated and ruled out based on factors like their availability for purchase, size, street access and topography. The current site meets all criteria and only recently became available (please see below for further details). Why this location, and not somewhere else? For years, other potential park sites were reviewed and ruled out based on a variety of factors. Out of respect to the confidentiality of those sellers, we are not able to release their information. This particular property fit all search criteria – and offered much more acreage than other sites, making it possible to build a mix of passive and active recreation opportunities – but it was not available until 2019. When it became available, DPR pursued the acquisition with the approval of the County Board of Supervisors (BOS)." vc

" On Feb. 27, 2019, DPR submitted a letter to the BOS to request funds to purchase the 98-acre parcel of land, with intent to build an active recreation area on site. READ THE BOARD LETTER. The request was approved, leading to the purchase of the property from Wright's Field Partnership, LLC on March 4, 2019.

Frequently Asked Questions: Alpine County Park County of San Diego Department of Parks and Recreation Last update: Feb. 2, 2021 Page 3 of 13 **The site has always been earmarked for active recreation.** However, of the 98 acres, only about 26 will be developed for that purpose; the rest of the land, which serves as a natural barrier between the proposed active recreation area and Wright's Field, will remain open space preserve. By purchasing the land for a park, the County prevented it from becoming a master planned community or other large development. It is protected as a park, in perpetuity. Its size, breadth of amenities, and open space trail system are designed to meet both the current and future needs of the community. Why was this park first presented as a 12-15 acre park, and is now larger? Early conversations about the search for a park in Alpine may have referenced smaller acreage, however, the purchase of the 98-acre parcel made it possible to expand acreage opportunities for both active and passive use.

I79-13 cont.

"Always earmarked for an active park" Really?

The County had apparently been negotiating the purchase of Phase IV of Wright's Field with Apollo Growth Group Ltd. prior to the LLC being created in Dallas, Texas.

https://opencorporates.com/companies/us_tx/0802888384

On February 14, 2018, Apollo Growth Group transferred Phase III of Wright's Field to Wright's Field Partnership LLC in Dallas, Texas.
Almost a year later, the County of San Diego on March 4, 2019 recorded an option to purchase this parcel from Wright's Field Partnership LLC.
Wright's Field Partnership, LLC legally FORMED on March 4, 2019. **Ethical Question?**

https://www.sdparks.org/content/sdparks/en/AboutUs/Plans/public-review-documents.html 12-16-2022 DEIR

https://www.sdparks.org/content/dam/sdparks/en/pdf/Development/alpine-park/9_Section%206_Alternatives_Recirculated%20Draft%20EIR_2023_Text%20Rec.pdf From Recirculated DEIR 12-16-22 Section 6 Alternatives 6.1, 6.2,6.4, 6.6, 6.7 and Table 6-1.

Environmental Resource Project Determination Alternative 1: No Project Alternative 2: Sports Complex Alternative 3: Reconfigured Project Alternative 4: Reduced Project Alternative 5: Passive Park
Table 6.3 Page 52, 53
Summary of Significant Effects of the Project Page 52, 53 of Table 6.3
Executive Summary Alpine Park Draft Environmental Impact Report September 2021 **Table ES-4.1,4.2, 4.3, 4.4,4.5,4.6. Project Impacts and Mitigation Measures**

https://www.sdparks.org/content/dam/sdparks/en/pdf/Development/Alpine%20Park%20FINAL%20for%20print.pdf **1-**

I79-13 cont.

14-21 PUBLIC OUTREACH MEETING #2 ALPINE COMMUNITY PARK **Page 7 of pages 1-25 Survey results of what people enjoy doing in Alpine. Activities/Amenities.**

https://www.sdparks.org/content/dam/sdparks/en/pdf/Development/Updated%20Alpine%20FAQ%20%202.2.21.pdf p. 2 and 3 of 13. 2-2-21

DPR has been working with the Alpine Community Planning Group and other stakeholders to find a suitable park location within Alpine since the 1990s. Many locations were evaluated and ruled out based on factors like their availability for purchase, size, street access and topography. The current site meets all criteria and only recently became available (please see below for further details). Why this location, and not somewhere else? For years, other potential park sites were reviewed and ruled out based on a variety of factors. Out of respect to the confidentiality of those sellers, we are not able to release their information. This particular property fit all search criteria – and offered much more acreage than other sites, making it possible to build a mix of passive and active recreation opportunities – but it was not available until 2019. When it became available, DPR pursued the acquisition with the approval of the County Board of Supervisors (BOS). On Feb. 27, 2019,

Frequently Asked Questions: Alpine County Park County of San Diego Department of Parks and Recreation Last update: Feb. 2, 2021 Page 3 of 13 **The site as has always been earmarked for active recreation.** However, of the 98 acres, only about 26 will be developed for that purpose; the rest of the land, which serves as a natural barrier between the proposed active recreation area and Wright's Field, will remain open space preserve. By purchasing the land for a park, the County prevented it from becoming a master planned community or other large development. It is protected as a park, in perpetuity. Its size, breadth of amenities, and open space trail system are designed to meet both the current and future needs of the community.

Why was this park **first presented as a 12-15 acre park**, and is now larger? Early conversations about the search for a park in Alpine may have referenced smaller acreage, however, the purchase of the 98-acre parcel made it possible to expand acreage opportunities for both active and passive use.

https://www.sdparks.org/content/dam/sdparks/en/pdf/Development/Alpine%20FAQ.pdf 8-16-22

" Public Meeting #2 on Aug. 29, 2019: The second meeting reported the community's priorities for amenities based on feedback received at the first meeting. Park concepts were shared, featuring attractions that reflected those preferences. Those who could not attend were provided with a link to an online survey, where they could rate options, amenities and provide comments. p 4 of 14

" Maintenance fees: **The cost to maintain the park is still being determined. b** Park maintenance can be funded a variety of ways. Departmental funds, **day-use fees, and private reservations** are some examples of how park money cycles back into the park budget." p 3 of 14 Frequently Asked Questions: Alpine County Park County of San Diego Department of Parks and Recreation Last update: Aug. 16, 2022

https://thealpinesun.com/barnett-lyon-must-resign-their-posts/ Question of Ethics?

https://www.eastcountymagazine.org/back-country-land-trust-bclt?fbclid=IwAR3KA4DWGO2KZbX2uqam_HMy3cUSH0Czx_9nf3C6wFFV9uf11mrPYm9-Uh4 Question of Ethics?

February 27, 2023

Anna Prowant
County of San Diego
Department of Parks and Recreation

CountyParksCEQA@sdcounty.ca.gov

RE: Recirculated Draft Environmental Impact Report ("DEIR") for the Alpine Park Project

Dear Ms. Prowant,

I80-1 Thank you for the opportunity to comment on the recirculated DEIR for the Alpine Park Project. My comments and questions are below.

Executive Summary and Section 4.4, Biological Recourses

I80-2 While in the recirculated Executive Summary and Section 4.4 I find approximately 20 references to the "Alpine Preserve" I'm not able to find any reference to this in the original sections of the DEIR.

I80-3
1. What is the Alpine Preserve?
2. Why was this added to the recirculated DEIR?

Section 4.4, Biological Resources

I80-4 In MM-BIO-3 you state, "The County DPR shall seek a Section 10 Incidental Take Permit (ITP) for impacts on QCB-occupied habitat and comply with any additional mitigation required by the ITP."

I80-5
1. Have you applied for the ITP? If so, when did you apply? If not, when do you expect to apply?
2. How long do you expect it would take to receive the permit? In other words, what impact will seeking the ITP have on the timing for beginning construction of a park?
3. What are your plans if you don't receive the permit?

Section 4.20, Wildfire

I80-6 In the Operations section you state, "The bike lanes would act as a by-pass in an emergency situation." There are currently no bike lanes on that section of South Grade Road. There is a bike route (Class III), with multiple signs along that entire stretch of road that have an image of a bicycle and say, "MAY USE FULL LANE". Since Class III bike routes provide shared use with motor vehicle traffic within the same travel lane, there are no additional lanes to use.

I80-7
1. What bike lanes are you referring to?
2. If you're referring to bike lanes that will be constructed on that section of South Grade Road, when will they be constructed?
3. If there will be no bike lanes, what will be the emergency by-pass?

Section 6, Alternatives

I80-8 In several places you state that population density in the central Alpine CPA is projected to increase by 61% by 2040 and you cite this figure in determining whether an alternative meets or doesn't meet at least two of the project objectives. While this population increase is based on the County Parks Master Plan, the source for this statistic is cited as SANDAG, 2014 Estimates and Series 13 Forecasts. These figures are now likely to be seriously out of date.

I80-9
1. Using current estimates and forecasts, what is Alpine's population projection for the future?
2. What changes will you make in the analysis of the alternatives to reflect the updated estimates and forecasts?
3. What changes will you make in the project plan to reflect the updated estimates and forecasts?

I80-10 In responses to the DEIR many Alpine residents, including myself, requested a park alternative that would reflect the rural nature of the area, be a smaller, nature-based park, still meet the project objectives and have a significantly lower environmental impact.

I80-11 In addition, according to DPR's own data, questionnaires from the outreach meeting held in May, 2019, revealed that out of 24 options the top eight activities the responders selected were, in order of preference:

- Walking/jogging
- Riding a mountain bike on a trail/in a park
- Nature (*Note: In the questionnaire, "Nature" was defined as "birdwatching, sketching/painting, photography, reading, writing")
- Dog park
- Picnicking
- Exercise on fitness station
- Playing on natural play elements (nature play)
- Riding a horse

I80-12 While I appreciate that you added an Alternative 5, it's difficult to understand how the alternative of a ".23-acre passive park" can be considered a park. Your description sounds more like open space or a preserve and is, therefore, not a reasonable alternative to the proposed park plan.

I80-13

1. What definition of a park are you using that supports the idea that this ".23-acre passive park" could be considered a San Diego County park?
2. Given the comments from many Alpine residents requesting a passive park, in addition to your own data which clearly supports this, why did you not present a reasonable alternative that would meet most of the objectives and have a significantly lower environmental impact?
3. Please provide another alternative that reflects the rural nature of the area, is a smaller, nature-based park, meets the project objectives and has a significantly lower environmental impact.

Again, thank you for the opportunity to comment.

Sincerely,
Christine Figari

cfigari@well.com

February 19, 2023

Anna Prowant
County of San Diego Department of Parks and Recreation
5500 Overland Ave, Suite 410
San Diego, CA 92123
Email: CountyParksCEQA@sdcounty.ca.gov

Re: Alpine County Park Project ("Project"), Recirculated Draft Environmental Impact Report ("DEIR") dated 12/16/2022 and modified DEIR ("RS") dated 1/30/2023

Dear Ms. Prowant,

I81-1 As a resident of Alpine, I request responses to my concerns and comments as raised in this letter and the attached copy of my original DEIR Comments (DEIR_Alpine_RFigari_Comments). I do not believe the RS properly addresses or resolves the issues raised in my original comments letter or those provided in this letter.

This letter includes further discussion of the two areas covered in my original letter regarding inadequate CEQA fulfillment. The first concerns the **population basis** used in developing the Project and the second discusses the **inadequate alternative plan**.

Population

I81-2 The RS continues to use outdated population data and data projections to support the size and scope of the park. Current research shows that Alpine simply does not have the size of population to support the building of this regional sized park. The San Diego County Parks Master Plan (PMP), US Census data and the new SDAG Regional Plan data clearly show that current, as well as projected population in the Alpine area is much lower than the data used as the basis for the park design. And the RS continues to ignore the increased "graying" of the Alpine population in the activities and elements it proposes in the Project.

I81-3 And, why doesn't DPR take the County's plan to reduce suburban development into consideration in its population estimates? Lastly, if the County is pushing for a mileage tax in order to nudge citizens into driving less distances to reduce emissions, why would you design a large regional style park in far off Alpine?

Alternatives

I81-4 Starting on page 3 of my original DEIR comments, I address your elimination of Alternative 1 and lack of providing a viable alternative that 1) follows the recommendations made in the San Diego County Parks Master Plan (PMP) which would significantly lessen environmental effects, that 2) matches the results of the initial DPR public outreach sessions before you developed your own divergent plan and that 3) follows the spirit of the CEQA law's intent.

I81-5 I was surprised to see that the RS adds a Passive Park Alternative 6.1 that simply adds a parking lot to the original alternative that was rejected.
How does merely adding a parking lot to the rejected alternative solve the objection you raised that "This alternative was rejected because it would not meet many of the project objectives, including creating a place where all Alpine residents can gather and connect as a community."?

I81-6 Again, I ask, why didn't you create an alternative derived from the park elements Alpine residents provided in the first two public outreach sessions (before you interjected your own park elements), which in turn mirror what the PMP research recommends: a park with mostly passive and mid active elements? What is so complicated about creating a park alternative that is limited to picnic areas, a natural amphitheater, play areas for children, informal play field, trails for hiking and riding, nature study and other low impact activities?

I81-7 You rejected the original alternative because "it would not meet many of the project objectives". CEQA's actual requirement is that an alternative must meet "most of the basic project objectives" or is

I81-7 cont. infeasible. “Most” and “many” are two entirely different criteria. It is disingenuous to use “many” as your criteria in developing an alternative. It is not serving the public interest to create a straw dog alternative that you know doesn’t qualify. You are required to provide meaningful alternatives that meet “most” of the criteria. You could have added to the rejected alternative the minimum park elements that are necessary to meet “most’ of the objectives and that are feasible. You could have used a totally passive park as the foundation and added elements per your PMP research recommendations and the stated desires of Alpine residents. Why didn’t you develop a qualified and feasible alternative like I am suggesting?

I81-8 The RS also ignores the recent improvement of dilapidated playing fields at Joan MacQueen Middle School, which adds a bonanza of baseball and soccer opportunities for the community. Why doesn’t the RS include a new alternative plan that reduces the size of fields in a proportionate way?

I81-9 Again, I don’t feel that the DEIR or RS have addressed the issues I raised in my previous comments or this letter. The DEIR and RS fall short of what CEQA seems to require. The County uses outdated and incorrect population data as a basis for the park Project. The Project and plan alternatives do not match the objectives and requirement of other County regional plans, policies and park objectives. The wishes of Alpine residents seem secondary to the County’s own desires for a park.

I81-10 I cannot support the Project as presented. However, I wish to make it clear that I support a more passive park with elements more representative of the needs and desires of our community. I would be more than happy to assist in any way to make this possible.

Sincerely,

Bob

Robert M. Figari
rfigari@well.com
415 259-8153

Attachment: DEIR_Alpine_RFigari_Comments

November 15, 2021

Anna Prowant
County of San Diego Department of Parks and Recreation
5500 Overland Ave, Suite 410
San Diego, CA 92123
Email: CountyParksCEQA@sdcounty.ca.gov

Re: DRAFT ENVIRONMENTAL IMPACT REPORT for the Alpine County Park Project
State Clearinghouse (SCH) #2021030196

Dear Anna,

I have emailed both MSWord and pdf document copies to you as my formal response to the DEIR for the Alpine County Park Project. I trust you will transmit it to the appropriate parties.

It would be helpful if you could please provide by return email a notice of receipt of the document.

Thank you for your help.

Sincerely,

Bob

Robert M. Figari
rfigari@well.com
415 259-8153

Robert Figari rfigari@well.com November 15, 2021

Comments on DRAFT ENVIRONMENTAL IMPACT REPORT for the Alpine County Park Project

What follows are my comments regarding the DEIR.

Section 4.14

Population and Housing

In this section, I'll provide background information from the DEIR and other sources, and then present my request.

Background

The DEIR includes many population estimates that do not agree at all with US Census Bureau results. The US Census Bureau reports significantly less population in Alpine than the DEIR uses. This is important because Section 14.1 Population and Housing, the Existing Conditions and Projected Population data (Table 4.14-1. Existing and Projected Population in Unincorporated San Diego County) form the basis in determining both Threshold 1 and 2 impact and mitigation factors in that DEIR section as well as other parts of the document.

For example, Table 4.14-1. of the DEIR titled Existing and Projected Population in Unincorporated San Diego County provides the basis for population estimates used in the DEIR. Alpine population is pegged at 17,609 in 2010 based upon "The 2010 San Diego Association of Governments (SANDAG) estimates for population and housing in the Alpine CPA identify a population of 17,609 with a total of 6,551 housing units (County of San Diego 1979)".

According to the 2020 United States Census Bureau results for Alpine (CDP), CA (https://www.census.gov/quickfacts/fact/table/alpinecdpcalifornia/POP010220#POP010220), the current population is 14,696. And in 2010 Alpine's population was recorded as 14,236. The SANDAG 2010 estimate more than 20% higher than the Census Bureau 2020 result! In terms of increase, according to the Census Bureau the increase in Alpine's population was only 3% over 10 years.

The SANDAG population estimates of 17,609 in 2010 (which DPR uses as a population basis in the DEIR) are grossly inaccurate and overstate the population by 20% compared to the 2020 US Census Bureau results.

Request:

- **Regarding section 4.16.3.3 of the DEIR where reference is made to "the central Alpine area" (a location term that appears throughout the DEIR), I could find no definition or**

map that explains or illustrates what exactly is considered "central Alpine". Please provide specific information on what is meant by that term and where it originated from.

- **Why did DPR and DEIR not use the latest census data included in the 2020 US Census Bureau results as the basis for the DEIR instead of the 2010 SANDAG estimates?**
- **Please explain what current population figures the DEIR used for Alpine**
- **Please explain how those current population figures were arrived at.**
- **Please explain how DPR arrived at the statement in section 4.16.3.3 of the DEIR that begins with "Because the population is expected to increase". What is the rate of increase DPR is projecting? What is the starting date and source and what are the projected dates and source that show that expected increase? And what are the expected results?**
- **Please provide calculations of the effect on Threshold 1 and 2 impact and mitigation factors if the Census Bureau data is used in place of whatever other source was used. What would the effect be if the 2010, 2020 and 2050 population figures the DEIR is based upon are are 30% too high?**
- **Please explain how the initial 2010 population figures SANDAG developed could be 20% higher than what the Census Bureau published.**
- **The Census Bureau population figures for Alpine for 2010 to 2020 increased just 3%. The DEIR is projecting a 36.1% increase for unincorporated areas from 2010 to 2050. What is the projected percentage increase for Alpine for 2010 to 2050? How was this number arrived at? How do you reconcile the much higher projected 2010 DEIR increases with the low Census Bureau increases?**
- **If the Alpine population figures the DEIR is using for 2010, 2020 and 2050 for Alpine are actually (as suggested by the Census Bureau figures) 20-30% too high, what would the effect be on the entire DEIR?**

Chapter 6

Alternatives

6.4.1 Alternatives Considered But Rejected

6.4.1.1 Alternate Location Alternative

"This alternative was rejected because it would not meet many of the project objectives, including creating a place where all Alpine residents can gather and connect as a community. This alternative also would not enable long-term natural and cultural resources management. Furthermore, this alternative does not meet the CEQA standard as being a "feasible" alternative given that the County does not own other properties in Alpine, and therefore could not accomplish implementation of a new park at these other potential locations within a reasonable period of time."

Re: "would not meet many of the project objectives including creating a place where all Alpine residents can gather and connect as a community."

Comments:
To satisfy the community gatherings objective, why couldn't, for example, an amphitheater be built at the proposed location for community gatherings and the other park elements be created in other locations (skatepark downtown, horse center further out, joint-use of baseball fields, etc.). This approach would certainly meet the second objective of active and passive recreation. This approach would obviously devote more of the proposed park land for the MSCP preservation. The preserve/integrate natural features objective wouldn't be affected by this approach. With the increasing population, the quality of life would be enhanced far more by having smaller parks available to a wider community that do not require auto travel. And regarding the last three objectives, I do not how this approach would not meet the objectives.
Request:

- **Please provide substantiation for this statement in specific reference to each objective and in the context of my comments below.**
- **And please explain in more detail why this option was rejected.**

Re: "This alternative also would not enable long-term natural and cultural resources management."
Request:

- **How would this approach "not enable long-term natural and cultural resources management"?**
- **How do you define "long-term natural and cultural resources management"?**

Re: "Furthermore, this alternative does not meet the CEQA standard as being a "feasible" alternative given that the County does not own other properties in Alpine, and therefore could not accomplish implementation of a new park at these other potential locations within a reasonable period of time."
Request:

- **Why would this approach not be feasible now under CEQUA, especially if it would improve the environmental concerns of developing such a concentrated swath of native land?**
- **According to rough maps the County provides of potential park locations, it appears many of the sites considered are already somewhat developed and less sensitive environmentally, so please provide specific reasons for why each site was rejected. (Ownership identification is not necessary)**
- **What does current ownership of properties have to do with determining alternatives for creating a new park?**
- **Did DPR ever consider this alternative before it was committed to the current proposal or was it only considered when Alpine citizens asked for it after the DPR developed its own plan?**
- **Why did the County buy the current land before determining what park attributes or elements the citizens of the Alpine CPA want?**

- **Why did the County buy the current land before examining the multi-park approach and considering other potential park sites less environmentally sensitive?**

Comments: It is absurd to consider what land the County owns now. The goal for DPR was to first determine what kind of park the community wants and then find the best site(s) for that kind of park. DPR put the cart before the horse, ie, bought the land before the park was designed. You provide no guidelines for what a "reasonable period of time" is, which is a somewhat disingenuous position to take considering the years you have taken to put this proposal together.

Missing Alternative: Background, Source Material, Requests/Comments

In this section, I will first give background information, then provide source material and finally state my specific requests and comments.

Background
DPR presents four alternatives to the proposed plan in the DEIR. Under CEQUA guidelines, DPR does not have to consider all possible alternatives, but has an obligation to present alternatives that are reasonable, appear to be feasible, and would avoid or substantially lessen at least one of the project's significant environmental effects.

For reasons difficult to understand, DPR did not include as an alternative, the recommendations made in the San Diego County Parks Master Plan (PMP) which would significantly lessen environmental effects.

And, even stranger, DPR did not include as an alternative, the plan recommendations gathered from participants in the DPR's initial Alpine public outreach efforts. It is important to note that these initial sessions were very open brainstorming sessions and occurred before DPR began interjecting many of its own park proposal elements into subsequent outreach sessions.

The park element recommendations of the Alpine residents in these initial outreach meetings not only lessen environmental effects, but also echoed precisely what the PMP research process recommended.

What follows is the source material supporting what is stated in the previous paragraphs. Specifically, in section 4.16.3.3 of the DEIR, it is stated that "The County's PMP [Parks Master Plan] serves as a guidance document for the acquisition and development of future parks and recreation facilities in the unincorporated county."

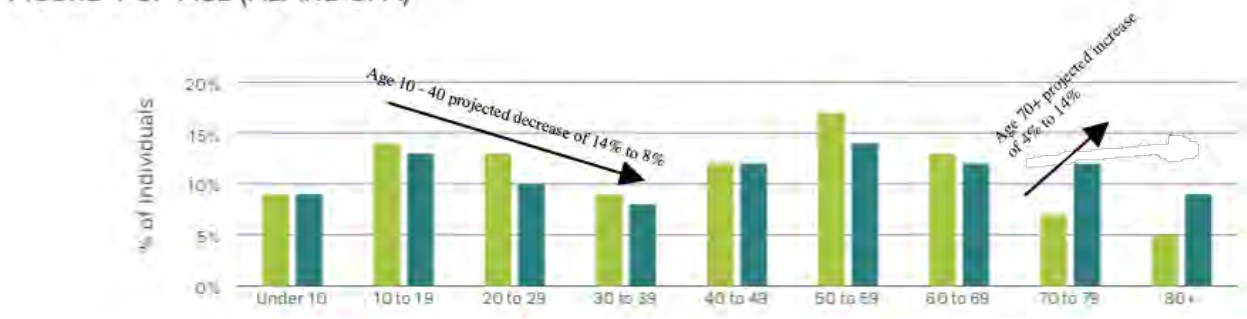
Starting on pg 42, this PMP guidance document presents the "existing (2014) and projected (2040) trends (ethnicity, age, and median household income) and provides an understanding of future demands for each CPA in the County".

The Sociodemographic Trends for the Alpine Community Plan Area (CPA) as stated in the PMP guidance document includes:

> 2. There is projected to be fewer residents ages 0-69 and more residents ages 70 and older.
> 5. Population density is projected to increase by 61% in the central Alpine CPA.

This same data is provided graphically on pg. 43 (with my notations):

FIGURE 4-8: AGE (ALPINE CPA)



This graph clearly illustrates exactly what the PMP Sociodemographic Trends states: the decrease in the younger child and adult population that would typically be more inclined toward a park with "active" elements and the strong trend toward more older adults that would typically be more inclined toward a park with less active and more "passive" elements.

Based upon these researched trends, your PMP guidance document then provides Future Recommendations:

1. Consistent with projected demographics, provide opportunities for running, jogging, fishing, road biking, mountain biking, camping, and hiking.
2. Due to a projected increase in residents ages 70 and older, provide fitness programs, like aerobics classes.
3. Due to a projected increase in population density in the central Alpine CPA, consider intensifying services in this area.
4. Due to a projected decrease in population density in the area surrounding the central Alpine CPA, consider reducing services in this area.

Also, the DEIR states in Section 14.6.3.3 that "Because the population is expected to increase, the PMP recommended the development of additional running, fishing, road biking, mountain biking, camping, and hiking facilities and the intensification of recreational services in the central Alpine area where population is expected to increase most."

The online DPR Alpine Public Outreach Summary provides the results of the initial surveys. These are the direct quotes from the summary (boldface/underline added for clarity):

> "The results of the questionnaire revealed the <u>top five activities</u> the responders selected were **walking/jogging, riding a mountain bike on a trail/in a park, nature, dog park, and picnicking**. The 5 activities with <u>the fewest votes</u> were **swimming pool, football, softball, bocce ball, and tennis/pickleball**."

> "The top five elements chosen from the questionnaire were **natural areas, restrooms, sidewalks and trails, shade trees, and drinking fountains**. The least preferred elements were **court and field lighting**."
>
> "The top five elements selected from the image boards were **multi-use trails, bike park, dog park, nature-based play, and picnic shelter**. The least favored were **horseshoe pits, table tennis, tennis, softball, and youth football**."
>
> "The top five activities revealed in the online survey were **nature, playing at a playground, walking/jogging, riding a mountain bike on a trail/in a park, and restrooms**. The least preferred was **court and field lighting**."

As you can see, what Alpine residents desire mirrors what the PMP research recommends: mostly passive and mid active elements.

Why wasn't some form of this missing alternative included in the DEIR since it represents both the research of the PMP and the will of the people of Alpine? It is a popular, reasonable, feasible alternative that would lessen the environmental impact and meet the stated project objectives.

Alternative 1 means no park. Alternative 2 packs even more unpopular elements into the park. Alternative 3 just moves elements around. Alternative 4 leaves in the least desired elements, but reduces the area for the most desired elements. This makes no sense at all.

Request:

- **Please provide substantiation in your responses to my specific questions and in the context of the background information provided above**
- **Why doesn't the DEIR include an alternative that represents the recommendations of the County PMP?**
- **Why were the Sociodemographic Trends appearing in the County PMP not featured in creating the proposed plan or at the very least in an alternative plan?**
- **Why were the Future Recommendation appearing in the County PMP not featured in creating the proposed plan or at the very least in an alternative plan?**
- **Why is there not an alternative that represents the recommendations submitted by Alpine residents at the initial outreach sessions before DPR interjected their own active park elements?**
- **Why were the known preferences of Alpine residents from the initial public outreach not featured in an alternative park plan?**

Section 4.9

Hazards and Hazardous Materials

In this section, I provide some background followed by my request.

Background
The DEIR section on Hazards and Hazardous materials seems to only focus on the construction timeline. I had asked before (you have published my letter requesting such in this DEIR) in the NOP for information on hazardous materials use in the future for maintenance. To date, I have not been responded to directly nor do I see such information in this DEIR.

Below is the pertinent text from my letter including my EIR request:

> **Hazardous Materials**: Given the number of acres devoted to artificial turf and natural grass, I'm concerned about hazardous chemicals and pesticides needed to install and maintain the surfaces in good condition. I request to see an analysis of the chemicals and pesticides that will be used over the life of the park and the impact on, among others, neighboring wells, surrounding watersheds and biological resources.
>
> **Biological Resources**: In addition to an analysis of the impact of hazardous materials (chemicals and pesticides used on the artificial turf and natural grass) on biological resources, the EIR should include a thorough analysis of the other direct and indirect effects on biological resources, such as the introduction of gophers, moles, skunks and other non-native species.
>
> In the EIR I request that:
> 1) all of the aforementioned concerns be thoroughly analyzed,
> and that
> 2) the impacts of these concerns are avoided or mitigated below the level of significance.

Request:

- **As before, I request the aforementioned concerns be thoroughly analyzed and proof of such be provided to me or included in a revised DEIR.**
- **And I request that these concerns are avoided or mitigated below the level of significance.**
- **I'm particularly interested in research you have conducted on the effect of an increased population of such "pests" as gophers, moles, skunks, and other somewhat pernicious critters due to the introduction of human garbage and public use debris.**
- **If you have not done such research, then please do so. The impact of the critters and the control techniques you employ needs to be determined in this DEIR.**
- **Please provide what critters you expect to invade the park, what population levels you anticipate and what steps you will take in controlling them.**

Comment Letter I82

From: diane flora <skigranny1@yahoo.com>
Sent: Tuesday, February 7, 2023 3:22 PM
To: CEQA, CountyParks
Subject: [External] Alpine Park Project

I82-1 Hi Anna. I just have a quick question. Currently we walk/hike frequently at Wright's Field. It looks like the park will take up part of our walking area but we would still have places to walk/hike. My question is if we were going to walk/hike after the park is completed where would we park? It looks like the park encompasses land all the way to the housing area. We usually park on South Grade on the border of where the park will be on the east side of Wright's Field. Would we be able to park our vehicles in Alpine Park to walk/hike Wright"s Field? Thanks!

Diane Flora

Comment Letter I83

From: Michael Funtas <mgfuntas@gmail.com>
Sent: Saturday, February 4, 2023 3:19 PM
To: CEQA, CountyParks
Subject: [External] CEQA County Parks

Good afternoon,

The following comments are with the Alpine Park environment in mind.

I want to say that my wife and I have visited Lindo Lake County Park in Lakeside and we think the county did a wonderful job in planning this multi-use park. We usually go during the day, while children are at school, and we observe hundreds of people enjoying the park, while walking, walking their dogs, and enjoying a meal in the beautiful surroundings. I83-1

I attended the initial meeting in 2019 where a 13 acre park was proposed. At that meeting, the community members brainstormed elements that we would like to see included in a park in Alpine. That meeting and subsequent surveys and community input have stated that Alpine prefers a scaled down park than the one proposed.

We support a park in Alpine, but have concerns about the following elements:

- Park use by Seniors:

A major need of seniors is having a safe place to walk. In fact, a walking trail is #1 on the survey. My understanding is that the only walking trails will be the existing trails in Wright's Field. These trails are rocky and uneven and risky for seniors. With the attraction of a county park, there will be additional horses, dogs, and bikes on those paths. The increased use of these existing trails will add to the destruction of the natural habitat of Wright's Field. Lindo Park has dedicated trails for walking that are graded and safe for walking. Shouldn't the plan for Alpine Park include safe, graded paths for walking within the park area? I83-2

- Skateboard/All Wheel Park

A skateboard park did not receive high marks on the survey that was circulated. Many have concerns of the draw of a skateboard park. At Lindo Park during the middle of the day, I observed three individuals who appeared to be out of work young adult men.. I think you can appreciate my concern. Also, what is an "all wheel park?" Does this include electric bikes, hoverboards, mopeds, and electric scooters? These vehicles do not belong in a county park and create a hazard for others. There should be **separate access** and a divider (wall, burm, etc.) to the all wheel park and skate park so those on wheels do not endanger those who are on foot. We don't want the congestion caused by bikes, electric bikes, skateboards, scooters etc.that Lake Murray has in the Alpine Park. I83-3

- Baseball Diamond:

Unlike Lindo Park, the baseball diamond is situated in the middle of the park and takes up a substantial area of the plan. Baseball is played 2 - 4 months out of the year tops. Alpine already has venues for baseball. There is one behind the community center. If the baseball diamond needs to be present, it should be on the outer edges of the park. This feature was #16 on the survey. Is it really needed? I83-4

- Traffic on South Grade Road: I83-5

I83-5 cont.

The greatest concern is for children as well as adults riding their bikes or walking on this dangerous road with blind curves. A major county park with an “All Wheel Park” and a skateboard park will be a major draw for residents of the community, especially children and teens, to access the park by bike, skateboard or by foot. There has already been a fatal accident on this road directly across from the proposed site. Additionally, this road is the only exit for over 250 homes that are located across from the proposed park. In the event of evacuation (which this area has experienced many times due to fire) this road will become easily congested and will interfere with safe evacuation. This site has been proposed as a staging area for biking events, causing additional road congestion.

I83-6

Thank you for the opportunity to comment on the County Park planned for Alpine. I hope you will take into account the wishes of the Alpine Community.

Sincerely,

Michael (and Christine) Funtas

From: Nina Gould <alpineartists@gmail.com>
Sent: Tuesday, February 28, 2023 6:00 PM
To: CEQA, CountyParks
Subject: [External] Park on Wright's Field

I84-1 Please consider this notice, that I, and my family, residents of Alpine for 31 years, would prefer to have Wright's Field stand as it is.

I84-2 However, given that this option will be pooh-poohed, I vote for a passive park. We do not need to use more water resources--please remember, many of us are on wells, and the water tables decrease with more usage.

Thank you,

Nina Gould

From: Tim C Guishard <guishard@sbcglobal.net>
Sent: Sunday, December 18, 2022 12:59 PM
To: CEQA, CountyParks
Subject: [External] Alpine Park Project

I85-1 I am not in support of most options offered by the County in the latest CEQA document.

As long as the County thinks there is climate change, that we have the power to change, how can a facility be constructed that would have a net carbon imbalance?

I85-2 Fact, solar panels require greenhouse gasses to be produced: while the materials are being mined and the panels are being constructed/shipped/installed, and then at the end of life when the panels must be disposed of. Thus solar is not the answer to a net reduction in greenhouse gasses. The proper design of facilities that do not require large quantities of resources long term, is a better idea.

I do not support the installation of:

I85-3
- Grass fields at this park, especially when we are being told by the Governor there is a drought and we need to curtail our water use to <50 GPD.
  - These types of grasses not only make our drought problems worse, they require electricity to be consumed to pump the water to our elevation.
- Groundwater wells to irrigate the non-native grasses, that would be needed to support turf type sports fields.
  - Again electricity is involved, and DPR has proven that it can not properly maintain groundwater infrastructures at most of its existing facilities.
- Any facilities that would require a full time support crew to maintain.
  - Electricity, water, sewer, and other resources that are needed to support any staff, can be reduced with a refined project scope.

I do support the installation of:

I85-4
- A facility that is only open from Dawn to Dusk, with limited security lighting after dusk.
  - No after hours lighting that might be needed to allow the use of these facilities after dusk shall be installed.
- Sports facilities, that are not already represented at other public facilities in the Alpine area,
  - PROVIDED these facilities do not need more than the 15" of annual rainfall that Alpine gets to maintain them in an aesthetically pleasing condition.
- Parking areas for people to access Wrights field
  - Preferably unpaved
- Hiking/biking trails
  - Unpaved
- Pavilions and other facilities that could be used by the public
  - These should be constructed mostly of metal/concrete, to limit the amount of PM needed to maintain them.
  - The installation of dry toilet facilities (no running water)
- A very limited addition of green space,

I85-4 cont.

    - Provided that these plant materials can be maintained with natural rainfall, after they are initially rooted (2-years maximum irrigation).
- A facility where no more than 2-crew members could maintain this facility part time, while providing the rest of their other time to other existing facilities in El Cajon or Lakeside.

Respectfully,

Tim Guishard

Tim Guishard Enterprises
www.timswatersolutions.net
This message contains confidential information. If the message was not directly sent to you, or you received the message in error, please notify sender and delete the message from your computer.

Jonah Gula
PO Box 2303
Alpine CA, 91903

20 February 2023

via email:
Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project Draft Environmental Impact Report (SCH No. 2021030196)

Dear Ms. Prowant,

I86-1 Thank you for the opportunity to comment on the revisions of the Draft Environmental Impact Report ("DEIR") for the Alpine Park Project ("Project"). I was born and raised in Alpine, and I grew up visiting the proposed park site and adjacent Wright's Field Ecological Preserve ("Wright's Field"). My comments, questions, and responses to them should be made part of the public record for the Project.

I86-2 First, I would like to express appreciation for the substantial revisions to the DEIR's biological resources section regarding the Western Spadefoot. This was previously a significant oversight by the Department of Parks and Recreation ("DPR") and its biological consultants from ICF. However, I still see several issues with DPR's plans regarding this sensitive species. In MM-BIO-4, why are studies on infiltration rates, soil properties, etc. of planned Western Spadefoot breeding pools planned to be conducted "as needed?" This seems like a deferral of mitigation, as this information should be required prior to construction on the Project site to ensure mitigation will be effective away from the park footprint. Why is the Western Spadefoot Habitat Mitigation and Monitoring Plan anticipated to be developed *after* the Project? If mitigation of the Project's impacts on this sensitive species are to be effective, and if DPR is to be held accountable for this, then this monitoring plan is required prior to Project construction. Otherwise, there is no standardized basis for post-construction monitoring. I am glad post-construction monitoring was added to the DEIR, but without a pre-construction monitoring scheme, the impacts cannot be accurately assessed from a scientific perspective. The unsystematic surveys conducted in 2022 are insufficient to compare with post-construction monitoring. Finally, I find the mitigation methodology of watering the park footprint to draw up estivating Western Spadefoot to be highly questionable, both from the standpoint of effectiveness and conservation ethics.

I86-3

I86-4

MM-BIO-3

I86-5 Is the possible purchase of an off-site parcel for Quino Checkerspot Butterfly (QCB) in the future another case of deferred mitigation? MM-BIO-3 treats such action as if it will be a simple solution and will adequately compensate for the loss of habitat at the Project site. Acquiring an off-site parcel with an established QCB population will be logistically and financially challenging, and acquiring a parcel that just has potential habitat will not be sufficient mitigation. As I expressed in my first DEIR comment letter, development like this Project only serves to fragment populations, which limits dispersal abilities into potential habitat. So acquiring potential habitat has no guarantee of colonization by QCB and is therefore not a mitigation action. If this mitigation action is to be anticipated, specific parcels and details of the QCB and its habitat on these parcels must be detailed prior to Project construction.

MM-BIO-5

I86-6 Why does this impact and mitigation assessment focus on the construction period and wholly neglect the permanent effects of the Project itself? The greatest impact is likely to be exclusion of sensitive species from the Project site following construction. Yet nowhere is this discussed in the DEIR. The single sentence inserted about Grasshopper Sparrows is also highly vague and appears to be a quick and sloppy insertion to satisfy my comments on the first DEIR.

MM-BIO-9 and Cumulative Impact

I86-7 Compensatory habitat management ignores the impact of fragmentation on the project site for sensitive grassland species that have already been significantly affected by similar development projects in San Diego County. Therefore, why does the DEIR not consider any impacts of the Project to be *cumulative* (pg. 4.4-14)? Reduction of habitat patches and habitat fragmentation in San Diego County has been a long-term trend due to suburban sprawl. Once the Project site is developed into the proposed park, the habitat loss is not reversible, and contributes to the degradation of threatened southern California grassland habitat on a landscape level. Therefore, the Project has both permanent and cumulative impact, but the latter is not considered in the DEIR. This demonstrates the clear tunnel vision of this DEIR and its lack of meaningful ecological interest.

Impact on Wright's Field

I86-8 Despite the significant concern I expressed about the bleed-over impacts of the Project onto Wright's Field, the revised DEIR only briefly and lazily addresses this issue even though it is one of the most significant impacts of the Project. Table 4.4-2 does not even consider impacts to adjacent Wright's Field. Why does the DEIR suggest there will be increased foot traffic on the trails within the boundaries of the County's parcel but tries to make the case that foot traffic will not increase on Wright's Field? The authors of the DEIR fail to grasp that members of the public will not distinguish between the legal parcel boundaries–accessible trails will be used if they are connected, which means visitors to the park will follow them onto Wright's Field. So the DEIR's attempt to explain away the impacts of increased foot traffic onto the neighboring preserve property are highly unreasonable.

I86-9 On pg. 4.4-29, the DEIR authors also try to minimize the impact of the Project on Wright's Field by using the distance from the park to the preserve as a way of dissipating increased foot traffic. It suggests that a distance of 600-800 feet is a sufficient discouragement to visitors to walk all

the way to Wright's Field. This is one of the most preposterous justifications in this revised section of the DEIR. Firstly, such a short distance is unlikely to be a discouragement to most visitors, especially those walking their dogs (or letting them run off-leash, which is guaranteed to happen), riding bicycles, and riding horses. After all, Wright's Field is already accessed from the proposed parking area for the Project and the distance is no hinderance to visitors. With the exponential increase in visitors that is expected, one can assume many will not find the distance a hinderance either. This attempt to downplay the impacts to Wright's Field is nonsensical and unfounded.

I86-9 cont.

Finally, the attempt of the DEIR authors to invoke COVID-19 as a reason for increased foot traffic to Wright's Field has no place in this environmental assessment and demonstrates the lack of integrity and honesty in the assessment of impact on the adjacent property. The intention of the Project is to attract visitors to use the developed part of the park and trails, which will without a doubt increase the number of people using the trails and going into Wright's Field. This section of the DEIR is the most dishonest assessment of impact and was clearly only inserted to satisfy those of us who expressed concern in our initial comment letters. As it is, this section contributes nothing to a genuine assessment of impact.

I86-10

Local Regulations

How does DPR justify the Project's conflicts with local regulations and plans under section 4.4.3.3? For example, under GOAL LU-6 (pg. 4.4-10), the Project clearly is not in balance with the natural environment and its scarce resources. The Project site is characterized by dry, open habitat predominantly. The Project will (1) alter this by installing impervious surfaces that will impact groundwater uptake, (2) require substantial and unnatural input of water into the park area, and (3) plant trees (native or otherwise) that are not currently part of the site's habitat.

I86-11

Under LU-6.1 beneath this local regulation, the Project clearly does not support long-term sustainability of the natural environment because it will result in a reduction of a patch of sensitive habitat that is important for maintaining sensitive wildlife species in a landscape where habitat has been increasingly fragmented. For the same reasons, the Project is in conflict with GOAL COS-2 (pg. 4.4-11), especially because it takes no interest in the impact on common species.

I86-12

DPR has continually cited the County's goals regarding park acreage per citizen, which is stated in GOAL COS-21. Why does DPR prioritize this goal over other local goals/regulations? The County's park metrics have much less priority for the overall population than goals about environmental sustainability, and DPR's insistence that the park metrics are sufficient reason for the Project are unacceptable.

I86-13

In closing, I have several general questions about the DEIR. Throughout the revised DEIR, why is prospective language used such as "surveys would be conducted" rather than "surveys *will* be conducted?" This is likely just the way the authors write, but I find these details to be important for keeping DPR accountable. Please revise language throughout to highlight the real intentions of DPR.

I86-14

Why was my suggestion to use citizen science databases of wildlife and plant species not taken into account? Still the DEIR and its biological assessment only consider agency databases, which are far less comprehensive than citizen science databases like eBird and iNaturalist. Indeed, species that the DEIR considers as potentially occurring actually do occur on

I86-15

I86-15 cont. the Project site and adjacent Wright's Field based on these citizen science databases. Exclusion of these data shows a lack of due diligence on the part of DPR and ICF.

I86-16 I thank you for the opportunity to provide this meaningful input as it addresses significant holes in the DEIR and Project plan. I would like to receive all notices relating to this project at Jonah.gula@yahoo.com

Sincerely,



Jonah Gula

Comment Letter I87

From: tdaleharmon@gmail.com
Sent: Thursday, February 2, 2023 5:18 PM
To: CEQA, CountyParks
Cc: CEQA, CountyParks
Subject: [External] Alpine , CA SCH#2021 0303 96

Hello,

I87-1 The proposed development of approximately 25 acres devoted to an array of activities solicited to "General Public" for comment should be directed to " Alpine residents". We as those residents in Alpine have an unbroken 98 acres known as Wright's Field Preserve. The appealing quality of life here has no room to divide this space into multi use areas. Make no mistake, the impact of quality of life is broken with noise, pollution, traffic, loitering, the trash bins that need servicing with noisy and polluting equipment, signs for designated projects, closing of trails for sport events, and the list goes on.

I87-2

I87-3 Lack of this type of development is why Alpine is a charming place to live, enabling those to literally walk outside our homes to smell and taste fresh air, rest our eyes and minds in the unbroken space in nature, and listen for the quiet sounds of life.

Please allow Alpine to be the 'escape' we all need in this small town community. "The bigger the piece of ground, the smaller amount of noise".

Thank You, Kimberly & Tracey Harmon, proud residents in Alpine, CA.

Comment Letter I88

From: Gary Hiebing <garyhiebing@yahoo.com>
Sent: Tuesday, February 7, 2023 3:04 PM
To: CEQA, CountyParks
Subject: [External] Alpine Community Park EIR #5 Passive Park Alternate
Attachments: scan_20230207230103.pdf

Good Afternoon,

I88-1 If you would please take time to read the attached letter in opposition to the proposed Alpine Community Sports Complex and agreement that the proposed alternate #5 for a passive park per the draft environmental impact report be done in its place I would appreciate it.

Thank you for your time and understanding

Gary Hiebing

Gary Hiebing

3006 Via Donito

Alpine, CA 91901

February 7, 2023

Proposed Alpine County Park Passive Park Alternate #5

To Whom it May Concern,

I88-2 I have been a resident of Alpine for over nine years and I'm the husband to a wife that was born and raised in Alpine. We are a young family and have three children. A thirteen-year-old son, eleven-year-old daughter and a five-year-old daughter. We are vehemently opposed to the proposed Alpine County Park at Wright's Field. Any development of Wrights Field or the County land surrounding it should be voted on by the residents of Alpine.

I88-3 A park of this magnitude is not justified in a community like Alpine. I have been involved as a coach over the years for both Alpine American Little League and Alpine AYSO and there is not a shortage of soccer fields or baseball fields in Alpine. As a coach, I never had any trouble finding a location to fill my practice slots for baseball or soccer. In fact, Alpine AYSO currently utilizes soccer fields just on the other side of Wright's Field at Joan MacQueen Middle School. There are also soccer and baseball fields at Shadow Hills Elementary and Alpine Elementary. We don't need any more baseball or soccer fields in Alpine.

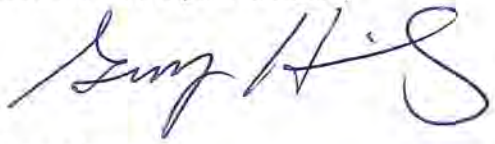
I88-4 This park would also be greatly underutilized and not need in a community the size of Alpine. Alpine cannot get a high school built because it lacks the number of required students. Just a couple years ago Alpine Elementary shut down due to low enrollment numbers and the existing students were sent to the other elementary schools in Alpine. Currently, on any given Saturday you can go down to the fields at Shadow Hills or drive by the smaller park next to Boulder Oaks Elementary School on Tavern Road and they are empty. This would be the same at this proposed park but at the expense of Wright's Fields natural beauty.

I88-5 Other major concerns are safety, logistics and infrastructure. The hard 90 degree turn on South Grade Road near Via Viejas is one of the most dangerous street locations in Alpine. You have speeding cars on South Grade, much slower traffic entering and exiting Palo Verde Ranch on Via Viejas and now this park could potentially create a new hazard of traffic and pedestrians. Infrastructure wise what are the costs and environmental impacts of getting utilities to the new park? If the park does not run of City water it would run off a well and further lower the aquafers many of the surrounding residents relay on. Also, all of the surrounding residents South and East of Wrights Field are not on City Sewer but on septic. Is a park this large scale going to be on a septic system and is this system compatible with this area environmentally?

I88-6 If the County is determined to spend our tax dollars on a new park in Alpine at this location, I would suggest the following. A simple decomposed (DG) granite parking lot with parking for a couple horse trailers. At most, level off the existing walking trails and cover with compacted DG or other natural terrain. This would allow for safe parking and still keep the natural beauty of Wright's Field. This falls inline with #5 Passive Park Alternate proposed in the draft environmental impact report.

I88-7 Over the years there have been numerous proposals on what to do with this parcel of land all of which have been overwhelmingly rejected by the residents of Alpine in favor of keeping Wrights Field wild and natural. When considering the proposed construction of this park I request you ask yourself, why do people want to move and live in Alpine. The reason isn't because of all the amenities you might expect to find in suburban living like, shopping malls, restaurants and yes community parks. For me the reason, in fact, is the exact opposite and lack of these things that makes Alpine special. This community has a feeling of a rural small mountain town and a sense of wilderness. That is what draws families like mine to Alpine. In Alpine when we want our kids to go outside, I don't want them playing on landscaped grass fields or concrete skateparks. I want them hiking in the bushes, climbing boulders and experiencing the outdoors in its natural habitat. Wright's Field is the center of Alpine, the heart of Alpine and a place that residents escape to. Walking through Wright's Field in the morning or in the evening at dusk with my family in its natural state reminds me of exactly why I live in Alpine and I don't want that to change.

A Concerned Alpine Resident,



Gary Hiebing

Comment Letter I89

From: devkus@cox.net
Sent: Sunday, February 26, 2023 4:06 PM
To: CEQA, CountyParks
Subject: [External] Alpine Park Project

Hi,

I89-1 I am writing in response to the DREIR for the Alpine Park Project. Repeatedly, Alpine residents have asked for and suggested a scaled back plan to this proposed park. We have asked for consideration of removing the sports complex aspect of this park, and constructing a "passive use only" park. A passive use park still has not been included as an option/alternative in this DREIR. It appears this park continues to be labeled as a "destination community park". As you

I89-2 know, the miles traveled and the no growth initiative outside of the urban center of surrounding cities, is dramatically changing the length of destination most people are currently traveling. This park will most likely never support the idea of a "destination park" for the above mentioned. The residents of Alpine would greatly appreciate this park centering

I89-3 around horse trails, hiking, mountain biking, and nature based activities, which would leave a much less environmental impact compared to huge grassy areas, sports complex facilities, skateboard park, bike park, basketball and pickle ball.

I89-4 The grass alone negates the idea of water conservation, especially when California is constantly enduring an ongoing

I89-5 drought, and wildfire threat. Please reconsider the plans of this park, and create a passive use park for all ages to enjoy.

Respectfully,
Heather Kusler
2473 Calle de Pescadores
Alpine, Ca. 91901
(619)981-2082

Sent from my iPhone

From: Alanna Light <ablight@cox.net>
Sent: Saturday, February 25, 2023 7:02 PM
To: CEQA, CountyParks
Subject: [External] Letter 2/25/2023 for Recirculation Comments Alpine Park plus editorial & previous comment letter Nov 2021
Attachments: Feb 25 2023 Letter to Anna Prowant from Jeff & Alanna Light Alpine Park DEIR.docx; November 12 2021 Letter to Anna Prowant DEIR Alpine Park.docx

Dear CEQA, County Parks,

Enclosed are two letters - one responding to the Recirculation DEIR and the one we wrote in November 2021.

I90-1 Within this letter is extra information, wanted it to be included so that perhaps you can somewhat understand our frustration about how the ACPG and San Diego County put this together pretending it is for the benefit of all….pretending you listened to us….but in my opinion, and many others, outright lied to us.

I90-2 Please look closely at the traffic situation if nothing else. If South Grade is not improved dramatically, subsequent traffic deaths will be attributed to your negligence.

Jeff & Alanna Light

Jeff & Alanna Light
2634 Calle De Compadres
Alpine, CA 91901
(619) 339-8222
alannalight@cox.net

February 25, 2023

Anna Prowant
Biologist and Land Use/Environmental Planner III Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410,
San Diego, CA 92123

By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

I90-3

First off, I would like to state that in my opinion, this park was created and pushed down taxpayers' throats for political agendas both in Alpine and San Diego County.

As Mr. George Barnett wrote at the end of a letter to Judy Tijong-Pietrzak Dec. 30, 2020, "**So we all are contractually together and well aligned as to goals and missions**." (Full letter is included)

I wrote an editorial that was published in East County Magazine almost two years ago.

Nobody mentioned in this letter has disputed any of the research that I have done. Information was taken from public documents & media.

Please read to understand why many are upset about how this park was created and for whose purpose.

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I90-4

READER'S EDITORIAL: HUNDREDS PROTEST AS COUNTY PLANS $28 MILLION SPORTS COMPLEX ON ENVIRONMENTALLY SENSITIVE LAND IN ALPINE
Wright's Field / Back Country Land Trust (BCLT)

By Alanna Light, 25-year Alpine resident

I90-4 cont.

March 7, 2021 (Alpine) - For decades, Wright's Field in Alpine has been a target for development.

Because of its rich natural resources and quality and diversity of plant and animal life, the land has long been protected from turning into a housing development, golf course, high school and an active sports park. But now a controversial proposal would allow a $28 million, 26-acre sports complex to be built adjacent to land preserved by the Back County Land Trust. (BCLT)

Passionate residents Dave and Yolaine Stout, through the Backcountry Land Trust (BCLT), were able to protect 230 acres of Wright's Field. Their ultimate goal was to purchase the remaining parcel adjacent to it, which they referred to as Phase III of Wright's Field.

The owner of Phase III, Apollo Growth Group Ltd., had tried to develop this land, but because of a number of reasons, including its biological sensitivity, it remained untouched.
In 2006, George Barnett, chairperson of Supervisor Dianne Jacob's Alpine Revitalization Committee for Active Parks & Recreation and board member of the Alpine Community Planning Group (ACPG) wrote, "According to the County, the property (Wright's Field) contains substantial endangered and rare habitats posing important environmental sensitivity…."

He quoted from a letter to ACPG Chair Jim Mowry from Renee Bahl, Director of County Parks & Recreation, "The County has previously evaluated Wright's Field as a potential site for park development and determined that Wright's Field is not suitable for the development of an active recreation park…..our concerns regarding the biological sensitivity of the habitats within Wright's Field have not changed and we do not believe that Wright's Field is suitable for active parkland development."

Barnett mentioned available active park locations that the County had found, one with a willing seller but Supervisor Jacob decided to stop all County work on active parkland development for Alpine "until the ACPG gets its act together."

The County of San Diego has since changed its opinion about an active park on Wright's Field – and did so quietly and methodically – under the radar of a community passionate about its rural heritage and open grassland.

On Dec. 22, 2017, journalist Karen Pearlman of the San Diego Union Tribune(link is external) wrote that Parks and Recreation Chief Jill Bankston said. "The department in the fall identified a parcel that may be suitable for a new park in Alpine…we are working with the property owner to gauge his interest in working with us," she wrote. "This site may be able to accommodate both active and passive recreation."

There was no mention of Wright's Field in the article.

I90-4 cont.

Barnett, whose ultimate goal(link is external) has always been "to get a large county-owned sports park for Alpine," is also a board member of the BCLT in charge of land acquisition. It was his job to acquire Phase III of Wright's Field, the same parcel the County targeted for a sports park. The same parcel that the County said wasn't "suitable for the development of an active recreation park."

The day before the Union Tribune article came out, Wright's Field Partnership LLC was created in Dallas, Texas.
Based on this timeline, the County had apparently been negotiating the purchase of Phase IV of Wright's Field with Apollo Growth Group Ltd. prior to the LLC being created in Dallas, Texas.

On February 14, 2018, Apollo Growth Group transferred Phase III of Wright's Field to Wright's Field Partnership LLC in Dallas, Texas.

Almost a year later, the County of San Diego recorded an option to purchase this parcel from Wright's Field Partnership LLC.

On February 27, 2019, the County of San Diego submitted a Land Use Agenda Item to the board of supervisors. It stated that the County intends to build an active park on this site and "seek to enter into a maintenance agreement with a partner organization using a partner evaluation model to operate and maintain the portions of the land that will be preserved."

Based on this information, it is no surprise that Barnett would be supportive of this transaction. His top priority of getting a County Sports Park is now checked off his political to-do list and he partners with the BCLT to maintain the leftover passive land. It's a win/win for Barnett.

Former Supervisor Dianne Jacob voted for the park and certainly Barnett, representing the ACPG's Parks, Trails & Conservation Subcommittee likely knew about it as well.
Prior to the vote, in a 10 News interview with Jerod Aarons(link is external), Jacobs said, "We add to Wright's Field, we add to the open space amenities, in the community, and at the same time, we have enough property to have active recreational opportunities for children, families in the community."

Although a plus for Barnett, his support for the project comes at the expense of those in the community who feel the existing sports facilities in Alpine should be refurbished and maintained. He does this at the expense of those who moved to Alpine to enjoy a rural lifestyle, who enjoy open space and expected a smaller, community park. He does this at the expense of a biologically sensitive grassland that he previously said was not a viable spot for an active park.

I90-4 cont.

Initially, residents were told that the County Alpine Park would be between 10 and 15 acres, which made sense and was accepted by many residents. However, it almost doubled in scope once the land was purchased.

In the County's Frequently Asked Questions: Alpine County Park(link is external) it states that "Early conversations about the search for a park in Alpine may have referenced smaller acreage, however, the purchase of the 98-acre parcel made it possible to expand acreage opportunities for both active and passive use."

While there are residents in Alpine who would welcome the recreational opportunities in an active sports park, such as baseball, basketball and skateboarding, such activities could occur in a different location, not necessarily an environmentally sensitive site that many in Alpine have long fought to protect.

Alpiners have suggested multiple smaller parks, with a skateboard/bike park easily accessible to children.

The proposed park is located on South Grade Road, which is one of the most dangerous roads in Alpine. Multiple people have died(link is external) on this road and recently, a 19-year-old was a victim of a hit and run accident(link is external).

The County's response to multiple parks was "Putting park amenities in a single area is more cost-effective and centralizes resources for better maintenance over time."
Barnett promotes this park without analyzing traffic safety, wildfire risk and where they would obtain the water source for the playing fields and landscaping.

Unfortunately, most residents never knew or read the County letter(link is external) stating they wanted to build an active park on it.

It wasn't until 2021 that the County posted a link to it on their website under "Frequently Asked Questions: Alpine County Park."(link is external)

Alpine residents were unaware that the community meetings, which occurred after the County decided to build an active park on Phase III of Wright's Field, were held in compliance of Policy I-44(link is external). "The Department of Parks and Recreation, in conjunction with the designated community advisory group…shall hold a minimum of two community workshops regarding the proposed park design project in the affected community."

There is no mention in this policy that the County has to listen or put in effect what the community wants.

The County just has to hold two meetings to be in compliance of Policy I-44.

I90-4 cont.

On September 23, 2020 residents got their first glimpse of the proposed Alpine Park during the county's virtual all-wheels community meeting(link is external). It was then that residents learned that this park was not what they expected. The County presented a 26-acre sports complex complete with baseball field, soccer field, basketball courts, pickleball courts, skateboard and bike park, a pad for a volunteer to live and 270 parking spaces.

When Barnett was asked why the BCLT hadn't purchased Phase III when it was offered for sale to them in 2013, he said that he couldn't secure government funding.
There is no record of public outreach to secure private funding for the purchase, or which federal grants he tried to secure.

Barnett also said that "in early 2019 rumors circulated that the property had been sold," and "about that time the County advised the public that the closing on a large property for an Alpine community park was imminent."

Barnett has been on the ACPG's Trails and Parks Subcommittee and has worked closely with the County and former Supervisor Jacob for over 15 years. While Barnett has not stated precisely when he learned of this plan, his state top priority has long been to get a "County sports park" and it seems unlikely that Supervisor Jacob would have made a decision to back the project without Barnett's knowledge or approval.

Once residents were made aware of the expansiveness of the park, many expressed their outrage at the prospect of a sports park rather than a passive park that preserves the natural environment.

A group of people united under the name of "Preserve Alpine's Heritage." They met virtually with the County to encourage the County to downsize its proposed sports park into a smaller, nature-based park. They have yet to change their plans.

At present there are almost 500 members of the Preserve Alpine's Heritage Facebook page. They envision "a small, nature-based park next to Wright's Field Preserve that respects and complements the open spaces and outdoor recreation offered by this irreplaceable natural resource already enjoyed by so many."

They also feel there should be smaller parks closer to town and to refurbish the existing sports fields that are in disrepair.

Two BCLT board members, wildlife biologist Rene Owens and research geologist Pat Williams, were supportive of this group.

As the Preserve Alpine's Heritage grew and became vocal in the community, the BCLT asked for both of these board members to resign. When Pat Williams wouldn't resign, they voted him off the board.

I90-4 cont.

Travis Lyon(link is external), like Barnett, is pro sports complex and is also on the BCLT and the ACPG. They remain steadfast in their support of a sports park on Wright's Field. Two out of the five BCLT board members are active proponents(link is external) for the development of the sports park.

However, the BCLT states(link is external) it "has not taken any official position on the proposed Alpine Park." Their website goes on to state "Any public sentiment from BCLT Directors/Personnel are solely their personal positions, not those of the board as a whole." During the January 2021 ACPG virtual meeting, Barnett replied(link is external) to residents concerned about the sports park's impact, "I'm comfortable with that personally… Um, I'm sure it's just not going to just damage the whole rest of the 380 acres."

Ultimately, the ACPG decided to justifiably wait for the environmental impact report and traffic analysis to vote on whether as a group they support an active park on Wright's Field. Meanwhile, public outcry is expanding in the Alpine community.

A letter on behalf of the board of the Greater Alpine Fire Safe Council(link is external) has been published in the Alpine Sun and a petition on Change.Org(link is external) has been posted. In less than a week there have been over 350 signatures of people who have serious questions about the placement of an active park on Wright's Field.

A website has been developed by Preserve Alpine's Heritage(link is external) to keep the public informed and force the County to be transparent.
Supporters of both the Back Country Land Trust and former Supervisor Dianne Jacob find it disappointing that they would barter the grasslands for what appears to be political gain. With Jacob gone due to term limits, any efforts by constituents seeking to have the active park moved elsewhere would need to persuade Jacob's replacement, newly elected Supervisor Joel Anderson.

If you are against the proposed park as it is presently designed, please make your voice heard. Write letters, make phone calls, sign the petition(link is external) and get involved. Once this land is gone, it is gone forever.

The opinions in this editorial reflect the views of the author and do not necessarily reflect the views of East County Magazine. To submit an editorial for consideration, contact editor@eastcountymgazine.org(link sends e-mail).

****

I90-5

I am including this information so that it can be on the record that many are aware why and how this park was created, and it wasn't because the taxpayers of San Diego County want to travel to Alpine in 90 + degrees and get heat exhaustion playing pickleball.

Here is the letter from George Barnett where he "believes the BCLT Board majority does support the proposed park. But it wishes to be reassured that the park's impact is identified and can be mitigated."

Based on my research, it is interesting that those who did not align with the "Board majority" were voted off the BCLT Board.

****

From: biggeorge8888@gmail.com
To: Tjiong-Pietrzak, Judy; Lubich, Marcus; Salomon, Johanna; Bradley, Lorrie; Whitty, Eira; Mosley, Deborah; Benham, Crystal; Williams, Robert
Cc: "George Barnett"
Subject: RE: Alpine Park Concept Review- BCLT
Date: Wednesday, December 30, 2020 11:58:17 AM
Attachments: draft county response to deir.pdf
2005-07-22 - county - renee bahl to mark price.pdf

Hi, Judy.

Thank you for setting-up this meeting. I have asked BCLT board members to provide a concise list of environmental concerns as to how the Alpine County Park could impact the adjacent Wright's Field Environmental Preserve. Part of this is due diligence on our part as the grant deeds of that property specify several conservation easements/restrictions, and we want to ensure we are complying and protecting the land.

I90-6

I assume that most concerns will fall into, or be addressed, by these three cataegories:

1. County's EIR Findings

What significant environmental impacts have been determined by the County's project EIR, and how will those impacts be mitigated? We are concerned with being able to maintin the commitments of the MSCP and the Field being a PAMA, BRCA designated.

In past years, the County has not supported parkland in the targetted area due to belkieving that impacts on Engelmann oaks and native grasslands, as expamples, would be unmitigable.

For reference, I attach a County letter to the Alpine Community Planning Group dated 2005-07-22 expressing disfavor with the idea of parkland on Wright's Field; and a copy of the County's response to the Grossmont Union High School EIR, which had targeted Wright's Field as a one of four potential high school sites. I believe the BCLT Board majority does support the proposed park. But it wishes to be reasurred that the park's impact is identified and can be mitigated.

2.CDFW Findings

What comments and/or concerns have been expressed by the California Department of Fish & Wildlife, and how will those be addressed?

3.USFWS Findings

What comments and/or concerns have been expressed by the U.S. Fish & Wildlife Service, and how will those be addressed?

I90-6 cont.

And too, we are interested in the Wildlife Agencies current focus on animal species such as butterflies. The reason is that focus has been shifting a bit in recent years and the Quino is showing a stronger presence on Wright's Field, while Hermes Copper has had a historic presense (altough recent surveys hace not found them). The Wildlife Agencies are increasingly concened with Hermes. And perhaps you know, BCLT, the Trust for Public Land and US Navy have been in a contractual partnership for several years regarding conservation in the East County, with focus on the far Backcountry from Potrero in the west through Campo to La Posta in the east. That contract has been recently amended to include the County of San Diego**. So we all are contractually together and well aligned as to goals and missions.**

Below are the potential BCLT attendees.

Thanks again.

George

BCLT Probable Attendees:

Tim Todaro; President & Director (Tim is a brokerage partner, financial adviser & stock analyst)
George Barnett, Vice President & Director of Land Acquisitions (George is a retired chemical engineer)
Ann Pierce, Secretary & Director (Ann is a publishing business owner & a Backcountry school counselor)
Scott McMillan, Director - Biological Resources (Scott is a biologist and land restoration manager)
Travis Lyon, Director - Land Use Planning (Travis is a commercial developer & CEO of a medical billings firm)
Pat Williams, Director - Backcountry Land Management (Pat is a geologist with teaching service at SDSU)
Rene Owens, Director (Rene is a biologist)

About BCLT

Back Country Land Trust currently owns and/or operates 4,600 acres of conserved land from Alpine to Potrero to La Posta. BCLT's annual conservation expense budget is about $350,000. BCLT has a asset base of nearly $15,000,000, mostly as conserved land plus some endowment investment accounts. Since founding in 1991, BCLT and its partners have conserved over 10,000 acres at a value of $40,000,000, including pariticipating in team effort projects such as Robert Ranch in Descanso and the Crest Ecological Preserve. Michael Beck, of EHL/EHC and Planning Commisioner, has been a BCLT director, and BCLT and Mr. Beck remain steadfast conservation partners.

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I90-7

With that information posted, I would like to reiterate our concerns, as well as some of the information put out on the recent recirculated DEIR.

On November 12, 2021, my husband and I wrote a letter regarding the proposed Alpine Park Project.

I90-7 cont.

I will attach the letter dated November 12, 2021 for reference, but the summary concerns were:

1. Lack of Noise Berm by Calle de Compadres Cul-De-Sac
   (No response on recirculated DEIR)

I90-8

2. Overflow parking/traffic on Calle De compadres
   (No response on recirculated DEIR)

I90-9

3. Location of dog park/Loose Dogs/Noise from dogs
   (No response on recirculated DEIR)

I90-10

4. Special Events Permitted to 10PM/Light Pollution
   (No response on recirculated DEIR)

I90-11

5. Calculation of average local highs and effect on the sports facilities and usage - including closure of park when temperatures are high.
   (No response on recirculated DEIR)

I90-12

6. Water & the cost to taxpayers for increased water need
   (Recirculated DEIR)

I90-13

7. Expansive soil impact on structures and asphalt parking
   (No response on recirculated DEIR)

I90-14

8. Circulation/Traffic
   (Recirculated DEIR stated that would be no significant impact)

I90-15

9. Fire Danger
   Lots of information in the Recirculated DEIR but bottom line is when there is a fire, and there will be, the roads must be able to accommodate first responders to get in and residents to get out. Having lived here through other fires, South Grade Road is a bad road to get out of in an emergency, no matter what excuse you make.

I90-16

Extending a sewer line?

14.13 there is a mention of a sewer line. From various talks and documents, it appeared that there would be a septic line – not a sewer line.

If there is a sewer line, where is this being attached from? Are you going to allow other developments to connect to it? If that was the case, it would be a huge traffic impact for all the residents.

I90-17

There still seems to be no indication of improving South Grade to accommodate the additional traffic, whether it is because of the park or for the additional, denser housing communities that the County wants.

Is your plan to wait for more developments to be built and then blame problems on the roads to them and not the Park? Seems like the Active Sports Complex and more developments have a symbiotic relationship, especially when you are now spouting a sewer line.

It wouldn't be the first time back room deals were made.

I90-18 The only plus on the whole RECIRCULATED DEIR is that you added **Alternative 5 – Passive Park Alternative to the packet….which would eliminate most everybody's concerns except for the politicians and special interests who obviously have a different agenda than residents in Alpine.**

I90-19 **My husband, neighbors and I would really like some answers to questions.**

Thank you for reading the information I have shared and hopefully paying some sort of attention to it.

Jeff & Alanna Light

Jeff & Alanna Light
2634 Calle De Compadres
Alpine, CA 91901
(619) 339-8222
alannalight@cox.net

November 12, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410,
San Diego, CA 92123

By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

Thank you for the opportunity to comment on the Alpine Park Project's (Project) Draft Environmental Impact Report (DEIR).

My husband and I live on Calle De Compadres Cul De Sac at the proposed entrance to the Alpine Park. We have lived in Alpine for over 25 years.

After going through the DEIR, we have questions and concerns, most of which were noted from all of the residents of Calle De Compadres in a letter written April 3, 2021 RE: Notice of Preparation of a Draft Environmental Impact Report on the Alpine County Park Project.

Most of our concerns documented such as noise pollution from the dog park, active sports facilities and high volume of traffic and people, parking issues in our cul-de-sac, light pollution and increased fire risk have not been sufficiently analyzed in the DEIR.

LACK OF NOISE BERM BY CALLE DE COMPADRES CUL-DE-SAC

Why haven't you mitigated for noise abatement for the residents living on Calle De Compadres? Your "noise berm" stops before the proposed dog parks.

OVERFLOW PARKING/TRAFFIC ON CALLE DE COMPADRES CUL-DE-SAC

Why have you not addressed overflow parking on Calle De Compadres or the impact on its residents when park goers use the cul-de-sac for turning around? If the Project charges for parking, visitors will find free parking on Calle De Compadres, negatively affecting the peace and quiet of our neighborhood as well as possibly endangering my dogs and horses which are often pastured by the entrance of the Project.

LOCATION OF DOG PARK/LOOSE DOGS/NOISE

Why did you choose the location of the dog parks to be adjacent to South Grade?
Not only do you not install a noise berm, but you have added more ongoing noise across the from Calle De Compadres.

In addition, have you investigated the impact on traffic, pedestrians and equestrians should a dog get loose and run onto South Grade? Common sense deems the dog park should not be on the perimeter of the Project.

SPECIAL EVENTS PERMITTED TO 10PM/LIGHT POLLUTION

How come you are allowing special events to be held until 10pm when we have been told over and over that this park will only be in use from sunrise to sundown? Do you have a limit of "Special Events" that can occur throughout the year? Are you planning to mitigate the impact of additional lighting that will negatively affect the dark skies of Alpine?

CALCULATION OF AVERAGE LOCAL HIGHS

Why did you base your average local highs from data that starts from 1951? With global warming the average local highs are no longer 76.4 degrees.

There are multiple days over 90 degrees in the summer and with the addition of artificial turf and thousands of feet of concrete, the playing area on the Project will likely be unusable as global warming continues to increase.

There are already County Parks that are closed in August due to high temperatures. Will this be the case for this Project as well?

WATER

First off, the DEIR estimates annual water needs as 16,471,273 gallons and there is no commitment that Padre Dam will be able to accommodate that need.

But even with that ludicrous amount of water, I question if that amount of water is even enough to keep the real grass playing fields alive and if the above temperatures were considered when evaluating the amount of water needed.

Did you include water needed to water down the artificial turf for the baseball field in your calculations? Artificial turf is adversely affected by high temperatures.

Regarding purchasing water from Padre Dam and water usage: According to *weather-and-climate.com*, the average precipitation in Alpine is 10.31 inches a year **NOT** 16 inches per year as per your Project states. How will the change of 4 ½ inches of rainfall impact your calculation for water use and future needs.

Please recheck your current evaluation of water needed, incorporating the increase of Alpine temperatures due to global warming and significantly lower average annual precipitation to get an accurate assessment of the Project's water needs.

According to the San Diego Water Authority, *"The 2021 water year was the driest in California in more than a century."*

My family adhered to past requests from the water district to change landscaping to prosper in our desert-like environment. My lawns our gone and in their place is an artificial turf lawn and hardscaping.

Looking around Alpine I see many others who have adhered to the same request.

Please explain why you want acres of water thirsty sod in the Project when global warming and increasing drought years point to eliminating sod altogether.

For the County to ask for, and for Padre Dam to commit to selling water for a park of this magnitude while telling everybody else to be "water wise" and without having accurate calculations of increased water need is wasteful and hypocritical.

We feel strongly that because of miscalculations of precipitation and temperatures in Alpine, compounded with ongoing global warming, that the projected water needed is incorrect and will cost the taxpayers an insurmountable amount of money as the realization of this situation occurs.

Because of this, expansive playing fields of sod is irresponsible, financially and environmentally.

EXPANSIVE SOIL IMPACT ON STRUCTURES AND ASPHALT PARKING

The soil in for this project is unstable, expansive and has a high shrink/swell behavior. As residents adjacent to the Project, we are highly aware how it negatively impacts foundations and roadways.

Here are pictures taken on November 8, 2021 of the asphalt street on Calle De Compadres and two of the properties. The asphalt parking lot will look like this within a few years unless you included an extensive maintenance plan to accommodate this soil.








2





Although the DEIR mentions the volunteer pad, how do you plan on mitigating the foundation for the skatepark park which is entirely concrete, the basketball courts and the pickleball courts?

Much of this expansive soil will have to be removed at an enormous cost and as it is not suitable for building fill, who is going to want it?

CIRCULATION/TRAFFIC

I would like to have more information on how the DEIR can possibly state that 500 daily visitors will not have a significant impact on traffic on South Grade and Tavern Road and that no mitigation is needed.

As 25-year-residents living off South Grade Rd., we have seen numerous accidents, near accidents and fatalities.

We watched traffic on South Grade gridlock during the 2003 Fire evacuation.

There is no concrete plan to widen South Grade Rd. to allow emergency vehicles to drive through.

There are no bike paths on South Grade to the project site.

It is unsafe for pedestrians to walk on the street.

There is no public transportation stop to the Project.

As this is a County Park and most people travelling will come to Alpine and take the Tavern Road exit, the first entrance to the park will be on the South end of the Project, not Calle De Compadres.

Have you considered how this will affect traffic if there is no stop sign on South Grade at that exit? Have you looked at putting an additional stop sign by that exit so people can safely enter that entrance?

Increased circulation around the Project will lead to additional injuries and fatalities on South Grade.

This portion of the DEIR needs to be readdressed as any injuries and fatalities due to trivializing the negative impact of an additional 500 visitors a day on an already dangerous two-lane road is negligent.

FIRE DANGER

The more people who go to this park, the higher possibility of a human caused fire. Whether it is from a BBQ or smoking, or an accident from the volunteer resident in their home, the dry grasslands that surround the park is extremely flammable and the roads surrounding Wright's Field are barely sufficient for current evacuations. Unless there is a definitive commitment that the roads will be widened, it is negligent to agree to build a park that will attract 500 people a day.

As my husband and I have stated in the past, we would like a smaller nature-based community park.

Where is the option of smaller parks throughout Alpine? Why isn't there an option that eliminates the sod and baseball field?

Alpine does not need acres of playing fields, a concrete skateboard park or basketball and pickle board courts. There are playing facilities in Alpine, but most are not maintained.

Both of my children grew up in Alpine and played AYSO, softball and Little League. This was BEFORE the decline of children in Alpine and an elementary school was closed. This was BEFORE the numbers didn't warrant a High School!

I anticipate that this Project, if approved, will not only ruin the rural feel of this community, but it too will fall into disrepair once the County realizes the high cost of operation & maintenance as well as lack of anticipated use due to extreme heat.

Time and time again you ignore the concerns of residents, the effects of global warming, ongoing drought and the dangers of putting a massive park along a dangerous two-lane road and say that there is no mitigation needed.

This DEIR is flawed and needs to be reanalyzed.

Jeff & Alanna Light
Alpine Residents

From: Erick Lundy <erick@lundyinsurance.com>
Sent: Saturday, December 17, 2022 8:03 AM
To: CEQA, CountyParks
Subject: [External] RE: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report Recirculated Portion (December 16, 2022 - February 14, 2023)

I91-1 Extremely unfortunate the park is taking so long to build. This is so typical of trying to get anything done in California. Environmentalists have a stranglehold on ANY land improvement, even this beautiful park that will benefit the residents of Alpine in a major way. Good Luck!

One of the main reasons we finally sold our home this year in Alpine and moved out of the state. VERY HAPPY.

Erick Lundy
Lundy Insurance Services, Inc.
Phone: (858) 408-1404
Fax: (858) 408-1407
www.lundyinsurance.com
CA LIC#0693554





Past President – El Cajon Rotary

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From: CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov>
Sent: Friday, December 16, 2022 6:52 PM
Subject: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report Recirculated Portion (December 16, 2022 - February 14, 2023)

Good afternoon,

The County of San Diego, Parks and Recreation Department is recirculating for public review an updated portion of the Draft Environmental Impact Report (EIR) for Alpine Park Project pursuant to the California Environmental Quality Act. Please see attached for the Notice of Availability and information on providing comments or visit the website at: www.sdparks.org/publicreview.

Written comments regarding the Draft EIR must be received no later than **February 14, 2023 at 5:00 p.m.** (a 60-day public review period). Comments should be emailed to CountyParksCEQA@sdcounty.ca.gov. For additional questions contact Anna Prowant at (619) 756-4548 or by email at CountyParksCEQA@sdcounty.ca.gov.

Thank you,

Anna Prowant (She-Her-Hers)
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
(619) 756-4548 (cell)
www.sdparks.org

For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com**. To receive updates via text, send **COSD COVID19** to **468-311.**

Coronavirus Disease 2019
COVID-19

James Mason, MD
2011 Via Dieguenos, Alpine, CA 91901
drstemcell@yahoo.com

Monday, February 27, 2023

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

I92-1 Thank you for the opportunity to comment on the Alpine County Park Recirculated Draft Environmental Impact Report (DEIR). As a 30-year resident of the rural town of Alpine, I have multiple concerns regarding the proposed park, its scope, need, and development.

Let me be clear: I strongly oppose the Alpine County Park as proposed. While I understand that the idea of creating a regional park for recreational activities is appealing, I believe that the current proposal is not the right solution for our rural community.

I92-2 First and foremost, I am concerned by the scope of the park. It has become evident that the population growth of the San Diego backcountry, especially Alpine, has not been as predicted (see SanDag Series 14 and US Census 2020 data). In fact, it is far, far less. As such, a park of this scope has not only not been requested by the local community, but the scope cannot be justified by the population levels. As a result, the proposed regional park will be significantly

I92-3 disproportionate to the needs and size of the community, as well as devastating to the local natural habitat (Wright's Field Multiple Species Conservation Program).

I92-4 Based on the above and given the options put forth under the DEIR Chapter 6: Alternatives, the option that best aligns with the park as initially presented and generally supported by the community is the passive park alternative.

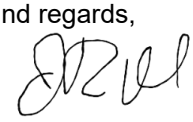
I92-5 However, I am convinced that a better solution is one not yet proposed by the County: a nature-based, passive park with activities such as trails, amphitheater, workout stations, playground, shaded areas, parking, interpretive center, etc. These activities:

1. Are appropriately aligned with the rural location.
2. Respect the majority of the community input as illustrated by County data.
3. Satisfy a majority of the County Park objectives.

I92-6 Therefore, it is requested that the County cease current plans, in favor of redesigning the park based on the above and present this to the community for approval. Approval and support I am convinced you would receive.

I truly appreciate the opportunity to comment and state my concerns regarding the Alpine County Park DEIR.

Kind regards,



James Mason, MD
Tel. 619.302-5534
drstemcell@yahoo.com

Comment Letter I93

From: Dcmeyer2 <dcmeyer2@cox.net>
Sent: Monday, January 30, 2023 6:38 PM
To: CEQA, CountyParks
Subject: [External] Alpine park project.

I93-1 I have been a resident of Alpine since 2003 and I would like to say that my children missed this opportunity to have a park to enjoy as children however, I am in full support of this project as I am sure it will provide enjoyment for the children and adults alike of this wonderful community as well as providing a safe environment to park vehicles and horse trailers, it really has become a safety issue with the amount of vehicles that park along South Grade Rd. And than try to
I93-2 navigate their way across the street with children and pets in tow to wrights field , it has become a dangerous situation!!

David Meyer
Sent from my iPhone

Comment Letter I94

From: Vince Murillo <vmurillo797@gmail.com>
Sent: Tuesday, December 27, 2022 12:22 PM
To: CEQA, CountyParks
Subject: [External] Wright's Field / Alpine Project

I94-1

Please note that this project is not supported by a large number of individuals I have spoken to. I would ask that a vote or poll be conducted, as again, it appears this is not favorable to many Alpine residents.

A community park seems to be a more logical choice and agreeable to many I've talked with.

We, the residents at my Alpine home, are NOT in favor of a sports complex.

Comment Letter I95

January 4, 2023

County of San Diego
Parks and Recreation
% Anna Prowant
5500 Overland Ave. Suite 410
San Diego, CA 92123
Via email: CountyParksCEQA@sdcounty.ca.gov.

Dear Ms. Prowant:

I am pleased to write this letter to submit my comments on the updated Draft EIR for the plan for the Alpine County Park. I support the original proposed park plan and reject any of the offered alternatives in the DRAFT EIR.

I95-1 I continue to believe that Alpine has been long overdue for a park of this quality that has had extensive input from the community over the past 4 years. I continue to stand in full support of the park amenities as planned and particularly the bike park and all-wheel park amenities which I know will be embraced by the community and riders of all ages.

The County of San Diego Department of Parks and Recreation is to be commended for their vision of providing quality parks for the people of San Diego County.

Sincerely,



Susie Murphy
County of San Diego Parks Advisory Committee - District 1

718 Elm Ave., Chula Vista, CA 91910
Susiemurphy63@gmail.com

Comment Letter I96

February 26, 2023

Anna Prowant
County of San Diego, Dept. of Parks and Recreation
Alpine Park Environmental Review
5550 Overland Avenue, Suite 410
San Diego, CA 92123
CountyParksCEQA@sdcounty.ca.gov

Dear Anna Prowant,

I appreciate the opportunity to respond with comments regarding the Recirculated Sections of the Alpine Park Environmental Review.

I96-1 While I cannot profess to be either an expert in flora and fauna or legal issues, I am a long-time resident of Alpine who has a vested interest in the community's present and future vision and needs. I wish to express my concerns, observations, opinions and questions regarding this life-changing proposed park in Alpine. I am requesting that the County answer with clarity all of the following questions and comments relating to the project as well as my unanswered questions in my November 11, 2021 letter to San Diego County Department of Parks and Recreation (DPR). (see Attachment 1).

Extension of time to respond

It does not go unnoticed the date in which the revision was published for public review; exactly when the holidays became all-encompassing. The last thing a member of the public wants to do is spend precious holiday and family time devoted to reviewing and responding to such detailed documents. I find this of questionable strategy and suspiciously view this as another maneuver DPR has taken to create obstacles for the public to have adequate time to review.

I96-2 The information DPR submitted for public review in December was inadequate due to lack of completed staff work (and discovered by an Alpine resident, not by DPR), causing the need for a time extension. **Question:** 1) Why was this time extension not awarded the same amount of time frame in order for the public to re-read and re-review all documents that had to be redone by County staff? 2) Why was it not made clear by DPR California Environmental Quality Act (CEQA) email notice that the time extension also included revisions to the documents released in December?

At this point in the juncture, rather than being a project in which we all worked together, I unhappily view the situation as being government vs citizens; the government deciding

what is best for its citizens without the government honestly listening to the citizens who will be directly affected by the government's actions. I personally believe that government agencies are indebted to working with (not against) its citizens. The DPR's attitude of the public throughout this process has been dismissive, disrespectful and possibly unethical towards the citizens of Alpine. DPR has taken on the oppressive Big Brother image, forcing our community to accept what DPR renders necessary for our community without taking into account our cherished sense of community and legitimate concerns.

I96-2 cont.

I will interject that DPR is not the only guilty party regarding lack of respect and disregard for Alpine community members. Alpine Community Planning Group (ACPG) should be held accountable for its self-interests, self-goals and self-motivations. At least on this issue, ACPG did not acknowledge the overwhelming (and surprising) number of people throughout the community who spoke of their disapproval of the project at numerous ACPG meetings. [Sidebar: Historically, Alpine residents do not participate in large numbers regarding public comments on items that may affect their community; maybe this is why Retired Supervisor Dianne Jacob said years ago that if Alpine doesn't get their act together, we'd never get a park.] The ACPG failed to live up to their sworn responsibility to represent the community's wishes, even if not aligned with their own individual wishes. They failed to pass onto the appropriate agency (this time it is DPR) what the public truly wanted. In fact, active efforts were made between DPR and ACPG to squelch public comments. Portions of the Public Records Act (PRA) will confirm my observations. I surmise that this is a close-to-perfect example of corruption and backdoor politics on a local level and should not be tolerated. **Question:** Because of these events occurring, should it not give pause to the true validity of this entire process of the proposed park moving forward in *any* aspect?

I96-3

I have attached my Letters to the Editor of the Alpine Sun which reflect some of my views and observations and point out the behind-the-scenes dealings of ACPG and the DPR that are possibly unethical. (See Attachments 2,3,4)

I96-4

Piecemealing

Elements of the construction and implementation of the proposed park that are red flags and that do not adhere to CEQA requirements include, but are not limited to:

I96-5

1) Piecemealing pathways: DPR is not taking into consideration the ever present lack of public pathways to reach this destination. And the County has NO intention to remedy this serious and very dangerous element within the park plans. The DEIR only includes a partial pathway along South Grade Road that is adjacent to the property line; rendering this piecemealed pathway-to-no-where and does not connect to any existing safe passageway.

I96-6

I96-6 cont.

Alpine's topography often does not lend itself to providing such vital necessities. Unfortunately, creating such a pathway from the center of the Village is probably not doable. There is an effort by ACPG to incorporate a viable "Alpine Loop" to remedy this circumstance but because the loop is not part of the current Community Plan and has not yet been adopted, DPR cannot proclaim that the pathway problems are solved and, therefore, have no significant impact. This element is a NON-NEGOTIABLE in order for Alternatives 2, 3 and 4 to be feasible without endangering our public.

I96-7

2) Piecemealing sewer connection: Infrastructure is not presently available. The current locations of the sewage line are either down Tavern Road and ending at Joan McQueen Middle School or from Albertson's which is at the far east end of the Village and at least 1 mile from the proposed park. Note that sewer lines are intended only within the hi-density area of Alpine, the Village. Sewer extensions lend to increased development outside the Village and is not in line with the Community Plan and encourages increased development outside the Village. The DEIR does not address how a sewer line from Joan McQueen will be implemented. **Question:** 1) Will the sewer line be extended to the park site and if so, via what route? If a sewer line will be utilized, proper evaluation of the impacts should have been included in the DEIR. Is there any chance that a sewage line would be constructed that would transverse Wright's Field in order for connection to the sewage line? I do not need to express how this option should not even be mentioned or considered within the DEIR.

I96-8

3) Piecemealing Access to Wright's Field: In essence, development of Alternatives 2, 3 and 4 will effectively cut off any public access into Wright's Field (without accessing via private roads.) The majority of those who access Wright's Field do so via the County owned property. Once Alternatives 2, 3 or 4 are implemented, the County will soon discover that many residents just want to reach the solitude of Wright's Field. **Question**: 1) Why has the county not taken serious considerations of the impacts the proposed park will have for those wishing to avoid the active park and just seek the passive park's access to Wright's Field? 2) Why has DPR chosen to eliminate this only viable method of access to Wright's Field?

I96-9

<u>Water Usage</u>

Our water resources have been depleting for a number of years and are a serious and acute issue. Alpine pays one of, if not the highest fees to have water pumped to our community in the County. We are constantly being told by the Padre Dam Water District that we must conserve, both inside our homes and in our landscaping. Smart garden landscaping in our area consists of replacing water-hogging lawns (and the chemical residuals that come to keeping a lawn) with drought tolerant plantings. **Questions:** 1)

I96-9 cont.

How can an agency, DPR, condone and recommend a project which will place tremendous and unnecessary stress on our water supply? 2) Why has DPR not addressed this real impact that will affect the entire San Diego County? 3) How can the County justify using County-wide moneys for this misuse of this finite resource?

Estimated Population Increase

I96-10

The Recirculated DEIR states in the Objective 2 of each Alternative, "...In addition, according to the County Parks Master Plan, population density is projected to increase by 61 percent in the central Alpine Community Plan Area's (CPA) by 2040 (County Parks Master Plan, p. 53). As a result, the demand for parks and recreational services will increase substantially over the coming years. Because the community already has a deficit with respect to parkland, with only 1.83 acres per person, this will place greater demand on existing facilities…." Alternatives 1 and 5 "would not address these concerns or contribute to responsibly furthering the region's growth."

In direct contrast, Attachment 5 is the May 18, 2022 letter from the law firm of Shute, Mihaly & Weinberger, speaks directly to the issue of population growth. It explains why there will be no need for a park in Alpine of the proposed grand scale. "The Project is oversized, incompatible with the rural character of Alpine, would substantially increase overall vehicle miles traveled ("VMT"), and would convert open space in an area with substantial biological resources to an active recreational facility."

I96-11

According to SANDAG's Regional Plan and Sustainable Communities Strategy, goals are to reduce greenhouse emissions and meet climate change standards between 2023 and 2035 (12 years). In addition, SANDAG's July 2020 Regional House Needs Allocation Plan (RHNA) has drastically reduced the number of allocated housing units in the <u>total</u> unincorporated rural areas. There can only be a TOTAL of the ENTIRE unincorporated areas of San Diego County of 7,000 units between 2023 and 2035.

The letter further concludes, " …in order to be consistent with SANDAG's 2021 Regional Plan and Series 14 forecast and RHNA, the County will have to *reduce* Alpine's housing allocation from the current General Plan, which will result in significantly less population growth in the Alpine area. Based on the foregoing, there [is] no reasonable argument supporting the need for a park project of the proposed size."

I96-12

Questions: 1) Why does the County continue to use outdated statistics relating to anticipated growth in Alpine and the rest of the unincorporated rural areas? 2) Why does the Recirculated DEIR not address the proper current calculations made in the May 22, 2022 letter from this law firm? 3) Is it not true that the County information submitted for public review is in essence not true facts relating to population growth? 4) Does DPR not need to comply with the current SANDAG's Regional Plan and Sustainable Communities Strategy, the Series 14 forecast and the RHNA? 4) Is this gross neglect of the County's responsibility to use up-to-date standards and compliances?

Determining the amount of park acreage needed in Alpine

If compared with SANDAG's analysis, it appears that the County is continuing to use outdated methods to calculate the number of needed park acreage in Alpine.

In addition, DPR seems to be neglecting to include existing passive park acreage into its calculation to determine the number of acreage already present in Alpine. If the County would include the number of acreage already present in Alpine that includes both passive parks/preserves with active parks, the County may be quite surprised at the park-to-population. Do the math. Even though the current parkland acreage is not necessarily owned by the County, Alpine still, nevertheless, has parkland that must be included to accurately calculate the park acreage. The County does provide partnership-funding for park elements in Alpine (example: $900,000 to redo the playing fields at Joan McQueen Middle School.)

I96-13

It appears that the County does not consider passive parks to be of equal importance to active parks to meet the park acreage-to-population ratio. From the way DPR has handled and has responded to the public, it is quite apparent they do not value passive parks; that passive parks serve only as a purpose of just meeting mitigation requirements. The County can then justify their intention to destroy sensitive habitat in the name of "Community Needs" of a gathering and connecting place. DPR should be aware that we already have a community center for the community to connect. It must be emphasized that Alpiners gather and connect in their own unique ways--not fitting into one of the County's prescribed, canned objectives.

One of DPR's goals is to have exceptional (by their standards) park and recreational opportunities. As the public has stated throughout this process, Alpine would embrace such goals IF these opportunities were located in *appropriate* location(s). DPR should have surmised from their studies and community input that in order to actually meet Alpine's unique needs, the multi-matrix approach should be taken using mini-parks. Mini-parks would address all the needed amenities and can then be located in the high density area--the Village--where the needs for these amenities are most needed and most appropriate.

I96-14

It should be made perfectly clear to the County that Alpine's heritage does not view active parks as more valuable than passive ones…Wright's Field is our town's stand-out gem which gives our town its own identity and an unsurpassing uniqueness. During Covid, it was where the community sought peace and tranquility walking the trails and reconnecting with the healthy values that only nature can provide.

I96-15

Incorporating Alternative 5 in its entirety (and with minor enhancements/inclusions) would be the ultimate enhancement to our town and our town's pride and would be the closest to keeping Alpine's unique and coveted rural character and heritage.

Level of Service (LOS)

I reference two articles regarding Level-of-Service (LOS) metrics (see Attachments 6, 7)

1) American Planning Association's *Pas Memo "Alternatives for Determining Parks and Recreation Level of Service",* May/June 2016
2) National Recreation and Park Association (NRPA) Parks & Recreation Monthly Magazine, *A New Approach to Parks and Recreation System Planning'"* October 29, 2020

I96-16

Both were authored by David Barth, Ph.D., CPRP, AICP. Dr. Barth has developed parks and recreation system master plans for over 70 US communities, one of which is downtown San Diego. Therefore, Dr. Barth's expertise in the field should not be a stranger to DPR. Both discuss the departure of using the antiquated 27-year-old (1996) guidelines to the new approach to Parks and Recreation System Planning.

The documents stress that "there are no longer any nationally accepted standards for parks and recreation planning." This includes the matrix used by DPR to determine the number of acreage-to-population figures.

This new approach responds to societal shifts and expectations. It indicates that park facilities should no longer be "isolated" but rather essential frameworks for achieving community sustainability, resiliency and livability. They further state that there should be "an ongoing, collaborative planning process [that] can lead to the development of an integrated public realm that can generate far more benefits for a community than the traditional" "linear, narrowly defined parks and recreation system plan"… In addition, "Careful and thoughtful planning is critical to identifying opportunities to generate greater resiliency and sustainability benefits for the community, as well as building the credibility and support needed to implement key recommendations. The eventual success or failure of many plans can be traced to the amount of time spent initiating and planning the process. Once a PRSMP process begins, it is very difficult to change its scope, budget and deliverables midstream."

I96-17

"...access is an important measure of service….[and]...there are no standard criteria for access LOS. Each community must determine its own based on land development patterns…"

I96-18

I96-19 **Questions and Comments:** 1) Can you state whether DPR incorporated any of this new approach into Alpine's park planning? If so, provide details. 2) Can you tell me

I96-20 why DPR failed to obtain robust and honest community input? 3) Can you explain why

I96-21 DPR slyly told the public we would be getting a small, undisruptive park but, in reality, the plan turned into a massive Sports Complex only for Alpiners to be blindsided and learn of this Alternative at the VERY END of the planning process?

DPR will probably justify their actions by stating that they initially hold public

I96-22 meetings (that were very poorly attended by locals). Had DPR's intentions and goals been transparent at the onslaught and during the public meetings, we would not have

relied on the misinformation given to us (i.e., a 10-20 acre portion of the property would be used for active purposes keeping in alignment with the community rural standards). I contend that the County and ACPG knew from the very onslaught of their goal to gain Prop 68 grant funding for a Region Sports Complex (of which funding was not awarded)yet did not have the "cajones" to be honest with the public. In effect Alpiners were lied to and deceived by DPR and ACPG.

I96-22 cont.

Biology

"Because we all share this planet earth, we have to learn to live in harmony and peace with each other and with nature. This is not a dream, but a necessity."
--His Holiness the Dalai Lama

I96-23 **Question and Comments:** How does the above quote square with the project's biologist's statement in one of the public meetings, "You are getting this project whether you like it or not?" This kind of condescending statement does not lend itself to establishing any public trust. 1) Does this then mean by "hook or crook" this project will be built? 2) How can the public then trust any statement or study done by the DPR as being honestly completed at expected standards?

I96-24

I96-25 The revision includes real or potential impacts to the following. Depending on the Alternatives, the level of impact of each varies except for Alternatives 1 & 5 (where there will be no impacts.) As stated by the Recirculated DEIR the following are the seven areas of impact:

1) Impacts of Wright's Field
2) Impacts of Wildlife Corridors
3) Impacts on native grassland
4) Decumbent goldenbush
5) Palmer's grappling hook
6) Valley Needlegrass Grassland
7) Engelmann Oak

I96-26 The Recirculated DEIR identifies a much-expanded list of biological impacts to specific species that were not included in the initial DEIR. This new revision shows a remarkable indication of DPR's shoddy, incomplete assessment in its *initial* DEIR. And we are supposed to blindly agree with DPR conclusions? The highly lacking studies continue to reconfirm that the public cannot place trust in this agency to fulfill its duty to the public as the lead agency.

I96-27 As stated before, I am not an expert in fauna or flora. It does not take a rocket scientist, (of which I also am not!) to see the convoluted approach to conservation by using mitigation (that have no guarantees of success) to redefine the existing property to suit the whims of man's immediate gratifications. It totally ignores the purpose of this land using Multiple Species Conservation Program (MSCP) guidelines.

I96-27 cont.

It is reckless for us to project that the trendy pickleball courts and skate and bike skill parks are more important than saving, protecting and enhancing Nature's gifts to us that are presently within the Project. It is additionally absurd to include more baseball fields, especially since the County and our school district just utilized an awarded $900,000 improvements to current sports fields. To demand more, at the cost of what we stand to lose including our precious and failing water resources, is an utterly selfish, greedy, short-sighted and improper use of sensitive habitats.

People, we have only a finite number of natural habitat acres left in our County and this property harbors a vast variety of creatures and plants that need our protection, not our destruction. This land needs for us to be its stewards to preserve in perpetuity. The diversities of wildlife and flora are extensive. When it is gone, it is gone forever.

Executive Summary

I96-28

The following is my review of the Recirculated DEIR's Executive Summary. I have specific questions regarding portions of the Executive Summary. I request answers to these questions which may help me understand DPR's motives and goals as they pertain to the project. I request that my questions be seriously considered and respectfully responded to.

Overview:

I96-29

"...The County DPR proposes conserving the remainder of the property as open space/preserve land…."

Questions: Who/what entity will be responsible for maintaining the remainder of the property? Is the County considering sharing or handing over the responsibility to an entity other than DPR? If so, have negotiations begun to ensure success?

I96-30

"...For the utilities, the project proposes connecting to the existing sewer system or including a septic system…"

Question: With regards to the septic system, has the County performed necessary studies and soil testing to ensure that the area for the septic lines will indeed percolate? This property has been plagued in the past and one reason it could not be developed was that the ground does not percolate and, because the property is presently outside the Village (where sewer hookups are only allowed), sewer hookups violate the Alpine Community Plan. This regulation was established to discourage wide-spread, uncontrolled housing and density developments and to maintain the rural character that is so valuable to its residents. **I then must ask**: 1) How do you square the violation of the community plan? 2) Has the County secured at least an estimation of the costs to connect to the existing sewer? 3) Why has the County not addressed in the DEIR the

I96-30 cont.

impacts it will have during the construction of connecting the sewer system including, but not limited to, noise, traffic congestion, and interference with the existing storm drainage systems? 4) Does the County realize that by connection with the existing sewer lines, the project becomes a piecemeal project as impacts have not been properly evaluated?

I96-31

"..."No Parking" signs would be installed along the shoulder of South Grade Road, as deemed necessary by the Department of Public Works (DPW), Traffic Division, to prevent potential overflow parking on South Grade Road."
Questions: 1) Has DPW done an adequate study to deem what is necessary? 2) Will the "No Parking" signage be placed on both sides of South Grade Road? 3) Which side is planned for the signage? 4) What is in place and planned for mitigating the potential overflow parking or parking of those not willing to pay the likely parking fee?
Comments: The DEIR does not address the likelihood and potential overflow of parking on side streets. This is gross oversight for it will directly impact the adjacent neighborhood's streets. **Question:** 5) Will the County provide Parking Permits for the residents on the streets to be affected? These streets would include but not limited to Calle de Compadres, Via Viejas, Nido Aguila with a spillover to Avenida Canora and the streets to the north of the park. It appears that there will be no "No Parking" signage along the west side of South Grade Road because the DEIR indicates there will be a walking path that will take up the space instead

I96-32

"...The project includes maintenance for approximately 1 mile of existing trails; it would close approximately 3,300 linear feet of existing informal-use trails. These existing trails are located north and west of the active park area."
Questions: 1) Why has the DEIR not included or addressed the trail artery leading within the proposed active park area that will also be closed? This trailhead begins almost directly opposite the entrance to Palo Verde Ranch/Via Viejas and traverses what would be in the proposed active park section. It eventually meets up with other trails. This trailhead is presently being used on a frequent basis and should not be overlooked in the discussion of permanent impacts. **Comment:** Therefore, the document is not accurately depicting what already exists. [Sidebar: DPR was told during one of the virtual community meetings by George Barnett (a former member of ACPG and current of BCLT Board Member) that there were no more trails that exist except for the ones on the DPR maps. Mr. Barnett's statement is wrong and misleading. The public was not allowed to correct his misinformation during the meeting.]

I96-33

"...The remaining 70 acres for open space/preserve would allow for restoration/habitat enhancement."

I96-33 cont.

Questions: 1) Who will be responsible to oversee these 70 acres? 2) In the past the County and BCLT have worked together to provide such goals. Should the public expect that BCLT will be the joint shareholder in preserving the acreage?

Project Location

"The project site is….approximately 1 mile south of the center of the unincorporated community of Alpine and approximately 1 mile south of Interstate (I-)8….."

Question: How did DPR derive this calculation? **Comments:** 1) DPR's calculation of 1 mile cannot be supported unless, perhaps, if you travel "as the crow flies". Bottom line: it is more than 1 mile to the proposed park entrance off South Grade Road in both directions.

I96-34

Fitting into the as-the-crow-flies category, there are two other roads off Alpine Boulevard that have access to Wrights Field (and then, presumably, onto the proposed site) that start out County-owned but end as private roads. Those roads are Olivewood Lane and Marshall Road. To access the proposed park via these two roads would be trespassing onto private property and which for obvious reasons should not be promoted. Therefore, they should not even be included or considered as access points.

In addition, there is a private road/lane off Tavern Road bordering Joan McQueen Middle School where one might be able to access Wright's Field and then onto the proposed park trails. Again, is it a private road with signage stating it is a private road and no parking is allowed for Wright's Field visitors? There are no parking spots at Joan McQueen to accommodate Wright's Field visitors. So that location cannot be considered.

I96-35

2) Please refer to Attachment 8, a Google Map that clearly shows that to reach the project proposed entrance is 2.8 miles from the Tavern Road exit off Hwy I-8 (the route most regional visitors will use and the route most convenient to reach the center of the community.)

3) Since the DEIR does not give its exact location of "the center of the unincorporated community…" a reasonably accurate location should be the "Y" intersection where Alpine Boulevard and Arnold Way intersect in the middle of the Village, where Alpine Womans Club is located. Attachments 9 and 10 are Google Map calculations that show that the distance from Alpine Womans Club (the center of town) to the entrance of the proposed project is either 2.8 miles (via Tavern Road) or 2.5 miles (via South Grade Road).

I96-36

4) One might ask, why such a trite question? Stating that the project site entrance is only 1 mile from the town center clearly misleads anyone that reads this report. It implies that it is within very easy reach for the public living within the higher density section of the Alpine community.

I96-37

Most of the active components to the park are directed to serve the needs of the public, many of whom live in the Village. However, the public does not live within a

I96-37 cont.

reasonable range of accessing the site. There are no sidewalks or pathways from the center of town to the proposed parks entrance nor does the project incorporate these needed pathways. There are no forms of public transportation (i.e., buses) for the public to reach the park.

From the onset of designing this park the park's components speak to the needs of the high density areas of Alpine, the Village, where access can be readily accommodated and optimally utilized, causing prudent use of funds and meeting project goals. (Think mini-parks or pocket parks.)

I96-38

In addition, it is misleading to imply that this park is an "easy-access" from the highway. The report also neglects to state that the access is on 2-lane rural roads meant for *rural* use and not meant to accommodate additional use that the project would bring.

6) So, again, where does DPR come up with 1 mile?

7) Why is such a seemingly minute calculation so misrepresented? It misleads the reader that this park site is close to and offers easy access to both local and regional citizens.

Project Objectives (that include the underlying purpose of the project)

"Create a place where all Alpine residents can gather and connect as a community."

Questions: 1) We have an Alpine Community Center located in the heart of our Village that meets this objective. The project would be duplicative and, therefore, is an unnecessary goal and a misuse of County-wide public funds. **Comments:** 1) Alternative 5, with some adjustments and additions, can and will continue to be a loosely-

I96-39

conceived gathering place for the community. Combined with Wright's Field, the trails on the project saved the physical and mental health of a large portion of the community during the Covid lockdown. 2) Alpine's sense of community is very diverse, adding to the community's uniqueness. There is rarely an occasion that "gathers" and "connects" the majority of our diversities. Two that come to mind are the Christmas Parade of Lights and a parade held around or on July 4th. Our interests are unique and individual and, at best, could be considered subsets within a community.

"Anticipate, accommodate, and manage a variety of active and passive recreational uses, as well as an open space preserve, that benefit all members of the Alpine community, both now and in the future."

I96-40

Comments: Without question, the project should benefit all members of the Alpine community but needs to be located elsewhere and the activities should reflect what the community wants as a whole. DPR should have had the foresight to realize that placing an active park with all the proposed activities on the proposed site is NOT in the interest of all Alpine members because 1) it is not conveniently located to the high density population or provides safe passageways to reach such a destination. Instead, the

I96-40 cont. location is surrounded by residences with a minimum of 2-acres--making it an out-of-place facility. Cool ideas and goals. Wrong location for active recreational uses.

I96-41 *"Provide for long-term natural and cultural resource management consistent with the goals and objectives of the Multiple Species Conservation Program (MSCP) for the preserve portion of the property."*
Comments: This should be achieved with the entire acreage. Again, the County is ignoring Alpine's vision of remaining a rural community who *appreciates* its natural setting.

I96-42 *"Design a community park that integrates and, where feasible, preserves natural features into the park design."*
Comments: 1) I take great issue with the two words, "where feasible". Excuse me, but current plans totally obliterate, and NOT preserve an established natural environment. To totally destroy a natural habitat and its natural features and then "reconstruct" it, like reshaping a clay sculpture and then to add, *"where --it --is --feasible",* preserve natural elements" is an absurd use of land. Something is wrong with this picture, including stripping Alpine of its precious heritage and coveted rural atmosphere.

I96-43 *"Enhance the quality of life in Alpine by providing exceptional park and recreation opportunities that improve health and wellness while preserving significant natural and cultural resources."*
Questions and Comments: This project is a discussion of what is more important: the preservation of significant natural and cultural resources versus the County's vision of what is needed in Alpine to improve health and wellness. If truly concerned about the community's health and wellness, 1) why is the County *taking away* something that already provides health and wellness (amazing what Mother Nature provides) and redundantly replace it with artificial recreational elements? Again, these artificial recreational elements belong within the Village and, because there is no parcel large enough within the Village that can provide a one-stop-shop-park, mini parks would recapture all these recreational features.

I96-44 *"Protect public health and safety by incorporating Crime Prevention through Environmental Design and other safety measures into the park design."* **Comments:** Let's not lose sight that by creating this active park, the County is, in fact, creating more opportunities for increasing the crime level which the community is not presently experiencing. No one in Alpine can condone this consequence especially in a location that is residential and presently sees very little crime. The deterrence of fencing, lighting and a volunteer pad do not fit in with or enhance our rural atmosphere and character.
Question: 1) How can the County justify this when all efforts for increased crime should be eliminated?

"Manage Alpine County Park consistent with County DPR's missions, policies, and directives, along with applicable laws and regulations."

DPR Mission Statement and Vision

The DPR's Mission includes: "We enhance the quality of life in San Diego County by providing exceptional parks and recreation experiences and preserving regionally significant natural and cultural resources."

DPR's Vision: "A park and recreation system that is the pride of San Diego County. To provide healthy, sustainable and enriching environments for all. To become a national model for park and recreation organizations…to connect all to the County's diverse world class park system…and should reflect the diversity of the population which this park serves…"

I96-45

Comments: By not applying the new approaches to parks and recreation as described in Dr. Barth's articles, DPR certainly cannot profess to create "a world class park system" and, therefore, is not meeting its Mission Statement of providing exceptional parks and recreation experiences. One would think that DPR could use this opportunity in designing Alpine's unique park needs as a ground-breaking model that could, in turn, become world class. **Question:** 1) Why is DPR not living up to its Mission Statement?

"Reflect Alpine Community's heritage through the inclusion of architectural elements that reflect the rural nature of Alpine."

Questions and Comments: How can one come to any conclusion that the County seriously has a vested interest in preserving Alpine's heritage? Except for Alternatives 1 & 5, the project will 1) totally destroy, reconfigure and immeasurably impact and substantially degrade the existing rural views. 2) Berms will totally block views of the openness one feels as they presently drive past this parcel and will totally block the neighbors' views. 3) Fencing is a visual block--and is *not* an architectural element of the rural nature of Alpine 3) I am trying to visualize how any of the proposed buildings will reflect architectural elements of a "rural nature." I ask that DPR provide a better understanding of the architectural design of such buildings and the specifics in how they consider these buildings to be improvements and architectural elements to our community? 4) How is placing a volunteer's RV pad on the premises in any way considered an *architectural element* that reflects the rural nature of our community? 5) How is having lighting at the RV volunteer pad in compliance with our Dark Sky goals? 6) Carrying this further, how is the project in its entirety in any way a part of maintaining a rural atmosphere with all its drawbacks?

I96-46

Areas of Known Controversy/Issues Raised by Agencies and the Public

I96-47 The public has been directed to ONLY respond to the sections within the Recirculate DEIR. However, I am not satisfied that the County responded with accuracies to the other remaining concerns submitted. Personally, I have questions I asked in my November letter to DPR that have not all been answered. Examples are what kind of fencing is to be expected and its height? Another is the odor and noise that will permeate from the dog park and the overall danger of dog parks.

Question: 1) Does this mean that these unanswered questions are not important and not worthy of a response?

Issues to Be Resolved

"...the CEQA Guidelines requires the summary of an EIR to include areas of controversy that are known to the Lead Agency, including issues raised by agencies and the public."

Comments: Although 33 comment letters were received during the NOP public review period, it is grossly misleading to imply that only 33 community individuals showed enough concern for the proposed project.

I96-48 **By not including a comprehensive summary of all the public meetings and letters from the public, the County is intentionally and dishonestly skewing and minimizing results to imply that only a few Alpine residents do not want this park.**

The advantage lies with the powers and influences of DPR vs grassroots efforts vs citizens who give up on the "process", feeling their opinions do not matter because it is futile to try to confront massive Big Brother (DPR) who I might add, is funded in part by taxpayer dollars.

Please refer to the information between DPR and ACPG made public via PRA to confirm the efforts to suppress the public's input.

Summary of Project Impacts

Alternative 1--No Project Alternative

I96-49 The site would remain undeveloped with no active park features. The statement, "The creation of a Habitat Conservation Plan for the remaining 71.6 acres would also not occur under this alternative" seems confusing and misleading. **Questions and**

I96-50 **Comments:** 1) Should not ALL, or most of the 96.6 acres be placed within a Habitat

I96-51 Conservation Plan and not just be deserted? 2) Who would be responsible for maintenance of this preserve? 3) Couldn't signage be placed in appropriate areas to

I96-52 educate the public the importance of remaining on the trails, to minimize disturbance of the wildlife, especially during mating/nesting seasons, identification of the varying flora and fauna species that reside or potentially reside in the acreage, and the value of why

I96-53 this land was preserved rather than developed? 4) There is an importance to preserve the Alpine's rural heritage and character that this land reflects.

Alternative 2--Sports Complex Alternative

Can the public assume that because the County was not able to obtain Prop 68 Regional Park grant funds that this Alternative is off the table?

I96-54 If this Alternative is still on the table for consideration, this DEIR does not properly address all the impacts and mitigations required to meet CEQA requirements. I would insist that an entirely new EIR be developed to address such a radical concept and to allow the public a right to address their concerns.

Throughout the public input timeframe and at virtual meetings with DPR, the public has been told this park would be a community park yet this Sports Complex Alternative was included in the DEIR. DPR has lied and misled the public throughout the entire process.

Alternative 3--Reconfigured Project Alternative

I96-55 **Questions**: 1) Why was this Alternative introduced? Was its intention to eliminate the berm that would destroy the visual integrity of the property?

I96-56 **Alternative 4--Reduced Project Alternative** It removes the skate and bike skill parks but still impacts the integrity of what this land really is--an ecological preserve with limited paths for the public. The visually impacting berm remains and, therefore, is a massive impact to the integrity of Alpine's heritage.

Alternative 5--Passive Park Alternative

I96-57 The County needed to add this Alternative in order to meet CEQA requirements. It is the best "fit" for proper and respected use of the land as a passive preserve. It respects the rural character of Alpine. It diminishes the safety issues of no reasonable pathways, crime avoidance, traffic and fire impacts and adds immeasurably to the uniqueness of Alpine--to have a 250+ acre passive park (including Wright's Field) unique to this community. Our passive park could and should become an outstanding model for future parklands within the County that host sensitive biological habitat.

I96-58 I suggest that the County implement protective measures and continued restorative measures to increase the land's pristine habitat varieties. Nature programs offered by rangers would help the public to continue to understand the value of maintaining such sensitive and diminishing lands. Signage explaining the different habitats would enhance the hiking experience and explain the importance of remaining on the trails. [Sidebar: When I first moved to Alpine 30+ years ago, a neighbor explained the real danger of not remaining on the trails. Previous developers had dug percolation test holes to determine if the property would percolate and sustain septic systems. These holes are supposedly all over the property and were and are presently covered by vegetation. Pretty doggone good reason to remain on the established trails even to this day.]

I96-59 In addition, to address the need for toilets, DPR could include an on-site port-a-potty with a washing station. Thirdly, a picnic table and benches could also be added. **Question:** 1) Why were these additional elements not incorporated into Alternatives 1 or 5?

Environmentally Superior Alternative

I96-60 County's conclusion that Alternative 4 is the superior alternative just does not make any sense when you compare it with Alternative 5. The reasoning that DPR gives is that Alternative 5 will not meet the County's goals. Is it not time for the County to realize that their prescribed goals are NOT suitable at this particular location?

I96-61 DPR needs to understand their intentions when they bought this property of building playing fields (according to Ret. Supervisor Dianne Jacobs' parting words to Alpine) was short-sighted and insensitive to the overall vision of Alpine. Jacobs was perhaps misled by the County and AGPG that this property was suitable for such fields. Jacobs was front and center in promoting the Stagecoach Ranch development on what is now Wright's Field. Jacobs later endorsed the value of preserving this land and making it a part of the MSCP. So it confuses me that she would endorse this particular "playing fields" park on this piece of property. Jacob's wishes for playing fields have already been met with the $900,000 County investment in partnership with Joan McQueen Middle School.

It would be a wonderful gesture that if Alternative 5 is accepted, that this passive park be named after Jacobs who did so much for her county residents.

<u>Conclusion</u>

I96-62 In conclusion the most ideal Alternative would have been to create **Alternative 6:** In addition to implementing Alternative 5, the County would use the remaining monies allocated to create mini-parks that are located in the high-density area of the Village or at least pay for the implementation of the Alpine Loop. **Question:** 1) Why were these not considered? 2) Why was the multi-parks vision not considered, especially since it fits Alpine's needs and in their appropriate locations?

I96-63 It appears the County did less than adequate surveys and studies to access the "whole picture", using antiquated approaches to fulfilling the needs of this community. The County ignored the variables imperative to planning an appropriate park for Alpine and, effectively, failed to serve the community.

One might ask, did the County mistakenly purchase this land? As a long-time resident and advocate of maintaining our rural and cultural heritage, I say "No"; the county added the "finishing touch" to include this land with Wright's Field's preserve. If the County can re-evaluate its narrow-minded attitude and embrace the property as a passive park, it then achieves a win-win situation and, for that, I and my community would say "Thank you."

Sincerely,

Anne Falasco Norton
2457 Avenida Canora
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CC:
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Attachment 1

November 14, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms Provant:

On April 2, 2021 I sent to your department my NOP letter and asked that my comments be further analyzed and commented on in the DEIR.

The following are quotes from my letter and my concerns that your department neglected to respond in a thorough manner within the DEIR.

In my NOP letter I state:
"In previous statements to the County and to the Alpine Community Planning Group (ACPG) and in published Letters of the Editor of the Alpine Sun I have made it quite clear that ideally the Project's land use should remain passive. Where the land is presently disturbed, only that area should be designed for parking and minimal facilities. The active portions of the Project should be removed and other locations should be identified. This alternative should be analyzed in the EIR.

In addition, at last week's ACPG meeting I offered an alternative location for many of the Project's activities that are not suitable to the Project's location: Alpine Elementary School (AES) in the heart of Alpine. It is an historical site sitting idle and empty. This site could be the perfect fit with regards to providing the activities in the park (the skateboard and bike parks, the playing fields, the community garden and the dog park) that ought to be clustered within the higher populated area of Alpine. This higher populated area is our village center. If designed properly, AES could become a stalwart example of incorporating historical value with the present needs of our community. AES already has the infrastructure. It has playing fields. It has reasonable off-street parking. It has existing electrical, water and sewage hookups. It addresses the traffic flow. Fields could be lighted without causing light pollution. Situated at the school, in the heart of town, the bike, skate and dog parks would not cause noise pollution. This is the location where these types of activities belong and are best served. This alternative should be analyzed in the EIR.

Another alternative park site in the heart of Alpine is the old Alpine School District's offices which also have similar amenities that are suitable for the active portion of the Project. This alternative should be analyzed in the EIR."

Were my requests for response ignored and deemed frivolous because DPR was working under the perimeters and protocols necessary to abide with funding which DPR was granted? I can only conclude this is the real scenario because not once did your department ever reveal to my community during public comment the source of the funding. Had your department been transparent our community would have had reasonable knowledge of your department's real

intention of creating a Regional County Park that would draw hundreds of people to our area and disrupt our unique environment; not the "Community Park" with which your department has been promoting and persuading some of the public. I find this "bait and switch" tactic unethical, deplorable and disgusting.

Why were my Project Alternatives not even addressed? My three alternatives give viable and very doable use of what already exists. All three minimize any and all mitigation. I request and demand that my comments be honestly and properly addressed as Project Alternatives and not be brushed aside as insignificant.

Why was the DEIR Alternative Two even considered? To further wipe out even more land solely in the pursuit of a SPORTS Complex??

My NOP letter states:
"This proposed park as it is presently planned will forever alter and change the character and ambiance of its bordering neighborhoods. Our home of over 30 years is part of Palo Verde Ranch and abuts South Grade Road, separated only by one residence. We have an elevated view of the proposed Project. Instead of the peaceful atmospheric views we now enjoy, the land will be defaced with man-made activities, permanently eliminating the valuable natural resource that it is today. These impacts should be analyzed in the EIR. These impacts should be avoided or mitigated below the level of significance."

This park in its present proposed location will totally alter and impact the essence of Alpine. There is one common thread that the community embraces: we left the chaos and conveniences of city living and specifically chose to settle in a rural environment. The inconveniences do not outweigh the quaint, small town feel, the measure of relative safety, and a sense of peacefulness and isolation.

As a whole Alpiners are not threatened by progress but we are threatened by destruction of what we know as and love of our community. This park poses a direct threat to our essence. Its location is totally out of our town's character, drawing inordinate traffic flows onto two-lane rural roads not built or improved to handle such volume.

One prideful aspect of Alpine is the approximate 350 acres in the middle of Alpine that we all call Wrights Field. Though not really accurate, the County's 90+ acres that are in question have been considered part of Wrights Field by the locals for the longest time.
This entire expanse of open land is what makes Alpine stand out and captures our town's uniqueness. It is unbearable to fathom losing this natural and irreplaceable gem to a mandate by the County for the sake of "What Man Deems Best."

"Direct impacts to our neighbors and ourselves include increased noise for the activities within the park and noise generated from the drastic increase of traffic to reach this destination park. Barking from dogs, constant sounds of skateboards against hard concrete and the tires creating dust from the bike skills area will be a constant annoyance to the neighbors and certain deterrents to the wildlife who make this area a safe animal pathway. Noise from all the activities will resound throughout the neighborhood directly impacting the area…non-stop…til dusk due us part… These numerous impacts should be analyzed in the EIR. These impacts should be avoided or mitigated below the level of significance. "

In my NOP letter I state:

"Dog-transmitted diseases, some of them airborne, and the stench of poo and urine will permeate the dog park grounds adding to the risks of disease and serious dog fights typical at such sites. These numerous impacts should be analyzed in the EIR. These impacts should be avoided or mitigated below the level of significance."

It does not appear that the DEIR seriously reviewed or sought studies regarding the dangers of community dog parks. Conscientious studies online indicate the many health risks through infection or canine aggression occur at dog parks. Diseases include canine distemper, influenza, parvovirus, leptospirosis, kennel cough and rabies. These diseases can be found in the soil, water and even the air. Even with treatment these can be fatal. Who will monitor dog owner compliance to these potentially life-threatening conditions? How can we be assured that the enclosures are disinfected properly and bleached in a timely manner? Spell it out. Who will be responsible?

Studies show that "off leash dog play among dogs from different households is a complex and difficult dynamic which should not be attempted by the average dog owner." Dog to dog attacks are quite common and veterinarians report seeing multiple injuries every week from Dog Park attacks. Owners think they know a lot about animal behavior and frankly most do not and poor choices are made. It is a recipe for dangerous dog behavior often leading to serious injuries or even death. Dogs innately defend themselves and that is where aggression is exhibited and, hence, fighting breaks out.

Dogs are not the only ones at risk in or near dog parks. Children and adults are attacked, sometimes viciously, sometimes being bitten when reaching through a fence and sometimes trying to break up a fight, trying to protect their pet. Who then is ultimately responsible?

What will be the fencing used and height of the fence per separate enclosures for the smaller dogs and the larger dogs? What will be the maximum number of dogs allowed in each enclosure at any given time?

Was the noise level of the dog park even properly addressed as an impact? My research indicates that "100 dB, average dog park between 4-700 Hertz, distance from nearest neighbor is 650 feet." What will the mitigation be regarding these disturbing noises and potential health hazards to the public neighboring homes? Does the DEIR even address how these noises will resound and be carried in this particular location, added to the other constant noise-making activities within this park?

The DEIR neglects to properly justify the impacts of domestic dogs on the wildlife and water quality which with their presence causes stress on the present wildlife environment and the potential contamination of water quality.

All of the scenarios listed are real possibilities. Most create risk of civil or criminal charges. More detailed information and justification needs to be addressed in the DEIR.

In my NOP letter I state:
"We pride ourselves in being part of a Dark Sky zone. People throughout the county come to Alpine to view stellar phenomena. Having a permanent on-site trailer/home generating light and the additional lighting within the park to deter crime will totally end this treasure. God forbid when the County allows lighted ballparks….total destruction. These numerous impacts should

be analyzed in the EIR. These impacts should be avoided or mitigated below the level of significance."

It puts fear down to my bones that the DEIR Alternative Two was published as a viable alternative. This alternative allows for lighted fields not to end at dusk but to be allowed 7 days a week until 10 pm each and every night. Where is this justice or an ounce of fairness to our town as a whole with traffic constricting all our two-lane rural roads to fit all these extra vehicles? Where is their consideration for those residential zones which comprise all of the routes to and from the proposed park? Where is the respect for the Dark Sky zone?

My NOP letter states:
"We have a working well which may be directly impacted by the draw of water use needed at the Project. Chemicals used to treat the lawns can cause air-borne allergies and affect ground water contamination. These numerous impacts should be analyzed in the EIR. These impacts should be avoided or mitigated below the level of significance."
Show me proof that this will not happen.

My NOP letter states:
"The Project will draw the need for more police protection from our Sheriff Substation which spills over with increased crime that directly affects the Project's neighbors who presently see very little crime. This impact should be analyzed in the EIR. These impacts should be avoided or mitigated below the level of significance.

Please share your reasoning that a park this size that will draw people from throughout the county along with visiting out-of-county crowds for soccer, etc. events will not see an increase in crime for the entire town as a whole but also the immediate neighborhoods. Building this mega SPORTS complex within the confines of a residential zone is destructive to the climate of peacefulness and tranquility which is the essence of what Alpine is. We live in a reasonably low crime zone. The park's location effectively invites vandalism, homelessness and crime. How does DPR plan to handle this safety hazard? Pass this responsibility on to the Sheriff's Substation?

My NOP letter states:
"Traffic along South Grade will increase substantially with no reasonable mitigation offered. With this comes the increase of air pollution and safety issues. The parking allotment within the park indicates the county's plans for a high volume park. Overflow parking along South Grade and into the county-owned residential streets next to the park will be inundated during the "big events" that will be scheduled at the Project. Parking will remain a high concern because inevitably, parking within the project will have a price tag and Alpiners will not pay the price (nor should they). Therefore, we will continue to see the residents of Alpine park along South Grade and the nearby residential streets. All of this points to a heavily increased use of and heavily increase of danger and safety on South Grade Road which was not built for such volume. These numerous impacts should be analyzed in the EIR. These impacts should be avoided or mitigated below the level of significance."

The DEIR says that "NO PARKING" signage will be placed along South Grade Road during events. Where is the overflow traffic supposed to then go? In addition there will be people who just do not wish to pay the park's parking fee and will seek the streets close to the park. This will have direct impacts on Calle de Compadres and Via Viejas/Nido Aguila/Avenida Canora. These small, narrow, quiet streets who normally only see the occasional neighbors or the postman are

part of the residential development of Palo Verde Ranch and do not have safe pedestrian pathways or sidewalks. The DEIR neglects to address these impacts and neglects to offer mitigation to the nature of our existing streets and neighborhoods. It is unnerving and threatening to have strangers parked at all hours in front of their homes 7 days a week. Palo Verde Ranch and its neighbors have the right to demand that the building of this park does not destroy their sense of community or safety. The building of this park does just that: destroys the sense of community and safety.

"The change of topography in order to achieve all the activities will drastically be altered when a “berm” will be constructed that will in effect halt all views of the park from the road. One of the beautiful and calming aspects of the existing property is that one can drive past the very open fields and with just glancing, obtain the sense of outdoors. These numerous impacts should be analyzed in the EIR. These impacts should be avoided or mitigated below the level of significance."

My NOP letter states:
"Presently, the Project effectively eliminates all access to Wright’s Field (WF). One will be forced to travel through the Project in order to enter WF. By doing this, the County just added another layer of hindrance, effectively deterring its own residents from access to this wonderful gem. The other access area to the park is via a private road abutting Joan McQueen Middle School. No one is allowed to park on this private road and no designated spots exist to accommodate WF enthusiasts at Joan McQueen. The other “access” is at the end of Olivewood Lane with no adequate public parking. These numerous impacts should be analyzed in the EIR. These impacts should be avoided or mitigated below the level of significance."

How are these impacts being addressed? Building this park actually eliminates the Alpine resident's easy access to Wrights Field where one can truly enjoy the benefits of nature. The DEIR needs to clearly answer my access questions during the building process and for the years to follow. What will the cost be to park in the mega parking lot?
Why has it not been addressed how people will safely walk to this park that is located so far from the town's village? Is DPR going to build a park that cannot be safely accessed?

"This project will hands-down substantially degrade the quality of the environment for all Alpine residents but more importantly: our dwindling wildlife habitat. It will further destroy a huge chunk of one of the last remaining grasslands in our county and State. These numerous impacts should be analyzed in the EIR. These impacts should be avoided or mitigated below the level of significance."

The DEIR mentions voluminous amounts of disruption of the flora and fauna habitats yet gives a meager mitigation plan. Reading the consequences that will occur as the topography is demolished should be enough for any department who includes in their mission statement to preserve our natural resources to give pause. What is DPR doing? Where is DPR’S respect of our lands and our resources? This park strangles what little is left of the wildlife corridor.

My NOP letter continues to state:
"...The County should be the steward of our precious environment. Instead the County leaves the undeniable impression that paving over sensitive and diminishing lands to build more ball fields and whimsical structures to satisfy the short-sighted needs of the public is of utmost importance. This Project continues with the “Slash and Burn” attitude, denuding what is left of our natural resources."

Sincerely,

Anne Falasco Norton
2457 Avenida Canora
Alpine, CA 91901
619-445-5048

You are getting this park whether you like it or not

By **Provided to The Alpine Sun** - 02/12/2021



I96-64 I am Annie Norton and am a resident of Alpine for 30 years. I have a personal attachment and historical knowledge of Wrights Field because I was one of the core opposers to the Stagecoach Ranch development. I know what it took to preserve this unique land and I am definitely opposed to the County's current plans for this park.

I96-65 I thank the County for purchasing the 98 acres and completing the remaining open space of Wrights Field. It came as a relief to hear that the plans were to basically leave the land "as is" except for perhaps 10-15 acres. This meant that the County "got it"; they understood how valuable open land and passive parks are. Passive parks give people the chance to reconnect with Nature and to understand Nature's restorative powers–so important to our overall health and appreciation of our planet.

I am having a huge problem wrapping my head around this oxymoron: A park on top of an existing park. It boils down to a Fabricated Park–the one the County is now proposing– vs. a Passive Park–the one they led us to believe we were going to continue to have.

I advocate for the Passive Park and honor the land's worth as such. There is a small patch of disturbed area that could be converted to a small parking area and is a needed safety feature.

I96-66 Transparency is needed between the County, our local officials and the public to understand this park's evolution. We have a right to know how the park exploded in size, snowballing into a park designer's Disneyland-of-sorts.

The County openly admits, almost with pride, that it has taken them over 25 years to bring a county park to Alpine. It feels like in order to make restitution for their lack of motivation, responsibility or

I96-66 cont.

whatever you want to call it, they now need to condense every kind of contrived recreational experience into this piece of land, plunk it down in a location where it simply does not belong and then shove it down our throats. Those present at the last meeting with the County will remember the County biologist basically saying, "You are getting this park whether you like it or not." Hmmm….that is not what I consider collaboration with the public.

I ask our local leaders to postpone their recommendation of the current park plans and to objectively reevaluate how credible this proposed park really is and if it truly meets the needs of our community. The grandiose bells and whistles that are packed into this design can be very persuasive. But not at this location. I challenge our community leaders to see the obvious and do what is right.

We already have a park, passive as it is. It is actually being used and appreciated daily.

Annie Norton,

Alpine

Download QR

'You can't fix stupid'

By Annie Norton

By **Provided to The Alpine Sun** - 04/16/2021



I96-67

I want to embrace and thank every single one of you who have joined Preserve Alpine Heritage (PAH), those who signed the Greater Alpine Fire Safe Council petition and those who just plain care about what may happen to a portion of what we know as part of Wright's Field.

You are a very well-represented group and kudos go out to you! It is extremely difficult to have to stand up and vocalize opposition especially when your voice will likely not be fairly heard or often misconstrued. You wearily know it will be an uphill battle. Some are filled with stage fright making it impossible to actually speak at a meeting. It is exhausting to formalize your thoughts into words. It is very, very possible that you have absolutely no extra time to address one more issue that affects your life. It is easier to let things pass because of the monumental effort that it takes to be confrontational. It is easier to allow elected officials and the local government to make choices and then read about those decisions. Don't we all really want to just feel content and secure and safe? To find contentment in our cocoons, our homes and our families and our friends? To live out our lives in the community of our choice? And sometimes, just be left alone?

One can talk oneself blue-in-the-face trying to convince and persuade a person with opposing views. One is rarely successful. Rather than become despondent and totally disappointed I have adopted a motto:

"You can't fix stupid–especially to those who sell their souls."

And my motto can apply to elements that surround the Park.

Adversaries at times resort to playing dirty in order to get what they want.

Because of you and your relentless push to be heard (again thank you), a special meeting was called on Tuesday, April 6 by the Alpine Community Planning Group to discuss the proposed location of the County Park. The County provided a polished presentation describing their plans. Oddly and questionably, Travis Lyon, chairman of the ACPG and a board member of Back Country Land Trust also gave a slide presentation showing various birds-eye-views of different parks throughout the County that are considered active use parks. His point was to try to convince the audience that our Park should not be considered a park filled with active sports fields. The slideshow backfired and, in fact, displayed our Park to be filled with these active fields. But more confusing and disturbing was Mr. Lyon, who chaired the meeting, displayed an overt bias towards the Park. His presentation was highly inappropriate.

I96-68

PAH's presentation was worthy of praise, remaining focused on the central issues and offering legitimate alternatives. Strong work (and a lot of work to prepare!)

Remember, this meeting was touted to all in Alpine as the time to speak up about the Park. Interestingly, out of the 20 public comments only two were positive for the park.

One was the Mountain Bike Association, a well-managed organization with one specific agenda: to lobby for as much land as possible to include mountain biking. Ms. Murphy made a point to say they partner with BCLT.

This is where it starts to get dirty, in my opinion.

The only person from Alpine supporting the park was Sharon Haven who identified herself as living in Alpine over 60 years. She is the wife of ACPG member Al Haven. Ms. Haven runs a land use strategy consulting company. It was her comments which planted the "fear" seed: quit complaining; we have waited so long for a park; what if the County ditches the entire project and puts its up for sale; we could end up with nothing; why do people have to be so resistant to this Park; the County bought a huge amount of open space and at least some of it should be used as a Park; think of the apartment dwellers; be happy with what is offered (and basically, shut up). Her intent was to plant the first seed of fear.

I96-69

After all the comments had been made, ACPG members had the expected discussion period.

The very last speaker was ACPG member Richard Saldano. Referring to Sharon by name, he thanked her for reminding him that if the County backs out, developers will sweep in and grab up this "goldmine" because it is so cheap and then develop the land to their hearts' content. We would get more houses and no Park. Boom! Got the jugular! Mission accomplished: Fear was definitely injected, even though Mr. Saldano's projections are based on falsehoods and not facts.

Both Ms. Haven's and Mr. Saldano's comments were planned and orchestrated to play the fear-factor and to distract from the oppositions' valid comments. Their bald-faced threat was: If you do not take it the way it is presented, you will lose it all.

This deceptive and manipulative charade was coordinated to achieve just that: Fear. Right, George Barnett?

But there are two big problems: we are not stupid and we are not ignorant.

I96-69 cont.

So, chin up and carry on. Know there are a bunch of you who feel the same way. The fight is not over in the least. Continue to unite. Keep supporting each other and we'll all become a stronger community together.

Norton resides in Alpine.

Download QR

'It Ain't Over 'Til the Fat Lady Sings'

By Annie Norton

By **staff** - 11/05/2021



Friends, neighbors, those who oppose the proposed Alpine County Park and those who think this park is the cat's hot pajamas, you need to know a recent discovery within the dubious confines of the Draft Environmental Impact Report (DEIR).

All of us have been duped, bamboozled and cunningly deceived without honest interest in the public's participation or the desires of the community.

Remember when we asked why the alarming change in size of the park from a 10-15 acres of passive park to a 25 acres of active park?

I96-70

Remember we could never get a straight, simple answer why the results of the public input meetings San Diego County Department of Parks and Recreations (DPR) held to determine what the community really wanted never aligned with the results of the public input? Remember most of the amenities did not even come close to the public input?

Remember when DPR and the vocal members of the Alpine Community Planning Group (ACPG) assured all of us that this park was a "local" park, meant for the locals to benefit; that, in no way, this was or ever will become a "regional", mega sports complex that would serve all of the County?

Remember we have all along asked what was the price tag to build and maintain this park and where was that money coming from and were never granted an answer?

I96-70 cont. And remember DPR always remained evasive, never giving us a straight answer to any of these questions and concerns?

We now have our answers to the above quandaries: a mega regional sports complex park has been planned and designed from the get-go and the proof is in how on October 20th DPR sought and received Prop. 68 funding that the Board of Supervisors just approved, again with overwhelming opposition.

I96-71 Put the puzzle pieces together: Prop. 68 funding can only be used for construction of a regional park and must include amenities that will attract visitors from a 20-mile radius or region wide. Virtually ALL the design elements comprised in the proposed park meet this prerequisites. In other words, this park and its design has been planned from the get-go to be a mega regional sports complex that will attract far more people than those in our local community. This park is meant for the entire region. Prop. 68 defines a "sports complex" as multiple sports fields or courts/ courses. The proposed park includes a baseball field, basketball court, and pickleball court, among many other amenities, thus easily meeting the "sports complex" definition.

DPR designed this park to be a Regional Park from the onslaught but at the same time giving the public lip-service, essentially deceiving us all the while. Did our local governing group, the ACPG, know of this "bait and switch" during the inception and throughout the development of the park's design? You draw your own conclusions.

I96-72 And remember how we questioned the inordinate amount of parking spaces that unreasonably exceeds any of our existing public parking lots in town? Per the DEIR, the park is anticipated to attract 500 people a day, that is 3,500 extra visitors on our roads per week without any improvements to improve safety of our roadways.

DPR never cared about the community's desires. Their goals were dead set in including as many amenities from the Prop. 68 list as possible. Throughout all the public comments this design has not been altered. DPR's own data collected at their public input meetings does not support the need or desire for the amenities that are presently included in the proposed park. So from its inception DPR knew what they wanted, a Mega Sports Complex come hell or high water…you remember their biologist telling us that you are getting this park whether you like it or not.

I96-73 What is vital for all of you to know is that there are four Project Alternatives DPR provided, none of which resemble what the community was originally told this park would resemble – a small nature-based passive park. The following is quoted from the DEIR:

Alternative 2 — Sports Complex Alternative

"Under the sports complex Alternative, a greater area of the project site would be allocated to active recreational uses and would include sports fields intended for competitive sports, including club soccer and baseball teams. Under this alternative, a total of 50 acres of the project site would be developed with multi-use turf areas for soccer, etc, as well as baseball fields, and other features described in Section 3.3.1 of Chapter 3, including a skate park and an equestrian staging area. In addition, because this sports complex would be intended to accommodate competitive teams, extended hours would be allowed and field lighting for nighttime activities would be installed. The number of parking spaces would also be increased to accommodate the increase in parking demand that could occur with the larger active recreational space. The remaining 46 acres of the project site would include open space/conservation area for which a Habitat Conservation Plan would be created."

Why in the world would such an alternative even be considered? Unless we have been totally blindsided by the pro-park people, not once has it been even fathomed that this "Community Park" would ultimately become the sports complex of the future.

I96-73 cont.

So now you know: we all have been intentionally misled. God only knows what else will be discovered hidden within the layers or strategically left out of the DEIR.

It is time for a professional legal team to take over the reins. A well-respected environmental firm has been hired by Preserve Alpine's Heritage to write a comment letter and truly represent our community, our resources, our essence of the uniqueness of Alpine and our environment.

To learn more about Preserve Alpine's Heritage visit: www. preservealpinesheritage.org

Do not just give up. It is not over 'til the fat lady sings.

Norton resides in Alpine.

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Attachment 5

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May 18, 2022

Via Electronic Mail Only

Ms. Anna Prowant
Land Use/Environmental Planner III
San Diego County
Department of Parks and Recreation
5500 Overland Avenue, Suite 410
San Diego, CA 92123
E-Mail: CountyParksCEQA@sdcounty.ca.gov

Re: Comments re Environmental Impact Report for the Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant:

On behalf of the Cleveland National Forest Foundation ("CNFF") we submit these comments on the proposed Alpine Park Project ("Project") and the associated Environmental Impact Report ("EIR"). For the reasons set forth below, the County has failed to demonstrate a need for the Project. The Project is oversized, incompatible with the rural character of Alpine, would substantially increase overall vehicle miles travelled ("VMT"), and would convert open space in an area with substantial sensitive biological resources to an active recreational facility.

The project proposes construction of a sports complex immediately adjacent to Wrights Field, a 230-acre nature reserve. The Project, which would develop 25 acres of various recreational uses, would include parking spaces for up to 275 vehicles. A sports complex of this size in a rural setting would not only serve Alpine area residents, but would attract people from distant areas as well, resulting in increased VMT and corresponding increases in greenhouse gas emissions.

Importantly, the Project is fundamentally inconsistent with SANDAG's Regional Plan and Sustainable Communities Strategy ("SCS"), which includes among its strategies to "focus housing and job growth in the urbanized areas where there is existing and planned transportation" and to "protect the environment and help ensure the success of smart growth land

use policies by *preserving sensitive habitat, open space, cultural resources, and farmland*."[1] The preeminent goal and performance target of SANDAG's Regional Plan, as mandated by SB 375, is to reduce per-capita CO2 emissions from cars and light-duty trucks to meet the California Air Resources Board's 2020 and 2035 reduction targets for the region. Id.

In addition, the July 2020 Regional House Needs Allocation ("RHNA") Plan reduced the housing allocation for the 2021-2029 planning cycle in the County's unincorporated areas by 15,000 units compared to the allocation in the previous cycle. The units were transferred from the rural unincorporated areas to already urbanized areas that have established infrastructure, transit corridors, and jobs for the express reasons of making housing and transportation more affordable and to reduce VMT and greenhouse gas emissions. This means that compliance with SANDAG's Regional Plan and the RHNA would limit development in rural lands in and adjacent to forest lands, such as Alpine.

The Alpine Park Project was purportedly planned to accommodate population growth and demographic changes anticipated in the area. However, the most recent Regional Plan, indicates otherwise. SANDAG adopted the 2021 Regional Plan[2] and certified the associated EIR,[3] both of which incorporate the Series 14 Regional Growth Forecast which SANDAG adopted in October 2019.[4] The Regional Plan shows a drastic reduction in the projected growth in the County's unincorporated areas.

Specifically, whereas SANDAG's Series 13 housing forecast calculated an increase of 51,123 housing units in the unincorporated county between 2012 and 2050,[5] SANDAG's current Series 14 housing forecast *reduces* this projected growth to an increase of just *7,419 housing units* in all unincorporated areas countywide during a similar timeframe (2021 Regional Plan, Appendix F at p. F-13). This reduction in population growth in the county's unincorporated areas consequently means the Project is not necessary to accommodate growth, because the projected growth rate for the Alpine area is now substantially reduced.

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[1] SANDAG 2015 Regional Plan at 26 (emphasis added), available at https://sdforward.com/pdfs/Final_PDFs/Chapter2_A_Strategy_for_Sustainability.pdf (last accessed January 14, 2022).
[2] Available at https://sdforward.com/mobility-planning/2021-regional-plan, last visited January 12, 2022.
[3] Available at https://sdforward.com/mobility-planning/eir/, last visited January 12, 2022.
[4] Available at https://sdforward.com/docs/default-source/final-2021-regional-plan/appendix-f---regional-growth-forecast-and-scs-land-use-pattern.pdf?sfvrsn=8fc1fd65_2, last visited January 12, 2022.
[5] SANDAG Series 13 Regional Growth Forecast at p. 8, available at https://www.sdforward.com/pdfs/Final_PDFs/AppendixJ.pdf, last visited January 12, 2022.

In brief, in order to be consistent with SANDAG's 2021 Regional Plan and Series 14 forecast and RHNA, the County will have to *reduce* Alpine's housing allocation from the current General Plan, which will result in significantly less population growth in the Alpine area. Based on the foregoing, there no reasonable argument supporting the need for a park project of the proposed size.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



Joseph "Seph" Petta

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American Planning Association
Making Great Communities Happen

May/June 2016

PAS MEMO

Alternatives for Determining Parks and Recreation Level of Service

By David Barth, PhD, AICP

Public agencies use Level of Service (LOS) standards to plan and monitor the quality of services provided to their constituents. For example, transportation planners use roadway LOS to categorize traffic flow and assign "grades" to roadways (e.g., A, B, C, etc.) based on speed, density, and other performance measures. Similarly, utility departments and agencies use LOS standards to characterize the performance of various levels of potable water and wastewater systems.

In contrast, parks and recreation system planning has historically been more art than science. Unlike other elements of the public realm, there are no nationally accepted standards for determining ideal levels of service for parks, indoor recreation centers, athletic fields, trails, and other recreation facilities.

The last set of national guidelines published by the National Recreation and Park Association (NRPA) in 1996 encourages communities to develop their own LOS standards rather than rely on any national standards: "A standard for parks and recreation cannot be universal, nor can one city be compared with another even though they are similar in many respects" (Mertes and Hall 1996, 59). Each city or county must determine the appropriate LOS required to meet the specific needs of its residents.

Peter Harnik (Harnik 2010, 5) summarizes the complexities of parks planning in *Urban Green:*

> A major problem for [park] advocates and managers is that parks seem relatively simple and straight forward. People frequently say, "It's not rocket science, it's just a park." No! For rockets ... you need to be good at math. Parks require math plus horticulture, hydrology, psychology, sociology and communication. They are immensely complicated.

Determining LOS standards for parks and recreation systems can be challenging for several reasons. One is the many different ways in which parks and recreation systems can be measured: typical metrics may address parkland acreage, numbers of recreation facilities, distance to parks and facilities, quality of parks and facilities, operating costs, revenues, or other factors. In addition, LOS metrics can differ between various components of a parks system; for example, LOS may be measured differently for a neighborhood park than a tournament sports facility. Appropriate LOS standards may also differ based on the community context — whether the setting is urban, suburban, or rural.

The purpose of this *PAS Memo* is to assist planners in determining the most appropriate LOS metric(s) to use for their parks and recreation systems, collecting the necessary data, and developing appropriate LOS standards that meet their communities' specific needs.

Overview of Parks and Recreation LOS

Parks and recreation LOS standards are used in a variety of ways. For example, a LOS analysis can be used to help determine community needs and priorities in conjunction with other techniques such as surveys, interviews, focus group meetings, site visits, public workshops, social media, and online forums. LOS standards can be used to help determine if parkland, facilities, programs, and funding are distributed equitably across geographic, political, and socioeconomic boundaries.

In long-range planning, LOS standards can help planners determine the general size and location of proposed new parks and recreation facilities needed to accommodate anticipated growth. And land development codes and policies (comprehensive plans, land development codes, impact fees, etc.) incorporate LOS standards to help determine the "fair share" of parks and recreation capital and operating costs to be borne by the developers of new residential or mixed use projects.

Table 1 describes the most common parks and recreation LOS metrics, followed by a description of each metric.

Table 1: Common Parks and Recreation LOS Metrics

Metric	Purpose
1. Acres per capita	To determine if a community has enough parkland To determine if parkland is equitably distributed based on population and geography
2. Facilities per capita	To determine if a community has enough recreation facilities such as athletic fields, playgrounds, tennis courts, swimming pools, etc. To determine if the facilities are equitably distributed based on population and geography
3. Building square footage per capita	To determine if a community has enough indoor recreation space such as recreation centers, community centers, senior center, or gymnasiums To determine if the indoor space is equitably distributed based on population and geography
4. Access distance/ time (bike, ped, car, transit)	To determine if parkland and facilities are easily accessible to residents via preferred modes of transportation including driving, transit, bicycling, or walking
5. Quality of facilities and experience	To determine if park facilities and geographies are consistent and equitably distributed across geographies
6. Operating expenditures per acre managed	To help determine if adequate funding is being provided for effective operations and maintenance
7. Operating expenditures per capita	To help determine if adequate funding is being provided for effective operations and maintenance
8. Revenue per capita	To help determine if a community is recovering enough costs to meet expectations and goals
9. Revenue as a percentage of operating costs	To help determine if a community is recovering enough costs to meet expectations and goals

Acres per Capita

The "acres of parkland per 1,000 residents" metric is the most common technique for determining whether a community has "enough" parkland. It is also known as a community's "acreage level of service." Acreage LOS is often used as a basis for "benchmarking" or comparing a community's parks and recreation system against another community, for determining how much parkland should be provided in a new development to meet the needs of new residents, or as a basis for calculating parks and recreation impact fees.

The Acreage LOS metric was first established in the 1930s by George Butler of the National Recreation Association, who proposed a standard of "10 acres of park and open space per 1,000 population within each city, plus an equal area in parkways, large parks, forests, and the like, either within or adjacent to the city" (Mertes and Hall 1996, 6). Butler acknowledged that the standard may vary based on location and other factors, and today there is no published Acreage LOS standard in the U.S. Each community must determine its own standards based on local history, culture, demographics, density, development patterns, and other factors. Today, most communities calculate their current acreage LOS and simply try to maintain the current ratio of acres to population as they grow. It is important to note that Acreage LOS does not address the equitable distribution of the parkland, the capacity or quality of the facilities, or the level of programming provided.

An often-asked question is, "What should be counted in an Acreage LOS?" Unfortunately, there is no standard answer. Some communities include public golf courses and beaches, while others include publicly accessible lakes and wetlands. Some cities and counties also include public parkland owned by other agencies, such as state parks and national forests. Some communities also count private recreation areas, owned and managed by homeowner's associations, because these areas help meet residents' local recreation needs.

Because the primary purpose of Acreage LOS is to measure and monitor a community's supply of parkland, it is recommended that communities count only developable, publicly accessible parkland within their jurisdiction. Undevelopable lands such as conservation areas, wetlands, water bodies, golf courses, and beaches cannot help a community meet its needs for parks, playgrounds, athletic fields, open play space, recreation centers, and other basic parks and recreation facilities. Privately owned parkland is not open to the public, and could be sold or redeveloped. Public parkland owned by another jurisdiction (such as county-owned parks within a municipality) is already counted by that jurisdiction for its own LOS, and should not be included in a community's acreage calculation.

Facilities per Capita

Another oft-asked question is, "Do we have enough recreation facilities?" such as athletic fields, swimming pools, playgrounds, and tennis courts. Similar to the parkland acreage metric, there are no LOS standards for recreation facilities in the U.S., and the number of facilities needed can vary widely due to a number of variables between communities. For example, a community with a high percentage of senior citizens might have a much lower need for athletic fields than a community with a high percentage of youth.

When calculating current Facilities LOS, a community may wish to develop a "first-tier" and "second-tier" LOS. The first-tier LOS should count only the community's own, publicly accessible recreation facilities to develop an accurate baseline LOS. The second-tier Facilities LOS calculation could include additional facilities that help meet residents' needs, such as publicly accessible school athletic fields and gymnasiums, homeowners' association pools and playgrounds, and nonprofit facilities such as YMCA pools and Boys and Girls Club gymnasiums. During the needs assessment process, the community can discuss whether the second-tier facilities are actually meeting residents' needs, thereby potentially reducing the need to build additional first-tier facilities.

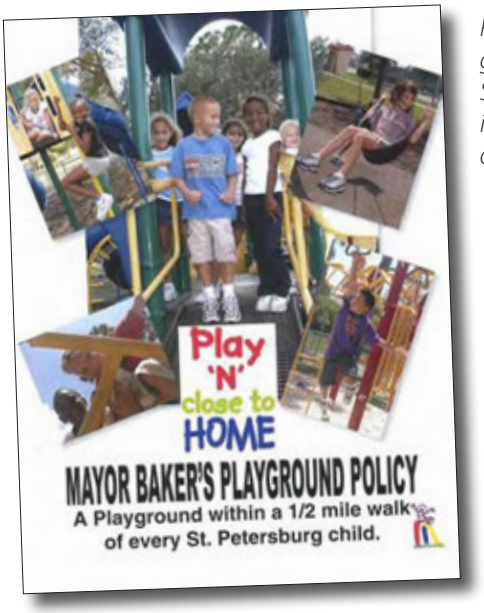
Building Square Footage per Capita

In addition to calculating the number of indoor facilities in the Facilities LOS, a community should also calculate the total square footage of indoor facilities. Recreation and community centers can range from less than 1,000 square feet to over 300,000 square feet, so a simple calculation of the number of facilities (rather than actual square footage) is not sufficient to analyze the true level of service for indoor recreation space. Similar to the Facilities LOS calculations, a community may wish to create a first-tier Facilities LOS of their own indoor facilities and a second-tier LOS of other publicly accessible facilities to enable more thoughtful discussion during the needs assessment process.

Access LOS

Access LOS is expressed as the distance, or amount of time, a resident or visitor must travel to a park or facility. As communities have become more densely populated and congested, it has become more important to ensure equitable access. Many residents do not drive cars in urban areas — either by choice or necessity — and residents are encouraged to take transit, bicycle, or walk to save energy, reduce pollution and congestion, and improve health. Thus access is an important measure of service.

Similar to the other LOS metrics, there are no standard criteria for access LOS. Each community must determine its own, based on land development patterns; street, bicycle, and pedestrian networks; transit access; and demographics. Depending on the area's values, a standard for a neighborhood park may be a five-minute or quarter-mile walk, while a standard for a community park may be one to five miles. For example, the City of Denver set a goal of a green space within six blocks of every resident, and the City of St. Petersburg, Florida, has a goal of a playground within a half-mile of every resident.



Playground access goal poster, City of St. Petersburg, Florida. Courtesy City of St. Petersburg

Communities may also wish to establish differential Access LOS standards for specific facilities based on existing or desired land development patterns. For example, in urban core areas

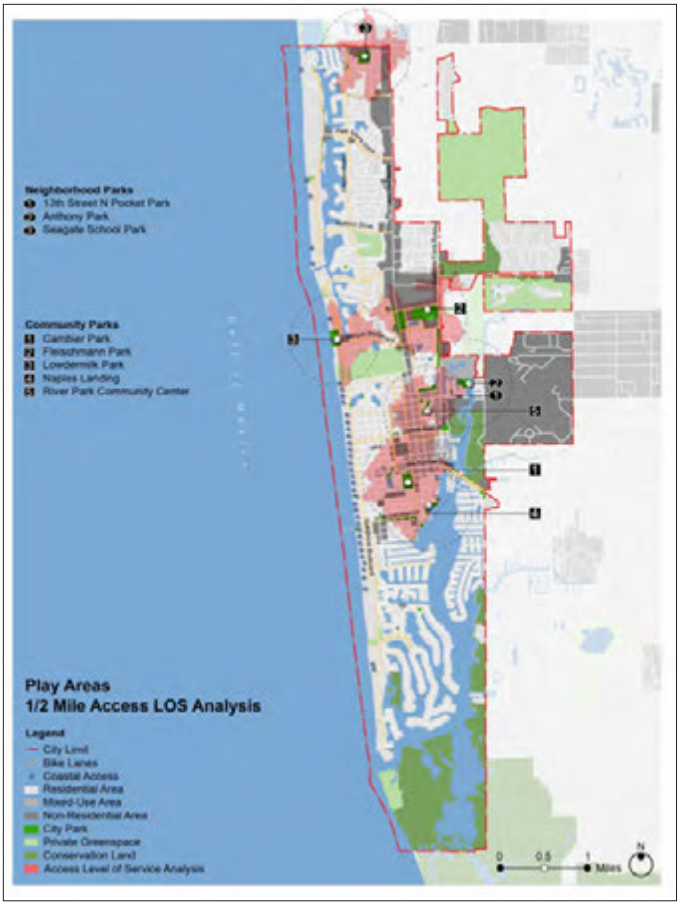


Figure 1. City of Naples, Florida, play area access LOS map. Residents who live within the pink-shaded area have access to a playground within a half-mile of their home. Courtesy Barth Associates

that encourage walkability, an Access LOS of a quarter-mile may be desirable for playgrounds, basketball courts, plazas, and other types of urban spaces or facilities. Conversely a three- to five-mile service area may be acceptable in suburban or rural communities for facilities such as soccer fields and swimming pools.

Communities should conduct a spatial analysis of the parks and recreation system to identify the existing Access LOS for both parklands and facilities. The analysis can also identify gaps in transit, roadway, bicycle, and pedestrian networks. Access to a landlocked park, for example, may be increased by creating new roadway, bicycle, or pedestrian connections, thereby reducing or eliminating the need to purchase additional park land. At the same time, access improvements also can create new recreational amenities, such as sidewalks, bike lanes, or trails. See Figure 1 for an example of an Access LOS map for play areas created through the parks and recreation planning process for the City of Naples, Florida.

Quality LOS

Quality LOS standards are used to measure whether parks and recreation facilities are meeting the design and maintenance criteria established by the local community. Even though a community may be meeting its acreage, facilities, and access LOS standards, it cannot be meeting residents' needs if it provides poorly designed or maintained facilities.

Very few communities have established Quality LOS standards for their parks and recreation facilities. Again, each community should develop its own quality criteria based on community values and priorities. Typical Quality LOS criteria may include the quality of construction materials, the frequency of maintenance, safety inspections, aesthetics, multimodal access, cleanliness, or others. Numerous publications list suggestions for maintenance criteria, including the National Recreation and Park Association's *Commission for the Accreditation of Parks and Recreation Agencies (CAPRA) Standards*, Fifth Edition (2014), and also its publication *Management of Park and Recreation Agencies*. Similarly, a wide variety of organizations publish park design guidelines, including the Project for Public Spaces and the Landscape Architecture Foundation.

Once the community has established its Quality LOS criteria, parks and recreation facilities can be evaluated and mapped to illustrate the distribution of different levels of quality throughout the community. For example, Washington, D.C., mapped the quality of its recreation centers based on their condition (deferred maintenance), size, and capacity (see Figure 2).

Operating Expenditures per Acre, Operating Expenditures Per Capita

Two metrics that can be used to gauge whether a community is adequately funded to manage, operate, and maintain its parks and recreation areas are "operating expenditures per acre managed" and "operating expenditures per capita." The first metric is calculated by dividing total operating expenditures by total parkland acres managed by the agency. The second metric is calculated by dividing total operating expenditures by the population of the jurisdiction served by the agency.

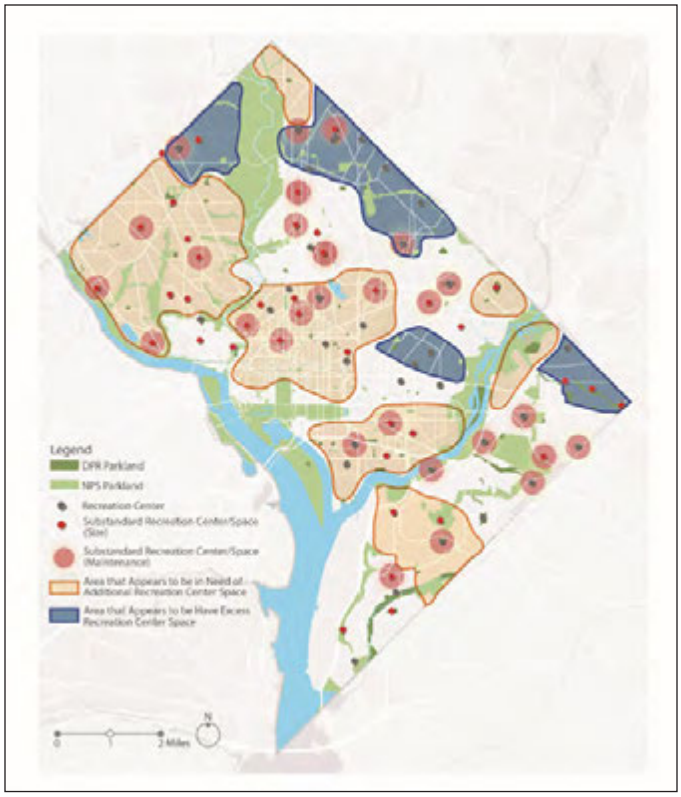


Figure 2. Washington, D.C., recreation center Quality LOS map
Courtesy AECOM Technical Services, Inc.

Operating expenditures include all of the costs to provide parks and recreation services to the community, including personnel salaries, benefits, utilities, equipment, and materials. Operating expenditures may also include debt service if it is paid out of the annual operating budget, as well as any expenditures incurred as part of a special or enterprise fund (such as a golf course) managed by the public agency.

It is important to note that operating costs can vary widely between communities due to differences in parks and recreation facility standards, types of equipment, repair and replacement schedules, types and topography of parkland, degree of maintenance required, levels of use, and other variables. Operating costs and efficiencies can also vary with the number of acres managed and the size of the population served. For example, a community that manages extensive conservation lands will have a lower ratio of expenditures to acreage than a community that primarily manages developed parkland.

Communities that benchmark operating expenditures (see below for discussion of benchmarking) should conduct follow-up research to analyze and document the specific reasons for differences in operating expenditures. For example, it may be helpful to visit and photograph the facilities at benchmarked communities and meet with agency staff to document key differences in facility quality or levels of maintenance. It may also be helpful to determine if a community is serving a larger population than its own residents. Elected officials, managers, and residents may be more supportive of increased operation budgets if they clearly understand the reasons for

variations in funding between communities and the implications of different funding levels.

Revenue per Capita, Revenue as a Percentage of Total Operating Expenditures (Cost Recovery)

Two metrics that can be used to track revenues and compare revenue generation to other agencies are "revenue per capita" and "revenue as a percentage of total operating expenditures." The first metric is calculated by dividing the total revenues generated by the agency by the population of the jurisdiction served by the agency. The second metric (also known as "cost recovery") is calculated by dividing the total revenues generated by the agency by the total operating expenditures of the agency. A community's parks and recreation revenues (also known as "annual direct revenues") include all of the monies generated directly from parks and recreation classes, programs, memberships, concessions, permits, rentals, and other nontax sources. Revenues do not include funding from taxes, grants, foundations, bonds, assessments, or other indirect sources.

In addition to revenue tracking and benchmarking, these metrics can also be used to establish cost recovery policies and goals. There are no industry standards for cost recovery; each community must establish its own goals. This is typically a policy decision determined by the agency department head, city/county manager, or elected officials. Some communities have established different cost recovery policies for senior, adult, and youth programs, while others have established overall cost recovery goals as a percentage of operating expenses. For example, a community may wish to subsidize youth programs to encourage accessibility, but require 100 percent cost recovery for adult sports leagues. Databases such as PRORAGIS (see sidebar, "PRORAGIS and Other Parks and Recreation Data Sources") can help agencies to determine reasonable and realistic cost recovery goals based on data from other agencies.

The Use of Parks and Recreation LOS Metrics Within the Planning Process

Parks and recreation LOS is most commonly addressed within the context of a parks and recreation master plan or needs assessment process.

The typical parks and recreation master planning process consists of four phases: (1) Existing Conditions Analysis, (2) Needs and Priorities Assessment, (3) Long-Range Vision, and (4) Implementation Strategy. Each phase of the process builds on the findings and conclusions from the previous phase(s). The following sections describe the important roles that LOS standards play in each of the first three phases of the process.

Existing Conditions Analysis

The first phase of the planning process, the Existing Conditions Analysis, includes an assessment of both the community and the parks and recreation system. The community analysis focuses on understanding the context of the parks and recreation system within the community's history, vision, values, demographics, land-use patterns, and standards. This phase typically includes the review of previously prepared guiding documents such as comprehensive plans, vision plans, strategic plans, redevelopment plans, and previous parks and recreation master plans. It is particularly important to evaluate existing and projected future land development patterns and

PRORAGIS and Other Parks and Recreation Data Sources

Several detailed sources for parks and recreation-related data are available to planners for LOS research and benchmarking efforts for their communities. These include:

PRORAGIS: The National Recreation and Park Association (NRPA) developed its Parks and Recreation Operating Ratio and GIS (PRORAGIS) system to replace outdated standards with a database that allows agencies to benchmark their parks and recreation systems against other systems across the country. It is the largest collection of parks and recreation operating data in the U.S. PRORAGIS is typically used in concert with other parks and recreation system planning tools such as mail or telephone surveys, service area analyses, and stakeholder interviews. Its reporting functions provide the ability to perform side-by-side comparisons based on filtered searches including jurisdictional population, department budget, employee number, location, and acres managed. These comparisons allow agencies to benchmark and evaluate performance against most similar agencies and aggregated data from across the country.

The Trust for Public Land (TPL) City Park Facts and ParkScore: The Trust for Public Land is a national nonprofit organization working to create and improve neighborhood parks. TPL's ParkScore index measures how well the 75 largest U.S. cities are meeting the need for parks, providing in-depth data to guide local park improvement efforts. TPL's City Park Facts is an annually published almanac of the parks and recreation systems of the 100 most populous cities that can be used for benchmarking.

State Comprehensive Outdoor Recreation Plans (SCORPs): States must prepare and regularly update statewide comprehensive outdoor recreation plans in order to be eligible for federal Land and Water Conservation Fund grants from the National Park Service and U.S. Department of the Interior. Most SCORPs address the supply of and demand for local, state, and federal recreation resources, identify needs and new opportunities for recreation improvements, and set forth implementation programs to meet plan goals (NPS 2008). Many SCORPs also include regional and statewide parks and recreation LOS standards or data that can be used for benchmarking.

demographics to gain a thorough understanding of the types of people who are and will be living in the community; their preferred lifestyles; the density of development in different parts of the community; and other factors that may provide insights into parks and recreation needs, priorities, and desired levels of service.

The existing conditions analysis also includes an analysis of the parks system based on the community's existing LOS standards, if available. They are most commonly found in the comprehensive plan or parks and recreation master plan, and are typically expressed in terms of parkland acreage and/or facilities per 1,000 population. The initial analysis will determine if the existing system is meeting the current LOS standards established by the community.

The assessment of the parks and recreation system includes site visits to evaluate individual parks, based on agreed-upon criteria (as discussed in the previous Quality LOS description), and evaluation of the actual existing LOS, based on the existing LOS standards. While existing standards may include only one or two metrics such as parkland acreage or facilities, the actual LOS would ideally be calculated for all of the LOS metrics listed in Table 1. Each metric is necessary to help determine actual LOS, but no metric is sufficient by itself to develop a comprehensive perspective.

Needs and Priorities Assessment

The purpose of the Needs and Priorities Assessment, the second phase of the planning process, is to determine the gaps between existing and desired conditions. Communities typically use a "triangulated" approach to identifying needs, including various types of qualitative and quantitative techniques to determine top priorities from different perspectives. Qualitative techniques typically include interviews with elected officials, community leaders, and other key stakeholders; focus group meetings with user groups such as sports leagues, seniors, and teenagers; workshops with a project advisory committee and the public; and informal discussions with residents at special events. Quantitative techniques include statistically valid surveys, nonstatistically valid online surveys, and LOS benchmarking.

Benchmarking has replaced standards in determining appropriate parks and recreation LOS. Benchmarking is generally defined as a comparison of the quality of an organization's policies, products, or programs with standard measurements or similar measurements of its peers. In parks and recreation system planning, benchmarking is used to compare one parks and recreation system to another. State and national parks and recreation associations no longer publish recommended LOS standards, but encourage communities to benchmark themselves against other communities. Several databases tracking parks and recreation-related information for hundreds of communities across the country are available to planners for this purpose (see sidebar, "PRORAGIS and Other Parks and Recreation Data Sources").

Some cities and counties benchmark themselves against communities with similar demographics, geography, or climate. Other communities select "aspirational" benchmarks using cities or counties they wish to emulate. Both PRORAGIS and TPL reporting functions provide the ability to perform side-by-side comparison based on filtered searches including jurisdictional population, department budget, employee number, location, and acres managed. These comparisons allow agencies to benchmark and evaluate performance against the most similar agencies and aggregated data from across the country.

Findings from the LOS benchmarking can be compared against findings from surveys, focus groups, and other needs assessment techniques to determine if the existing LOS is adequate. For example, if the Facility LOS benchmarking for athletic fields indicates that the community provides a lower number of fields per capita than comparable communities — and the statistically valid survey indicates a high unmet need for athletic fields — then the community may decide to establish a higher Facility LOS standard to reflect demand and need.

Long-Range Vision

The third phase of the planning process is to develop a long-range vision. Elements of the vision should include parks and recreation subsystems; preferred service delivery model(s) for each subsystem; a classification typology for each subsystem; and differential land development patterns and lifestyles identification.

Subsystems. Subsystems include the various components of the parks and recreation system, such as parks, trails, athletics complexes, community centers, aquatics centers, civic plazas, and natural areas. Figure 3 shows some of the typical components or subsystems of a parks and recreation system. Each subsystem may use different metrics to measure and monitor LOS.

Service Delivery Models. Once the subsystems are defined, communities need to determine the preferred Service Delivery Model (SDM) for each. The four typical SDMs are: (1) centralized,



Figure 3. Typical components of a parks and recreation system Courtesy Glatting Jackson Kercher Anglin Inc.

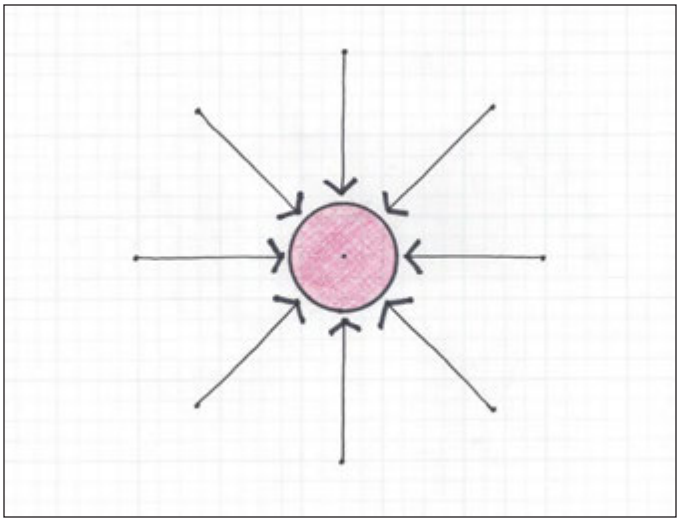


Figure 4. Centralized Model for SDM. Courtesy Barth Associates

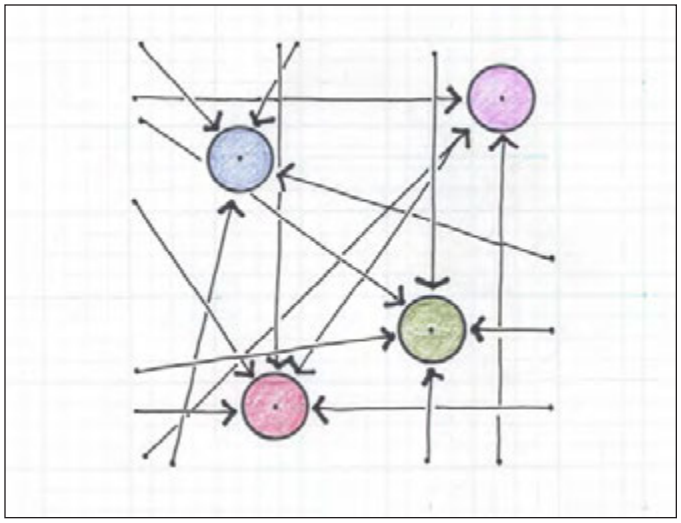


Figure 6. Venues Model for SDM. Courtesy Barth Associates

(2) decentralized, (3) venues-based, and (4) activities-based.

The centralized SDM (Figure 4) assumes that residents and visitors from throughout the community will drive to the central facility. This model typically applies to regional or signature facilities and subsystems such as an aquatics center, a sports complex, an urban festival park, or a cultural center.

A decentralized SDM (Figure 5), on the other hand, focuses on the equitable distribution of services, measured in terms of distance (Access LOS) or population served (Facility or Acreage LOS). A decentralized SDM assumes that facilities or parks will be distributed equitably throughout the community, e.g., one facility per quadrant, as opposed to a single centralized facility.

A venues SDM (Figure 6) is a variation on the centralized model; it assumes that the system is comprised of specialized facilities that will serve the entire community, regardless of access distance or population densities. For example, the City of Naples, Florida, has a tennis complex, a downtown/ urban festival park, a sports park, a dog park, an environmental preserve, a cultural arts park, a boat ramp park, a city beach, a city pier, and an aquatics/community center. Each venue has been planned and designed as a first-class venue to serve the needs of residents citywide.

Finally, an activity-based SDM (Figure 7) focuses on providing desired recreation opportunities throughout the community without regard for the type of park or recreational facility. This model is most common in large, urbanized sites where land is at a premium. A dog park or tennis courts may be located on top of a parking deck, a playground may be provided through a local church, and an athletic field may be provided through partnerships with local schools. For example, the City of Seattle built a mountain bike trail underneath one of its freeway overpasses. The emphasis is not on park or facility types, but on providing access to recreational opportunities wherever and however they can be provided.

As mentioned above, each subsystem may deliver services using a different SDM. For example, an Aquatics Subsystem may deliver services through a single, large, centralized, multipurpose aquatics complex that includes a family water

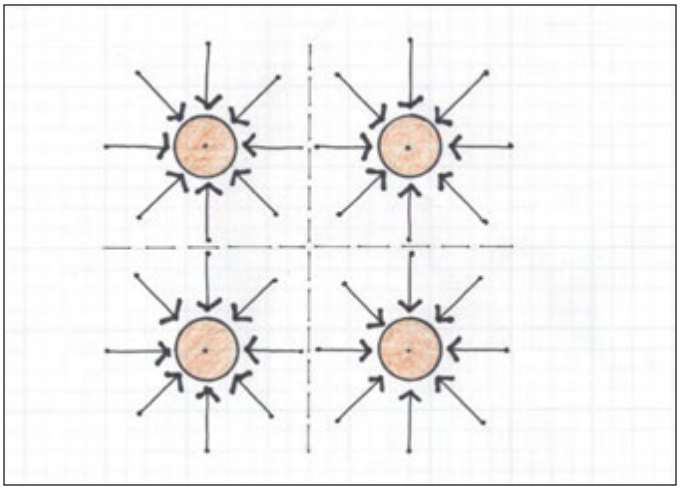


Figure 5. Decentralized Model for SDM. Courtesy Barth Associates

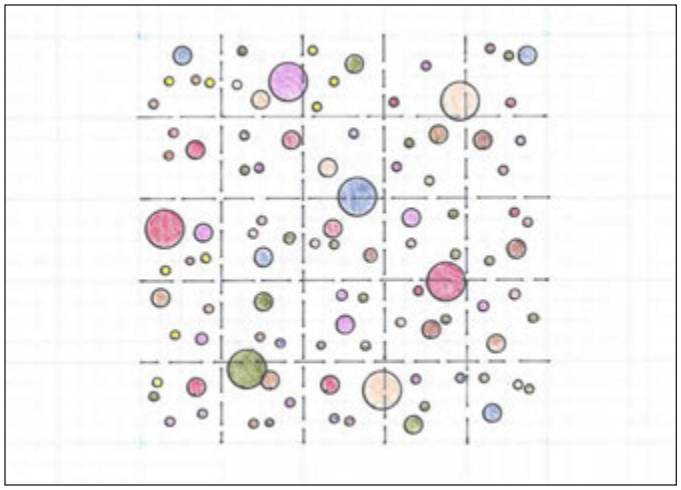


Figure 7. Activity-based Model for SDM. Courtesy Barth Associates

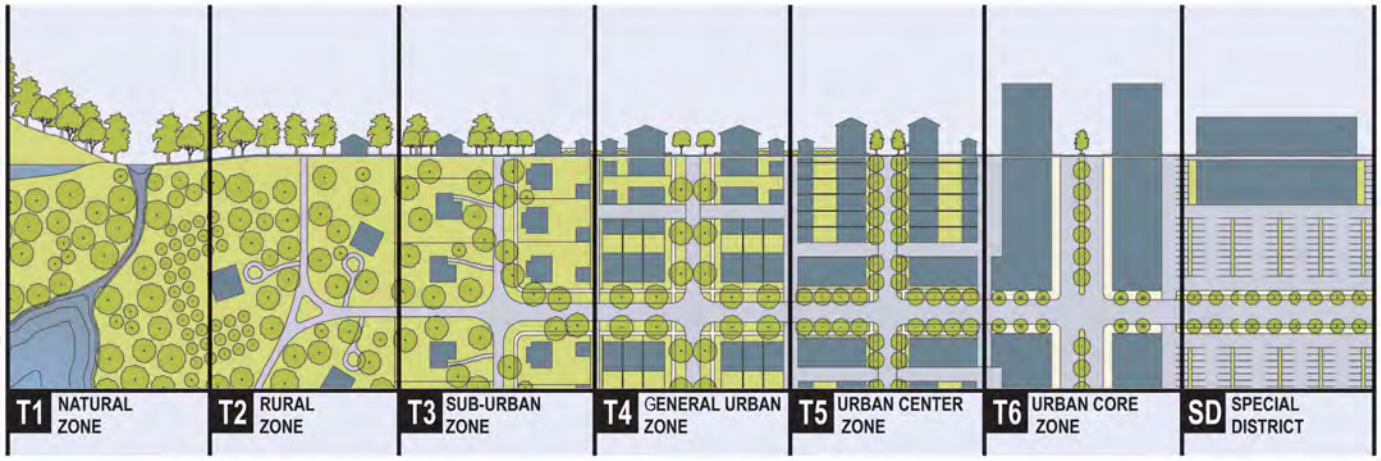


Figure 8. The "transect" illustrates the differences between urban, suburban, and rural development patterns. Courtesy Duany Plater-Zyberk & Company

park, lap pool, and competitive pool. A Neighborhood Parks Subsystem, on the other hand, may deliver services through an equitably distributed decentralized model, where every neighborhood has access to a small public or private recreation area that includes a picnic shelter, playground, basketball courts, and multipurpose lawn. The LOS for each of these two subsystems may be measured very differently.

Classifications. Traditional parks and recreation classifications have included mini-parks, neighborhood parks, school-parks, community parks, large urban parks, natural resource areas, greenways, sports complexes, and special use facilities (Mertes and Hall 1996). However, these classifications do not recognize the wide variety of facilities and spaces found in modern parks systems, including dog parks, skate parks, splash pads, festival ground, mountain bike parks, and others. They also do not reflect variations in levels of amenities and maintenance between facilities within the same subsystem. Therefore, many communities are developing their own classifications systems to better reflect their needs and priorities.

One Florida county is using a three-tiered classification system for each of its subsystems. "Top Tier" facilities include those that are least common and have the highest level of amenities, highest level of maintenance, highest level of staffing, and highest cost recovery goals. "Bottom Tier" facilities include those that are most common and have the lowest level of amenities, maintenance, staffing, and cost recovery goals. Top tier athletic facilities are classified as "Signature Facilities," middle tier facilities are classified as "Competitive Practice and Game Fields," and bottom tier facilities are classified as "Recreational Practice and Game Fields." Similarly, the classification system for the county's Natural Areas Subsystem comprises Destination Preserves, Enhanced Natural Areas, and Basic Natural Areas; and the classification system for their Community Centers Subsystem is made up of Signature Recreation Centers, Community Centers, and Neighborhood Recreation Centers.

Differential Land Development Patterns and Lifestyles. Another determinant of a community's parks and recreation vision — and resulting LOS — is its existing and future development patterns. The "transect" (Figure 8) illustrates the differences between urban, suburban, and rural development patterns.

Recreational lifestyles and needs can vary greatly between these patterns. For example, residents in downtown San Diego indicated that one of their top recreation activities was strolling downtown sidewalks and eating in restaurants, while the top facility priorities for many suburban residents may include bicycling and walking trails, dog parks, and multipurpose fields. Similarly, urban residents often express a desire for facilities such as indoor fitness/ exercise centers within walking distance (about a half-mile) of their homes, while rural and suburban residents are often willing to drive as much as five to 10 miles to a recreation center.

A long-range vision should reflect these differences in both existing and future land development patterns and lifestyles, and a community may wish to create differential LOS standards to reflect these differences as well.

Developing New LOS Standards

There is no single methodology for calculating a community's desired parks and recreation LOS, but it should be based on the findings and decisions from the planning process including the existing conditions analysis, needs assessment, and long-range vision. The first step is to determine which of the LOS metrics are most appropriate for each subsystem.

The selection of metrics should be based on the values of the community and the ability to collect and maintain the appropriate data. For example, the LOS metrics for a Community Center Subsystem may include Square Footage per Capita, both communitywide and within specific geographic areas; Access LOS (for a decentralized SDM), including differentials for urban, suburban, and rural areas; and Revenues as a Percentage of Operating Costs, based on agreed-upon cost recovery goals for each center.

LOS metrics for an Athletics Subsystem may include fields per capita, broken down between competition, practice, rectangular, diamond, and multiuse fields, and Access LOS for urban, suburban, and rural areas. Depending on the governing body's philosophy and policies, there may be no cost recovery metrics required for recreational fields, but Revenues as a Percentage of Operating Costs may be an important LOS for a tournament-quality sports complex.

LOS metrics for a Neighborhood Park or Playground Subsystem may include Per Capita LOS both communitywide and within specific geographic areas; Quality LOS to ensure equal opportunity for quality experiences; and Access LOS for different development patterns. The Access LOS for a Signature Playground may be very different than the Access LOS for a Neighborhood Playground, and both types of experiences may be important to the community.

Once the desired metrics have been determined for each subsystem, the question must be asked: "Do we have enough?" The summary of findings from the Needs Assessment typically provides the answer, including findings from surveys, public workshops, interviews, focus group meetings, benchmarking, and other LOS techniques. If the Needs Assessment summary indicates a strong need or priority for a certain type of park or facility, the existing LOS is probably too low. By calculating the approximate deficiency in parkland or facilities — based on voids in service areas, lack of capacity, or other deficiencies determined during the needs assessment process — communities can estimate the approximate LOS required to satisfy community needs. The new LOS standards can be used as a basis for determining the types, locations, and size of proposed new parks or facilities for the long range vision. The new LOS standards can also be incorporated into the community's comprehensive plan and land development codes to help implement the new vision.

Trends and Additional LOS Metrics

In addition to the traditional LOS metrics outlined above, communities may wish to add other metrics to gauge their LOS regarding social equity, connectivity, water quality, or other community values and initiatives. These types of metrics are closely related to the Sustainable Development Indicators (SDIs) developed by many communities since the late 1980s to measure and monitor progress towards sustainability goals. SDIs are now viewed as both "a means for assessing the distance between a current state of affairs on the ongoing task of achieving a sustainable way of life" and "a means of instituting dialogue over the very conditions of sustainability" (Scerri & James 2010, 223). Similar to LOS standards, there are no universally agreed-upon sustainable development indicators to help measure and monitor progress towards sustainability.

Several current trends lend themselves to nontraditional parks and recreation LOS metrics, including age-friendly communities, connectivity and walkability, access to nature, sports tourism, and placemaking.

Age-Friendly Communities

Communities throughout the U.S. are recognizing the benefits of creating age-friendly communities. John Crompton at Texas A&M notes that "seniors are moving from being a relatively small fringe group to being a large central focus" of parks and recreation service. "Five changes in the status of seniors suggest that recreation and park departments should ... move them to the center of their service efforts: extension of active retirement time, enhanced discretionary income, contributions to economic development, enhanced leisure literacy and disproportionate political influence" (Crompton 2013). Parks and recreation departments wishing to promote and measure LOS related to age-friendly communities may wish to establish alternative LOS metrics such as:

- Multimodal/ Transit Access to Recreation Facilities and Programs for Seniors
- Percentage of Senior Participants
- Percentage of Multigenerational Programs and Activities
- Percentage of Programs that promote Wellness and Active Aging
- Percentage of Opportunities for Paid Work and Volunteering for Older Adults

Connectivity and Walkability

A trend directly related to Age-Friendly Communities is improved bicycle and pedestrian Connectivity and Walkability. Movements such as Smart Growth, New Urbanism, and Complete Streets have been developed in response to increased traffic congestion, automobile-dependent suburban development patterns, and the decline of safe routes for walking and biking. Many parks and recreation departments are actively involved in the development of trails systems as well as safe sidewalk and bike lane connections to parks, community centers, and other recreation facilities.

To indicate their progress towards connectivity and walkability goals, communities may wish to develop LOS metrics such as:

- Percentage of Complete Streets
- Miles of Multipurpose Trails
- Percentage of Parks with Multimodal Bike/Ped/Transit Access

Access to Nature

Recent parks and recreation needs assessment processes across the country indicate that residents feel a real need for access to nature. This need is most acute in urbanizing communities that are losing natural areas and open spaces to higher density development or redevelopment. Richard Louv notes in *Last Child in the Woods* that adults are the predominant users of natural lands, and that today's youth are losing any sense of connection with nature: "In the space of a century, the American experience of nature ... has gone from direct utilitarianism to romantic attachment to electronic detachment" (2008, 16). In response he calls for a new back-to-the-land movement,

including green cities and towns "that, by their very design, reconnect both adults and children to nature" (2008, 276).

Communities wishing to measure access to nature could establish such metrics as:

- Access Distance/ Time to Natural Areas
- Percentage of Residents Who Participate in Nature-Based Programs

Sports Tourism

Sports tourism and travel ball have had a significant impact on parks and recreation agencies in recent years, as many parks and recreation agencies are serving an increasing number of nonresidents. In "Stealing Home: How Travel Teams are Eroding Community Baseball," author Davie Mendell (2014) laments that "community league games have lost a certain sense of community." Mendell is concerned about the high costs of travel ball, the added pressure to perform, mental burnout, overly competitive parents, and the added wear and tear on young players. A significant impact of the shift from recreational leagues to travel ball is the added pressure on local governments to pay for "tournament-quality" sports facilities, regardless of where the players reside.

Peter Harnik of the Trust for Public Land (TPL) notes that "visitors put a different kind of strain on city park resources than do full-time residents. Tourists may make little use of pools, recreation centers and dog parks, but they are a big factor in ... signature destinations … If heavy out-of-towner park use truly diminishes the experience for residents, the response should be the acquisition of more parkland, preferably with some of the funds derived from nonresidents" (Harnik and Martin 2016). Parks and recreation agencies concerned with the impacts of travel ball or sports tourism may wish to track the number of visitors using local facilities — as well as related costs and revenues — and create separate LOS metrics such as:

- Percentage Use of Facilities by Visitors
- Percentage Use of Facilities by Residents
- Cost per Visitor User
- Cost per Resident User

Such data could be helpful in establishing capital and operating budgets and determining the true costs and benefits of accommodating travel teams and sports tourism.

High Performance Public Space Criteria

The following 25 criteria for a HPPS were developed through a "Delphi process" at the University of Florida involving 22 sustainability experts:

Social Criteria:

- The space improves the neighborhood
- The space improves social and physical mobility through multimodal connectivity — auto, transit, bike, pedestrian
- The space encourages the health and fitness of residents and visitors
- The space provides relief from urban congestion and stressors such as social confrontation, noise pollution, and air pollution
- The space provides places for formal and informal social gathering, art, performances, and community or civic events
- The space provides opportunities for individual, group, passive, and active recreation
- The space facilitates shared experiences among different groups of people
- The space attracts diverse populations
- The space promotes creative and constructive social interaction

Environmental Criteria:

- The space uses energy, water, and material resources efficiently
- The space improves water quality of both surface and ground water
- The space serves as a net carbon sink
- The space enhances, preserves, promotes, or contributes to biological diversity
- Hardscape materials were selected based on longevity of service, social/cultural/historical sustainability, regional availability, low carbon footprint, and/or other related criteria
- The space provides opportunities to enhance environmental awareness and knowledge
- The space serves as an interconnected node within larger-scale ecological corridors and natural habitat

Economic Criteria:

- The space creates and facilitates revenue-generating opportunities for the public and/or the private sectors
- The space creates meaningful and desirable employment
- The space indirectly creates or sustains good, living-wage jobs
- The space sustains or increases property values
- The space catalyzes infill development and/or the reuse of obsolete or underused buildings or spaces
- The space attracts new residents
- The space attracts new businesses
- The space generates increased business and tax revenues
- The space optimizes operations and maintenance costs (compared to other similar spaces)

High Performance Public Spaces

Many parks within the U.S. were developed within the "Recreation Era" between 1930 and 1965, characterized by architectural historian Galen Cranz as emphasizing basic, universal facilities to meet the increased demand for recreation, such as playgrounds, ball fields, and picnic shelters. In 2004 Cranz and Boland identified a new trend in parks and recreation design, the "Sustainable Park," which responds to the needs for communities to become more ecologically and socially sustainable. Characteristics of Sustainable Parks include self-sufficiency of resources and maintenance, solving larger urban problems outside of park boundaries, and adopting new standards for aesthetics and landscape management (Cranz & Boland 2004).

Communities are becoming more aware of the need to design all parks and recreation facilities as great public spaces that generate multiple benefits. In my recent research at the University of Florida, I created the concept of a High Performance Public Space (HPPS), defined as "any publicly accessible space that generates economic, environmental, *and* social sustainability benefits for their local community" (Barth 2015). A HPPS can be a park, trail, square, green, natural area, plaza, or any other element of the public realm that generates all three types of benefits. See the sidebar on page 10 for a description of the defining criteria for a HPPS.

While it is not realistic to think that every public park or public space could meet all 25 defining HPPS criteria, every public space has the potential to generate some type of sustainability benefits either directly or indirectly. Parks and recreation agencies interested in promoting any of these criteria could establish appropriate LOS metrics to measure and track their progress.

Final Thoughts for Planners

A thoughtful, meaningful set of Parks and Recreation LOS Standards can be very useful to communities for long-range planning, needs assessments, and growth management. There are very few, if any, state or federal mandates that dictate which metrics must be used; communities are free to develop the LOS metrics and standards that best serve their needs.

Key considerations for selecting LOS metrics include:

- Do the metrics reflect the values and needs that are most important to residents?
- Are the LOS standards, metrics, and definitions logical and easy to understand?
- Is accurate data available for each metric and relatively easy to collect?
- Do the metrics truly represent the actual levels of service provided?
- Collectively, do the metrics and standards provide a comprehensive perspective of LOS, including quantity, quality, and access to facilities and programs, as well as other factors that are important to the community?

LOS metrics and standards should be developed through a comprehensive planning process, as outlined above, including a robust public review process. Preliminary metrics and standards should be reviewed and discussed with staff, user groups, an advisory or steering committee, key stakeholders, the general public, and elected officials in order to build consensus regarding how Parks and Recreation LOS should be defined, measured, and counted.

Most importantly, LOS standards should not be viewed as static. They should be reviewed and recalculated annually, and updated every five years (at a minimum) in conjunction with a needs assessment process to ensure that they remain reflective of the community's needs, values, and goals. A comprehensive set of LOS standards, tested and updated regularly, helps ensure that a community is truly meeting residents' needs and generating the greatest benefits from its parks and recreation system.

About the Author

Dr. David Barth is a registered landscape architect, certified planner, and certified parks and recreation professional who specializes in the planning, design, and implementation of the public realm. He has developed parks and recreation system master plans for over 70 communities throughout the United States including Washington, D.C.; Miami-Dade County, Florida; Norfolk, Virginia; downtown San Diego; and the City of Raleigh, North Carolina; and has led the planning and design of hundreds of parks and trails. He was a co-author of the American Planning Association (APA) PAS Report From Recreation to Re-Creation*, as well as a contributor to APA's* Planning and Urban Design Standards *for parks and recreation needs assessments.*

References and Resources

Barth, David. 2015. "The Adoption of Innovation in the Planning and Design Process; Creating High Performance Public Spaces." University of Florida.

Cranz, Galen, and Michael Boland. 2004. "Defining the Sustainable Park: a Fifth Model for Urban Parks." *Landscape Journal* 23: 102–20.

Crompton, John. 2013. "Are Your Seniors Moving to Center Stage?" *Parks and Recreation*, December. Available at www.parksandrecreation.org/2013/December/Are-Your-Seniors-Moving-to-Center-Stage/.

Harnik, Peter. 2010. *Urban Green*. Washington, D.C.: Island Press.

Harnik, Peter, and Abby Martin. 2014. "How Many Out-of-Towners are in your Parks?" *Parks and Recreation*, May. Available at www.parksandrecreation.org/2014/May/How-Many-Out-of-Towners-Are-in-Your-Parks/.

Louv, Richard. 2008. *Last Child in the Woods*. 2nd edition. Chapel Hill, N.C.: Algonquin Books of Chapel Hill.

Mendell, Davie. 2014. "Stealing Home: How Travel Teams are Eroding Community Baseball." *The Washington Post*, May 23. Available at www.washingtonpost.com/opinions/stealing-home-how-travel-teams-are-eroding-community-base-

ball/2014/05/23/5af95d34-df6e-11e3-9743-bb9b59cde7b9_story.html.

Mertes, James D., and James R. Hall. 1996. *Park, Recreation, Open Space and Greenway Guidelines.* Arlington, Va.: National Recreation and Park Association.

Moiseichik, Merry, ed. 2010. *Management of Park and Recreation Agencies.* 3rd Edition. Ashburn, Va.: National Recreation and Park Association. Information available at www.nrpa.org/Store/detail.aspx?id=MANAGEM06.

National Park Service (NPS). 2008. "Land and Water Conservation Fund: How States Plan and Select Projects." Available at www.nps.gov/ncrc/programs/lwcf/plan_prjts.html.

National Recreation and Park Association. 2016. "PRORAGIS." Available at www.nrpa.org/PRORAGIS/.

National Recreation and Park Association. 2014, amended 2015. *Commission for the Accreditation of Parks and Recreation Agencies (CAPRA) National Accreditation Standards.* Fifth Edition. Available at www.nrpa.org/capra/.

Scerri, Andy, and Paul James. 2010. "Accounting for Sustainability: Combining Qualitative and Quantitative Research in Developing 'Indicators' of Sustainability." *International Journal of Social Research Methodology* 13(1): 41–53. Information available at http://dx.doi.org/10.1080/13645570902864145.

Trust for Public Land. 2015. "2015 City Park Facts." Available at www.tpl.org/2015-city-park-facts.

Trust for Public Land. 2016. "ParkScore." Available at http://parkscore.tpl.org/.

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November

A New Approach to Parks and Recreation System Planning

October 29, 2020, Feature, by David Barth, Ph.D., CPRP, AICP

For an enhanced digital experience, read this story in the ezine.

How today's environment is shifting our thinking about the future of the profession

Much has changed since NRPA published its *Park, Recreation, Open Space and Greenway Guidelines* in

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issues, such as the coronavirus (COVID-19) pandemic, wildfires, urbanization, social equity and services, habitat restoration and economic development.

In recognition of these increased complexities, there are no longer any nationally accepted standards for parks and recreation planning. Each community must determine its own standards, level-of-service (LOS) metrics, and long-range vision for its parks and recreation system based on community issues, values, needs, priorities and available resources. Even NRPA's 1996 guidelines recognized that "a standard for parks and recreation cannot be universal, nor can one city be compared with another even though they are similar in many respects." Therefore, it's time for a new approach to parks and recreation system planning; one that not only addresses traditional park and recreation challenges, but also is robust and comprehensive enough to address these broader community-wide issues.

First, we need to broaden our perspective of parks and recreation systems, in order to respond to societal shifts and expectations in a meaningful way. Parks and recreation facilities should no longer be regarded as isolated, but rather as elements of a larger, interconnected public realm that also includes streets, museums, libraries, stormwater systems, utility corridors and other civic infrastructure. Alternative dimensions of parks and recreation systems, such as equity and climate change, should be considered from the onset of the planning process. And, each site or corridor within the system should be planned as high-performance public spaces (HPPSs) that generate multiple economic, social and environmental benefits. This broader perspective encourages park and recreation agencies to transcend their silos — and leverage their resources — to plan and collaborate with other public and private agencies to meet as many of the community's needs as possible. As a result, parks and recreation systems can be repositioned as essential frameworks for achieving community sustainability, resiliency and livability.

Second, we need to replace the traditional linear, narrowly defined parks and recreation system master planning (PRSMP) process with a cyclical, open-ended process that is constantly updated and integrated with other foundational public realm plans, such as long-range transportation plans, stormwater master plans, habitat conservation plans and future land-use plans. Such an ongoing, collaborative planning process can lead to the development of an integrated public realm that can generate far more benefits for a community than the traditional siloed parks and recreation system. This proposed new approach, illustrated in Figure 1, differs from the traditional approach in several ways.

Project Initiation, Planning and Dimensions

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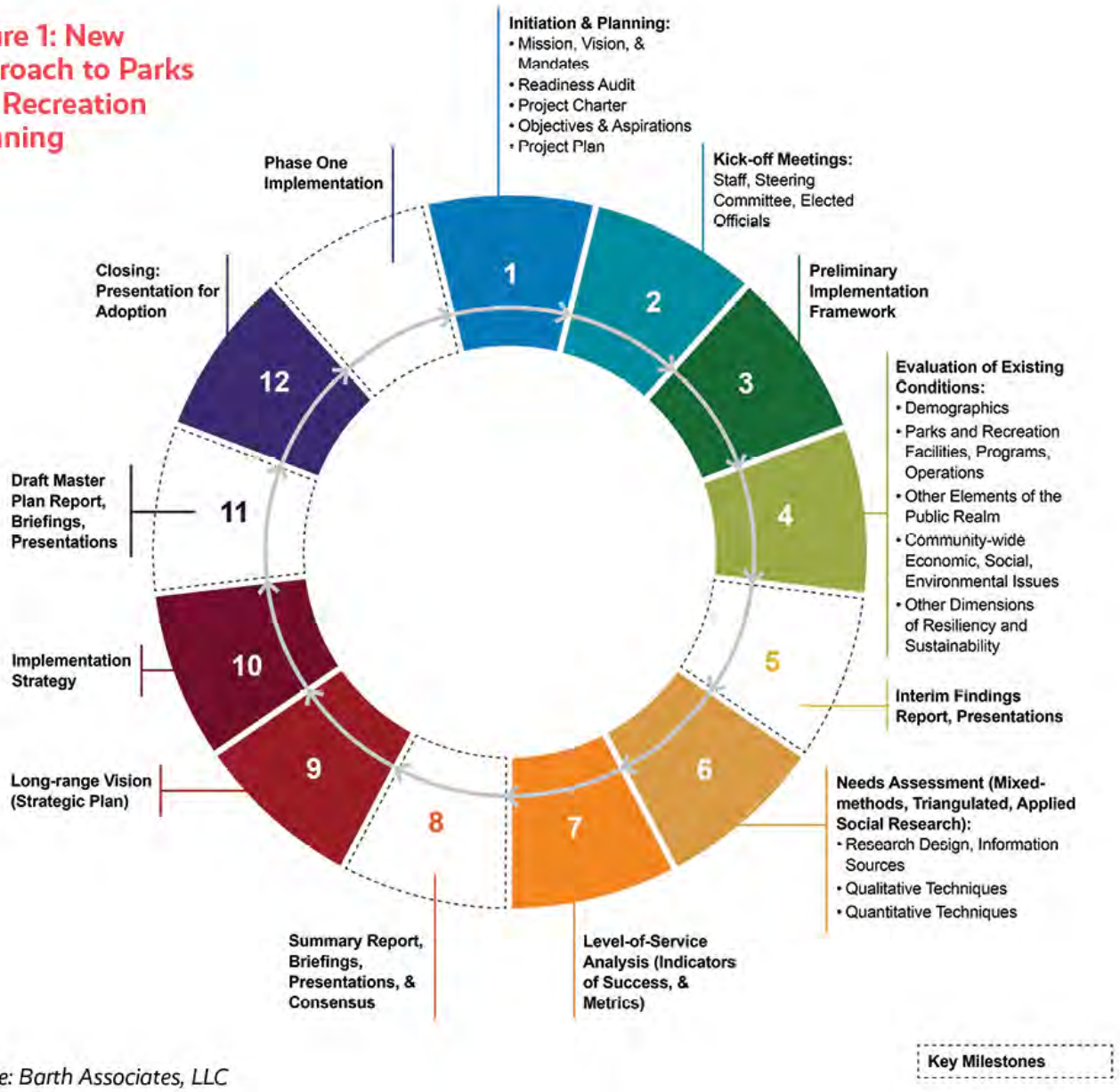
Figure 1: New Approach to Parks and Recreation Planning



Source: Barth Associates, LLC

amount of time and thought given to the initiation and planning phase of the project, including the development of a project charter, project plan and a readiness audit. Careful and thoughtful planning is critical to identifying opportunities to generate greater resiliency and sustainability benefits for the community, as well as building the credibility and support needed to implement key recommendations. The eventual success or failure of many plans can be traced to the amount of time spent initiating and planning the process. Once a PRSMP process begins, it is very difficult to change its scope, budget and deliverables midstream.

A key component of the initiation phase is the identification of the desired, alternative "dimensions" of parks and recreation planning to be addressed during the process, as listed in Figure 2. Identification of these dimensions during the initiation phase has direct implications for the makeup of the project team, the scope of work, the areas of focus and the eventual success of the project.

Decision-Making Framework

Another feature of the new PRSMP approach is a more thoughtful and nuanced "decision-making framework" to replace absolute standards and classifications, providing parks and recreation agencies with the freedom and flexibility to respond to community issues and needs. Such a framework may

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Figure 2: Alternative Dimensions of Parks and Recreation System Planning

- Accreditation by the Commission for Accreditation of Parks and Recreation Agencies (CAPRA)
- Before- and after-school care
- Bicycle and pedestrian access
- Branding
- Capital improvement program
- Commercial recreation
- Compliance with Americans with Disabilities Act (ADA)
- Comprehensive plan goals
- Construction delivery methods
- Cost recovery
- Crime prevention through environmental design (CPTED)
- Design standards and details
- Economic development
- Educational opportunities
- Environment
- Esports
- Flood control
- Funding
- Gentrification
- Green infrastructure
- Health and wellness
- Homelessness
- Impact fees
- Income inequality
- Land development codes
- Land use
- Level-of-service standards
- Marketing
- Mental health
- Needs and priorities
- Neighborhood stabilization
- Operations and maintenance
- Opioid abuse
- Organizational mission and role
- Organizational structure
- Park classifications
- Partnerships
- Permitting
- Political priorities
- Programs — recreation, social, educational
- Quality of life
- Redevelopment
- Resource protection
- Safety
- Sea-level rise
- Service delivery models
- Social equity
- Staffing
- Stormwater treatment
- Technology
- Tourism
- Transportation
- Wildlife habitat
- Youth development

Source: Barth Associates, LLC

needs and priorities; community context; desired experiences; and service-delivery models. Collectively, these components encourage thoughtful, context-based solutions rather than pre-conceived standards.

Feedback and Consensus Building

The new approach provides numerous opportunities throughout the planning process to pause, present and discuss interim findings; determine if additional lines of inquiry are needed; and build consensus with key stakeholders and decision-

makers regarding the direction of the process. Typical formats (online or in-person) often include staff review meetings, stakeholder focus group meetings, advisory committee presentations, and one-on-one briefings and workshops with elected officials. Such feedback loops are critical for eventual

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Evaluation of Existing Conditions

While the traditional approach to evaluating existing conditions focuses solely on parks and recreation facilities, the new approach also emphasizes the evaluation of the specific dimensions identified in the initiation phase. Each topic requires an in-depth analysis of existing conditions and issues, and their implications of the parks and recreation system. For example, research and discussions with the public works or engineering department may reveal new information, such as the need for additional stormwater treatment or floodwater storage in certain areas of the community or the opportunity to meet recreation needs and stormwater needs on the same site. Investigation into crime rates and safety issues could identify hot spots that might benefit from additional security, nighttime recreation programs, or design modifications in accordance with guidelines for crime prevention through environmental design (CPTED). Parking and transportation issues could be investigated to determine the potential role of parks in providing trail connections, bike-share stations, overflow parking, transit stops or other multimodal transportation solutions. What's more, discussions regarding housing and economic development could detect opportunities for parks and green spaces to stabilize neighborhoods, improve property values and catalyze redevelopment.

Preliminary Implementation Framework

The purpose of the preliminary implementation framework (PIF) is to initiate implementation discussions as early in the process as possible; traditional processes often leave implementation discussions for last, which can doom the project to failure. The PIF is particularly important for plans that address numerous dimensions, such as transportation, stormwater and social services, which will be implemented by agencies other than a parks and recreation or planning department. In addition to traditional forms of implementation — such as capital improvements, additional staffing, new programs and increased maintenance — the PIF may include updates to comprehensive plans or land development regulations; partnerships with other agencies, businesses or nonprofit organizations; changes to staffing or organizational structure; refocused delivery of programs and services in response to the agency's mission or residents' priorities; and changes to maintenance and operations procedures. Accreditation by the Commission for Accreditation of Parks and Recreation Agencies (CAPRA) is another form of implementation.

Needs Assessment Process

The new approach proposes a more rigorous, scientific methodology than that used by many communities. Needs assessments are often scrutinized by the public, stakeholders and elected officials; parks planners need to be able to defend their methodology, data collection process and findings. If done correctly, a needs assessment is a type of applied social research that involves developing a research design, gathering and analyzing the data collected from various sources, and using the results to inform policy and program development. In our practice, we use a mixed-methods, triangulated approach that compares the findings from quantitative, qualitative, and secondary research techniques and data to identify top priorities. As with the evaluation of existing conditions, the needs assessment process should solicit public input regarding the entire public realm, as well as community-wide resiliency and sustainability needs.

Level-of-Service Standards

The 1996 *Park, Recreation, Open Space and Greenway Guidelines* state that "we must realize an open space standard is not so much an exemplary measure to be used in some form of comparison or judgement of adequacy or accomplishment, but is an expression of a community consensus of what constitutes an acceptable level of service." Therefore, the new approach encourages public agencies to revisit their core values, principles and goals; and to develop LOS metrics that effectively reflect their

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some communities may also wish to establish new metrics related to resiliency and sustainability as outlined in Figure 3.

Figure 3: Potential LOS Metrics for Alternative Dimensions

Dimension	Potential Metrics
Bicycle and pedestrian access to parks, open spaces, natural areas, civic sites and other elements of the public realm	• Miles of paved multiuse trails • Percentage of the long-range bicycle and pedestrian network vision completed • Percentage of parks and open spaces with bicycle and pedestrian access • Percentage of complete streets
Green infrastructure and stormwater treatment	• Percentage of community tree canopy coverage • Improvement in water quality of key water bodies • Percentage of stormwater treatment projects incorporating green design practices
Health and wellness of community residents	• Percentage of residents considered obese • Participation in fitness and wellness programs • Reduction in chronic health conditions such as type 2 diabetes and heart disease
Social and educational programs	• High school graduation rate • Local unemployment rate • Percentage of households considered by the United Way to be Asset-Limited, Income-Constrained, Employed (ALICE)
Economic development	• Increase property values adjacent to new or improved parks and open spaces • Increase number of businesses opened in response to new or improved parks and open spaces • Increase in public and private sector jobs created through parks and open spaces

Source: Barth Associates, LLC

Collaborative Visioning

As mentioned above, a key attribute of the new approach is the collaborative planning of the park and recreation vision concurrently with planning of other public realm elements, such as streets, bikeways and trails, civic spaces, stormwater treatment facilities and utilities.

Collaborative planning is also required to address broader community-wide dimensions, such as health, equity and economic development. Strategies to increase collaboration includes concurrent scheduling of PRSMPs with other foundational public realm plans, such as comprehensive transportation plans (CTP) and stormwater master plans; concurrent, multidisciplinary needs assessment processes — including site visits, interviews, focus group meetings, public workshops and surveys; and multiagency and multi-departmental reviews of proposed capital improvements to identify opportunities for partnerships, collaboration or joint use. Collaborative brainstorming by people with different perspectives and backgrounds often can yield far more innovative and imaginative ideas than can visioning that involves only those of similar mindsets.

Implementation Strategy

The implementation phase of the PRSMP represents the culmination of all the analyzing, planning, ideating, discussing, meeting, surveying, thinking and visioning activities described above. Consistent

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collaborative approach to implementation involving community leaders, elected officials, multiple departments and agencies, businesses and other key stakeholders. An effective implementation strategy requires that participants transcend the silos of their departments or agencies; identify opportunities for partnerships or joint use; leverage available resources, regardless of the source; and actively look for ways to generate multiple benefits for the community through implementation of projects, programs and initiatives.

Embracing a New Approach

Regardless of your aspirations — whether you wish to transform your entire community, reposition your department or parks and recreation system as being more essential, or simply increase the quality of the services and programs you provide — the new approach to parks and recreation system planning can help you meet your goals. Following this process will result in a PRSMP that is more relevant to the needs and issues of your community and elected officials, more collaborative, more credible and more likely to be successfully implemented and transformative. And, adoption of this new approach can yield numerous benefits for park and recreation agencies and their communities, including increased recognition, quality of life and resiliency.

To hear David Barth speak about PRSMPs, tune in to the November bonus episode of Open Space Radio at nrpa.org/NovemberBonusEpisode.

David Barth is the Principal of Barth Associates, a firm specializing in parks and recreation system planning (david@barthassoc.com). He is the author of the new book *Parks and Recreation System Planning: A New Approach for Creating Sustainable, Resilient Communities*

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Jon Kohl
2 years ago

The author is dead on when he says that implementation discussion is often left to the end and this is a problem. Consequently he proposes establishing an implementation framework earlier on in the planning process. While I agree with the spirit, implementation is best served going even further back in the process than Mr. Barth proposes. One of the main reasons plans are not implemented is that stakeholders do not support the plan because they do not see their interests, sweat, and blood adequately represented and feel little ownership for someone else's objectives and strategies. If we accept that premise, then the very process of planning itself is what builds that interest, that ownership, that empowerment, and that capacity of the stakeholder community. If these investments are crucial to implementation, one might reconceptualize implementation as inherent in the process itself not something you do once the plan is completed (as Mr. Barth noted), which is far too late. Implementation, in fact, can be seen as beginning the very moment the idea of doing a plan enters someone's head. In that moment, the person begins thinking about how to allocate power, configure relationships, and build alliances. From that point, the process may head down a path that leads to little participation, ownership, and commitment by stakeholders or it may go down a very different path. It is what systems theorists call path dependence. The key is trace the path back to its origin rather than waiting until the ball is already accelerating half-way down the mountain to start thinking about implementation. In conclusion, "how we plan determines what we

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Google Maps

Shell, 1140 Tavern Rd, Alpine, CA 91901 to Wright's Field, 1951 Tavern Rd, Alpine, CA 91901

Walk 2.8 miles, 59 min



via Tavern Rd and S Grade Rd — 59 min, 2.8 miles

via Alpine Blvd and S Grade Rd — 1 hr 12 min, 3.4 miles

262 ft · 66 ft



Attachment 9

Google Maps

Alpine Woman's Club, 2156 Alpine Blvd, Alpine, CA 91901 to Wright's Field, 1951 Tavern Rd, Alpine, CA 91901

Walk 2.5 miles, 51 min



via Alpine Blvd and S Grade Rd	51 min	2.5 miles
via Tavern Rd and S Grade Rd	56 min	2.8 miles

230 ft · 108 ft



Attachment 10

Google Maps

Alpine Woman's Club, 2156 Alpine Blvd, Alpine, CA 91901 to Wright's Field, 1951 Tavern Rd, Alpine, CA 91901

Walk 2.8 miles, 56 min



via Alpine Blvd and S Grade Rd — 51 min, 2.5 miles

via Tavern Rd and S Grade Rd — 56 min, 2.8 miles

226 ft · 105 ft



February 27, 2023

Anna Prowant
County of San Diego, Dept. of Parks and Recreation
Alpine Park Environmental Review
5550 Overland Avenue, Suite 410
San Diego, CA 92123
CountyParksCEQA@sdcounty.ca.gov

Dear Anna Prowant,

I97-1 Thank you for the extension of time to provide comments. The reasoning behind why the comment period was extended was not clear. It became evident after reviewing that the documents had been updated after my second review began. Was the extension of two weeks enough time for the public to begin their review and comments of the updated version distributed in January on such a large document truly enough time? Why was this not made clear in the email sent by the CEQA email account requiring the public to learn this information in the attached flyer or webpage?

I97-2 Alpine County Park (sdparks.org) website is not updated on the status of the park which is misleading to the public. According to County of San Diego Parks and Recreation (DPR) in a May 2022 meeting, the Park Concept has changed. On this website it states the status of the Draft Environment Impact Report (DEIR) mentions the comment period of 2021, not the February 2023 status of recirculated DEIR. If the public were to google Alpine Park this is the information they would find. It is much harder to navigate to the page with the Recirculated DEIR.

I97-3 The source path for the DEIR, Public Review Documents (sdparks.org), is also misleading. For full transparency and accuracy, can you please clean your website sources up so the public has one location to access the most current status?

I97-4 There have been multiple Public Record Requests (PRA) requests made to DPR and the Alpine Community Planning Group (ACPG) between 2022-2023. These documents are too large to submit via email and DPR should have these on file. ACPG should have these files also available. I request all PRA records be submitted to the public record. Below are Google Drive links to all documents. Please confirm these documents are added to public record:

https://drive.google.com/drive/folders/1dr3XriegdIUOY2GjVJ6MQ-KNsBAehmkP?usp=share_link

https://drive.google.com/drive/folders/1iTAJJK9vvFZfMVoJz9Tzop70jfoXJh38?usp=share_link

https://drive.google.com/drive/folders/1dqn1QsDUKBbQjpZ94sDn8CP3rCPrlgLK?usp=share_link

https://drive.google.com/drive/folders/15I9IslGK7mGMmoLptYER9UnTArQ-74gc?usp=share_link

I97-5 Throughout the entire process, the public has requested information on the properties surveyed for joint use for mini-parks and has been denied. It is evident throughout the PRAs that proper analysis of these properties was not completed. In California Department of Fish and Wildlife's (CDFW) Notice of preparation letter dated April 7, 2021, they asked that other locations be considered (attached letter for reference). This seems to have been ignored during the original Environmental Impact Report and the

I97-5 cont. Recirculation Draft Environmental Impact Report. Please provide justification of why other locations have not been considered and share this information with the public.

I97-6 In CDFW's original DEIR letter regarding mitigation for the grasslands (letter attached for reference), they said that offsite mitigation is necessary. The recirculated DEIR states that the mitigation for the destruction of the grasslands would be in Wright's Field. This is confusing, Wright's Field is already a preserve. How can Wright's Field be used for mitigation?

I97-7 As disclosed within the PRAs, DPR was communicating with members of the ACPG, who were giving insight on how to communicate with the community and attempting to silence the majority voice. ACPG members were having backdoor conversations with DPR staff and keeping the community in the dark regarding the proposed park. As a community member this is offensive and unethical. Where is the transparency with the community's lead agency? Were there violations of Brown Act as a result?

I97-8 3-12 MM-BIO-6: Burrowing Owl Preconstruction Surveys: According to *Staff Report on Burrowing Owl Mitigation* (California Department of Fish and Game 2012) which the DEIR said it will be using, it suggested *three or more* surveys to be conducted. Yet the DEIR only mentions two surveys and a 30-day time between the surveys even though it is suggested to be three surveys. Was this a mistake in the DEIR? When is construction scheduled to begin? In addition, please be sure to follow the proper measures if it is not burrowing owl breeding season as special care will be needed. What is your source for 300 feet observation during construction? Documents state it should be 600 meters (almost 2,000 feet). Burrowing owls were also observed by the public on Tuesday, March 2, 2021.

I97-9 What is the anticipated timeline for construction? According to the DEIR, construction cannot be done during the breeding/nesting season "to keep the project in compliance with state and federal regulations…the bird breeding season is defined as January 15-September 15, which includes the tree-nesting raptor breeding season of January 15 to July 15, the ground-nesting raptor breeding season of February 1 to July 15, and the general avian breeding season of February 1 to September 15". In addition, the pupping season of roosting bats is typically April 1 through August 31. This would mean that the County has only 4 months a year to do any sort of construction. What will happen to the construction during the 8 months that breeding/nesting season occurs? Will The public look at disturbed land? You must comply with state and federal regulations.

I97-10 In conclusion, DPR needs to go back to the drawing board.

Thank you,

Courtney Norton

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courtney.norton88@gmail.com

State of California – Natural Resources Agency
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South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

April 7, 2021

Ms. Lorrie Bradley
Environmental Planner
County of San Diego, Department of Parks and Recreation
Lead/Public Agency
5500 Overland Avenue, Suite 410
San Diego, CA 92123
Lorrie.Bradley@sdcounty.ca.gov

Subject: Alpine County Park Project (PROJECT), Notice of preparation (NOP) of a Draft Environmental Report (DEIR), SCH #2021030196

Dear Ms. Bradley:

The California Department of Fish and Wildlife (CDFW) received a NOP of a DEIR from the County of San Diego (County) Department of Parks and Recreation (DPR) for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding the activities involved in the Alpine County Park Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" (see Fish & G. Code, § 2050) of any species protected under the California Endangered Species Act (CESA; Fish & G. Code, § 2050 et seq.) or the Native

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Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

CDFW also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program. The County participates in the NCCP program by implementing its approved Subarea Plan (SAP) under the County Multiple Species Conservation Plan (MSCP). The Project site is located with the boundaries of the County's approved MSCP covering southwestern San Diego County. Although the MSCP is permitted under both the California NCCP and federal Habitat Conservation Plan (HCP) programs, the MSCP did not provide take coverage for the Quino checkerspot butterfly (*Euphydryas editha quino*), a federal endangered species that has been identified onsite. Impacts are therefore being addressed by the U.S. Fish and Wildlife Service (USFWS) under a separate HCP.

PROJECT DESCRIPTION SUMMARY

Proponent: County DPR

Objective: The Project site is in the area covered by the Alpine Community plan. The site is subject to the General Plan Rural Lands Regional Category, with an Open Space-Conservation land use designation in the western portion of the property and a Semi-Rural Residential land use designation in the eastern portion. The Project site encompasses 98 acres. Twenty-five acres will be developed and turned into an active park and the 73 acres that will not be developed will be designated as open space and managed as part of the MSCP Preserve. The 25-acre active park will include: multi-use turf areas, baseball field, all-wheel area, bike skills area, recreational courts (i.e., basketball, pickleball, game table plaza), fitness stations, leash-free dog area, restroom facilities, administrative facility/ranger station, equestrian staging with a corral, nature play area, community garden, volunteer pad, picnic areas with shade structures, picnic tables, game table plaza, and trails. Included in the Project boundary will be a parking area with 250-275 single vehicle spaces. There will be two entrances to the parking area located on South Grade Road. The Project site will be open to the public from sunrise to sunset. Dogs are allowed on leashes in the Project boundaries and off-leash in the designated dog area. As stated above, the 73 acres that will not be developed will be called the Alpine Park Preserve (Preserve), and monitored and managed by the County. This management will include maintenance of one mile of existing trail and closure of informal use trails. The HCP will also include restoration and habitat enhancement for the Quino checkerspot butterfly.

Location: The Project site is in eastern San Diego County, one mile south of Interstate 8, and approximately one mile south of the center of the town of Alpine. Alpine is an unincorporated community in the eastern portion of the County and is approximately 25 miles east of downtown San Diego. The Project site is north of South Grade Road, east of Tavern Road, and adjacent to the Backcountry Land Trust's (BCLT) Wright's Field Preserve. Residential and rural communities surround the 98-acre site.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

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Specific Comments

1) Consider Alternative Location(s). Due to the presence of highly sensitive habitats (clay soils, native grassland) and species on and/or adjacent to conserved areas of Wright's Field, CDFW recommends that the forthcoming DEIR include an alternative location or locations that would meet the needs of the community yet avoid or minimize impacts while not reducing the remaining acreage of the large block of habitat encompassing the Wright's Field conservation area.

2) Biological Baseline Assessment. CDFW recommends that the DEIR provide a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project site, with emphasis upon identifying endangered, threatened, sensitive, regionally and locally unique species, including any Covered Species under the County's approved MSCP, and sensitive habitats. Impact analysis will aid in determining any direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. CDFW recommends avoiding or minimizing impacts to any sensitive natural communities found on or adjacent to the Project. The DEIR should include the following information:

    a) Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region [CEQA Guidelines, § 15125(c)]. The DEIR should include measures to fully avoid and otherwise protect Sensitive Natural Communities from Project-related impacts. Project implementation may result in impacts to rare or endangered plants or plant communities that have been recorded adjacent to the Project vicinity. CDFW considers these communities as threatened habitats having both regional and local significance. Plant communities, alliances, and associations with a state-wide ranking of S1, S2, S3, and S4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by visiting https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities;

    b) A complete floristic assessment within and adjacent to the Project area, with particular emphasis upon identifying endangered, threatened, sensitive, and locally unique species and sensitive habitats. This should include a thorough, recent, floristic-based assessment of special status plants and natural communities.

    c) A complete, recent, assessment of the biological resources associated with each habitat type onsite and within adjacent areas that could also be affected by the Project. CDFW's California Natural Diversity Database (CNDDB) should be reviewed to obtain current information on any previously reported sensitive species and habitat. CDFW recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp;

    d) CNDDB indicates the occurrence of several special status species within the Project vicinity. The DEIR should have a complete, recent, assessment of rare, threatened, and endangered, and other sensitive species onsite and within the area of potential

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effect, including California Species of Special Concern and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050 and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of the Project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the USFWS; and,

e) A recent wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years as long as there was not a prevailing drought during the time of the botanical survey. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if build out could occur over a protracted time frame, or in phases.

3) Management Plan. A site Resource Management Plan (RMP) for the 73-acre Preserve should be completed before any trails are opened to the public. A discussion is needed on the impacts of the designated trails that will be located throughout the Preserve and the cumulative impacts that will result from an increase in human activity. The RMP will need to address how these impacts will be monitored and managed in the Preserve.

4) Listed Species and California Species of Special Concern (SSC). CNDDB indicates that State rare (SR), CDFW Watch List (WL), CDFW fully protected (FP), SSC, or California Endangered Species Act (CESA)-listed (i.e., State Endangered (SE) or State Threatened (ST)) or federal Endangered Species Act (ESA)-listed (i.e., federal Endangered) (FE) or federal Threatened (FT) or a candidate for federal listing (FC)) are known in and adjacent to the Project area. Also indicated below are species which are covered by the South County (i.e., existing/approved) MSCP (SC) and species which are preliminarily proposed for coverage under the forthcoming East County MSCP (EC)).

   a) Sensitive plant species known in the Project area include (but are not limited to): Cuyamaca larkspur (*Delphinium hesperium* ssp. *cuyamacae*, SR); Dehesa beargrass (*Nolina interrata*, SE, SC); Dunn's mariposa lily (*Calochortus dunnii*, SR, SC); Encinitas baccharis (*Baccharis vanessae*, FT, SE, CS); Gander's ragwort (*Packera ganderi*, SR, EC); Mexican flannelbush (*Fremontodendron mexicanum*, FE, SR); and San Diego thorn-mint (*Acanthomintha ilicifolia*, FT, SE, SC).

   b) Sensitive amphibians and reptiles include (but are not limited to): arroyo toad (*Anaxyrus californicus,* FE, SSC, SC, EC); Blainville's horned lizard (*Phrynosoma blainvillii,* SSC, EC, SC); California glossy snake (*Arizona elegans occidentalis*, SSC); coast patch-nosed snake (*Salvadora hexalepis virgultea*, SSC, EC); coast range newt (*Taricha torosa*, SSC, EC); coastal whiptail (*Aspidoscelis tigris stejnegeri*, SSC); Coronado skink (*Plestiodon skiltonianus interparietalis*, WL, EC); orange-throated whiptail (*Aspidoscelis hyperythra beldingi*, WL, EC, SC); red-diamond rattlesnake (*Crotalus ruber*, SSC, EC); silvery legless lizard (*Anniella pulchra,* SSC, EC); southwestern pond turtle (*Actinemys pallida*, SSC, EC, SC); two-striped gartersnake (*Thamnophis hammondii*, SSC, EC); and western spadefoot (*Spea hammondii*, SSC, EC).

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c) Sensitive bird species include but are not limited to: Bell's sparrow (*Artemisiospiza belli*, WL); coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis,* SSC, EC, SC); coastal California gnatcatcher (*Polioptila californica,* FT, SSC, SC); Cooper's hawk (*Accipiter cooperii*, WL, SC); golden eagle (*Aquila chrysaetos*, WL, FP, EC, SC); least Bell's vireo (*Vireo bellii pusillus,* FE, SE, EC, SC); southern California rufous-crowned sparrow (*Aimophila ruficeps canescens,* WL, EC, SC); southwestern willow flycatcher (*Empidonax trailii extimus,* FE, SE, EC, SC); Swainson's hawk (*Buteo swainsoni*, ST, SC); tricolored blackbird (*Agelaius tricolor*, ST, EC, SC); and yellow-breasted chat (*Icteria virens*, SSC).

d) Sensitive invertebrates include (but are not limited to): Hermes copper butterfly (*Lycaena hermes*, FC, EC) and Quino checkerspot butterfly (FE, EC).

e) Sensitive mammals include but are not limited to: American badger (*Taxidea taxus*, SSC, SC); Dulzura pocket mouse (*Chaetodipus californicus femoralis,* SSC); northwestern San Diego pocket mouse (*Chaetodipus fallax*, SSC); San Diego desert woodrat (*Neotoma lepida intermedia*, SSC); San Diego black-tailed jackrabbit (*Lepus californicus bennettii,* SSC, EC); pallid bat (*Antrozous pallidus*, SSC, EC); pocketed free-tailed bat (*Nyctinomops femorosaccus*, SSC); big free-tailed bat (*Nyctinomops macrotis*, SSC); Townsend's big-eared bat (*Corynorhinus townsendii*, SSC, EC); western mastiff bat (*Eumops perotis californicus*, SSC); western red bat (*Lasiurus blossevillii*, SSC); and western yellow bat (*Lasiurus xanthinus*, SSC).

5) Quino Checkerspot Butterfly. The Project Description indicates the presence of Quino checkerspot butterfly onsite. This butterfly is federally endangered and a County Group 1 species. This species is found only in western Riverside County, southern San Diego County, and northern Baja California, Mexico (USFWS 2003). The DEIR should make provisions to avoid the occupied area: however, further discussion should be included in the final document to address indirect impacts to the species.

a) Direct impacts to Quino checkerspot butterfly could result from Project construction and activities (e.g., equipment staging, mobilization, and grading); ground disturbance; vegetation clearing; and trampling or crushing from construction equipment, vehicles, and foot traffic. Indirect impacts could result from fugitive construction dust coating foraging habitat, and other edge effects associated with landscaping and fencing.

b) CEQA provides protection for CESA- and ESA-listed species. Quino checkerspot butterfly is federally endangered and CDFW considers impacts to federally threatened species a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures.

6) Vernal pools. The Project site is adjacent to the BCLT Wright's Field Preserve which has vernal pools present. The Project Site has species present that are associated with vernal pools such as western spadefoot and contains high levels of clay soil which are known to support vernal pools and sensitive species. Vernal pools are considered a rare resource, as it is estimated over 95% of vernal pools in California have been destroyed (USFWS 1998). CDFW considers the loss of these pool complexes to be regionally and biologically

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significant. To fully avoid impacts to vernal pools and depressions, the entire sub-watershed that supports the hydrology of the pool/depression should be avoided and conserved.

7) Biological Direct, Indirect, and Cumulative Impacts. Due to the proximity of the Project site to the Alpine Park Preserve and BCLT's Wright's Field Preserve, it is essential to understand how the open space and biological diversity within it may be impacted by Project activities. CDFW recommends providing a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. The following should be addressed in the DEIR:

    a) A discussion regarding indirect Project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with an NCCP (NCCP, Fish & G. Code, § 2800 et. seq.). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR;

    b) A discussion of potential adverse impacts from lighting, noise, temporary and permanent human activity, and exotic species and identification of any mitigation measures;

    c) A discussion on Project-related changes on drainage patterns downstream of the Project site; the volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site. The Project includes plans for an underground parking structure; therefore, the discussion should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary, and the potential impacts on the habitat (if any) supported by the groundwater. Mitigation measures proposed to alleviate such Project impacts should be included;

    d) An analysis of impacts from land use designations and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the DEIR; and,

    e) A cumulative effects analysis, as described under CEQA Guidelines section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

8) Sensitive Bird Species. The Project plans indicate that existing undeveloped land will be developed for the 25-acre park. A review CNDDB indicates occurrences of special status bird species the Project vicinity. Project activities occurring during the breeding season of nesting birds could result in the incidental loss of fertile eggs, or nestlings, or otherwise lead to nest abandonment in habitat directly adjacent to the Project boundary. The Project could also lead to the loss of foraging habitat for sensitive bird species.

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a) CDFW recommends that measures be taken to avoid Project impacts to nesting birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the MBTA).

b) Project activities including but not limited to staging and disturbances to native and nonnative vegetation, structures, and substrates should occur outside of the avian breeding season which generally runs from February 15 through August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, CDFW recommends surveys by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). Project personnel, including all contractors working onsite, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

9) Landscaping. The Project Description includes landscaped areas and a community garden on the Project site. Habitat loss and invasive plants are a leading cause of native biodiversity loss. CDFW recommends that the DEIR also stipulate that no invasive plant material shall be used. Furthermore, we recommend using native, locally appropriate plant species for landscaping on the Project site. A list of invasive/exotic plants that should be avoided as well as suggestions for suitable landscape plants can be found at https://www.cal-ipc.org/solutions/prevention/landscaping/.

General Comments

1) Project Description and Alternatives. To enable CDFW to adequately review and comment on the Project from the standpoint of the protection of plants, fish, and wildlife, we recommend the following information be included in the DEIR:

a) A complete discussion of the purpose and need for, and description of, the Project, including all staging areas and access routes to the construction and staging areas; and,

b) A range of feasible alternatives to Project component location and design features to ensure that alternatives to the proposed Project are fully considered and evaluated. The alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources and wildlife movement areas.

2) Compensatory Mitigation. The DEIR should include mitigation measures for adverse Project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration or enhancement should be discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore would not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or

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acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement, financial assurance, and dedicated to a qualified entity for long-term management and monitoring. Under Government Code section 65967, the Lead Agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or non-profit organization to effectively manage and steward land, water, or natural resources on mitigation lands that it approves.

3) Long-term Management of Mitigation Lands. For proposed preservation and/or restoration, the DEIR should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist the County in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Emily Gray, Environmental Scientist, at Emily.Gray@wildlife.ca.gov.

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Sincerely,

DocuSigned by:
David Mayer
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Environmental Program Manager I
South Coast Region

ec: CDFW
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References

California Department of Fish and Wildlife. 2020. California Natural Diversity Database. Available from: https://wildlife.ca.gov/Data/CNDDB.

California Department of Fish and Wildlife. 2020. Lake and Streambed Alteration Program. Available from: https://wildlife.ca.gov/Conservation/LSA.

Cowardin et al. 1970. Classification of Wetlands and Deepwater Habitats of the United States.

San Diego (1998). San Diego Multiple Species Conservation Program, Plan. Final MSCP Program Plan, August 1998.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2008. A Manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.

U.S. Fish and Wildlife Service. 1998. Vernal Pools of Southern California Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon. 113 pp.

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November 15, 2021

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Governor's Office of Planning & Research

Nov 15 2021

STATE CLEARINGHOUSE

Subject: Comments on the Draft Environmental Impact Report for the Alpine Park Project, SCH# 2021030196

Dear Ms. Prowant:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a Draft Environmental Impact Report (DEIR) from the County of San Diego (County) Department of Parks and Recreation (DPR) (Lead Agency) for the Alpine Park Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding the activities involved in the Alpine Park Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW Role

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" (see Fish & G. Code, § 2050) of any species protected under the California Endangered Species Act (CESA; Fish & G. Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

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CDFW also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program. The County participates in the NCCP program by implementing its approved Subarea Plan (SAP) under the San Diego County Multiple Species Conservation Plan (MSCP). The Project site is located with the boundaries of the County's approved MSCP covering southwestern San Diego County. Noteworthy is that the Wright's Field area was added to the Pre-Approved Mitigation Area (PAMA) of the County's MSCP SAP due to its very high biological resource values. More specifically, the heavy clay soils, extensive network of native grasslands with scattered vernal pools, and the presence of a number of highly sensitive plant and animal species make Wright's Field a unique area within the MSCP subregion. Although the MSCP is permitted under both the California NCCP and federal Habitat Conservation Plan (HCP) programs, the MSCP did not provide take coverage for the Quino checkerspot butterfly (*Euphydryas editha quino*; Quino), a federal endangered species that has been identified onsite. Impacts to Quino are therefore being addressed by the U.S. Fish and Wildlife Service (USFWS) under a separate HCP.

PROJECT DESCRIPTION AND SUMMARY

Proponent: San Diego County Department of Parks and Recreation

Objective: The Project site is in the area covered by the Alpine Community plan. The Project site is currently zoned as Limited Agricultural Use (A70) and Open Space (S80). The site is subject to the General Plan Rural Lands Regional Category, with an Open Space-Conservation land use designation in the western portion of the property and a Semi-Rural Residential land use designation in the eastern portion. The Project site encompasses 96.6 acres of undeveloped land. Twenty-five acres will be developed and turned into an active park and the remaining 71.6 acres that will not be developed will be designated as open space and managed as part of the MSCP Preserve. The 25-acre active park will include: multi-use turf areas, baseball field, all-wheel area, bike skills area, recreational courts (i.e., basketball, pickleball, game table plaza), fitness stations, leash-free dog area, restroom facilities, administrative facility/ranger station, equestrian staging with a corral, nature play area, community garden, volunteer pad, picnic areas with shade structures, picnic tables, game table plaza, and trails. Included in the Project boundary will be a parking area with 250-275 single vehicle spaces. There will be two entrances to the parking area located on South Grade Road. The Project site will be open to the public from sunrise to sunset. Dogs are allowed on leashes in the Project boundaries and off-leash in the designated dog area. As stated above, the 71.6 acres that will not be developed will be called the Alpine Park Preserve (Preserve) and monitored and managed by the County. This management will include maintenance of one mile of existing trails and closure of informal use trails. An HCP addressing impacts to Quino checkerspot butterfly will include restoration and habitat enhancement for the species.

Location: The Project site is in eastern San Diego County, one mile south of Interstate 8, and approximately one mile south of the center of the town of Alpine. Alpine is an unincorporated community in the eastern portion of the County and is approximately 25 miles east of downtown San Diego. The Project site is north of South Grade Road, east of Tavern Road, and adjacent to the Backcountry Land Trust's (BCLT) Wright's Field Preserve. Residential and rural communities surround the 96.6-acre site.

Timeframe: There is no official start date, but Project construction will take 16 months to complete.

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COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. CDFW's comments are also intended to assist the County Parks Department to ensure the project meets the conditions of the County MSCP SAP.

I. Environmental Setting, Mitigation Measures, and Related Impact Shortcoming

Comment #1: Presence of Western Spadefoot (*Spea hammondii*) Egg Mass

Issue: In the Biological Resources Report (BRR), in internal Appendix B, Table 2 notes the presence of western spadefoot eggs in an onsite road rut (AP-007) during fairy shrimp protocol surveys. Western spadefoot was not addressed in the DEIR as being present on the Project site. Page 4.4-3 in the DEIR identifies special-status species that were observed and/or have the potential to occur but does not mention western spadefoot in this section. The DEIR also states on page 4.4-30 that it would not have an effect on state or federal wetlands, which is true in the context of wetlands. However, in the impact discussion it states, "No wetland features or aquatic resources were found within the BSA during any field surveys." Although there may not be jurisdictional wetland features onsite, the soils onsite have the ability to hold water, allowing for an ephemeral species such as the western spadefoot to use the site for breeding and presumably for estivation and foraging.

Specific Impact: Direct impacts to western spadefoot could result from Project construction and activities (e.g., equipment staging, mobilization, and grading); ground disturbance; vegetation clearing; and trampling or crushing from construction equipment, vehicles, and foot traffic. Indirect impacts could result from temporary or permanent loss of suitable nonbreeding habitat and breeding habitat.

Why Impacts Would Occur: Western spadefoots are burrowing anurans that breed in ephemeral pools, but the majority of their life is spent underground in adjacent terrestrial habitat. In a recent study, inland populations of western spadefoot showed dispersal up to 187 meters from a breeding pool (Halstead et al. 2021). This means that there is a high potential for adult western spadefoots on or near the Project site. Without appropriate species-specific avoidance measures, biological construction monitoring may be ineffective for detecting western spadefoot or other Species of Special Concern (SSC). This may result in trampling or crushing of western spadefoot individuals or egg masses. Demolition and paving after false negative conclusions may trap wildlife hiding under refugia and burrows.

Evidence Impacts Would Be Significant: Western spadefoot is a candidate species under the federal Endangered Species Act (ESA), and a California Species of Special Concern (SSC). Western spadefoot is not a covered species in the County's MSCP SAP. Impacts to special-status species are discussed in section 4.4 in the DEIR but do not include western spadefoot. The DEIR states that "MM-BIO-1 through MM-BIO-5 would reduce the Project's impacts on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS, to less-than significant level." CDFW appreciates the intention behind these

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mitigation measures but is concerned that the measures do not provide enough specificity to avoid or minimize impacts to special status species. CEQA provides protection not only for California Endangered Species Act (CESA)- and ESA-listed species, but for any species including, but not limited to, SSC. CDFW considers impacts to SSC a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. Take of SSC could require a mandatory finding of significance by the Lead Agency (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure

Mitigation Measure #1: Species-specific Surveys, Habitat Creation, Post-relocation Monitoring - Prior to the start of the Project, ground disturbance, construction, or site preparation activities, the applicant shall retain the services of a qualified biologist to conduct pre-construction surveys for western spadefoot toad within all portions of the Project site containing suitable breeding habitat. Surveys shall be conducted during a time of year when the species could be detected (*e.g.*, the presence of rain pools). If western spadefoot toad or additional egg masses are identified on the Project site, the following measures will be implemented.

(1) Under the direct supervision of the qualified biologist, western spadefoot toad breeding habitat shall be created within suitable natural sites outside the developed area plus a minimum 50-foot buffer from the forthcoming development; a minimum 100-foot buffer is recommended if it can be accommodated by the Project design. The amount of occupied breeding habitat to be impacted by the Project shall be replaced at a minimum of 2:1 ratio. CDFW recommends that two pools be created at disparate locations to off-set the loss of the existing breeding pool. The actual relocation sites design, and locations shall be approved by the Wildlife Agencies. The locations shall be in suitable habitat as far away as feasible from any recreation activities. The relocation basins shall be designed such that they only support standing water for several weeks following seasonal rains in order that aquatic predators (*e.g.*, fish, bullfrogs, and crayfish) cannot become established. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing pool(s) as feasible. No site preparation or construction activities shall be permitted in the vicinity of the currently occupied pool until the design and construction of the pool habitat in preserved areas of the site has been completed and all western spadefoot toad adults, tadpoles, and egg masses detected are moved to the created pool habitat.

(2) Based on appropriate rainfall and temperatures, generally between the months of February and April, the biologist shall conduct pre-construction surveys in all appropriate vegetation communities within the development envelope. Surveys will include evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas of the site. All western spadefoot adults, tadpoles, and egg masses encountered shall be collected and released in the identified/created relocation basins described above.

(3) The qualified biologist shall monitor the relocation site for five years, involving annual monitoring during and immediately following peak breeding season such that surveys can be conducted for adults as well as for egg masses and larval and post-

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larval toads. Further, survey data will be provided to CDFW by the monitoring biologist following each monitoring period and a written report summarizing the monitoring results will be provided to CDFW at the end of the monitoring effort. Success criteria for the monitoring program shall include verifiable evidence of toad reproduction at the relocation site.

Comment #2: Impacts to Native Grassland Habitat

Issue: The DEIR proposed 11.73 acres of offsite mitigation for impacts to native needlegrass grassland but does not provide the location of where this mitigation will take place. The Project needs to meet compensatory mitigation requirements of the MSCP, which require impacts to be mitigated at a 2:1 ratio, assuming that the mitigation will occur within the PAMA of the County's MSCP SAP. This is a relatively large amount of native grassland requiring replacement and may be very difficult to accomplish.

Specific impact: Valley needlegrass grassland is at the central and southern area of the BSA and it represents a large contiguous vegetation community that is unique in this area. Without an offsite mitigation site, the Project would result in permanent loss of native needlegrass grassland. This vegetation community is known to provide habitat for special-status plant and wildlife species including Quino, and it is considered prime foraging habitat for several species of raptors.

Why Impacts Would Occur: Native grasslands provide habitat for special-status plants and wildlife species. Impacts to special-status plants and wildlife species may occur through habitat loss or modification, resulting in reduced reproductive capacity, population declines, or local extirpation of a sensitive or special-status plant or wildlife species.

Evidence Impacts Would Be Significant: The DEIR states that valley needlegrass grassland is the most common vegetation community in the Biological Survey Area (BSA), compromising 22.1 acres of the total BSA. In the BSA there is also disturbed valley needlegrass grassland (0.8 acre) and nonnative grassland (9.1 acres). Valley needlegrass and disturbed valley needlegrass habitat are Tier I communities under the County's MSCP SAP. The DEIR indicates that County DPR will provide compensatory mitigation for sensitive vegetation communities within the open space and/or within offsite locations. Table 4.4-4 states that 27.73 acres is required to mitigate for impacts to native grassland (Tier I) communities, with 16 acres of onsite mitigation and 11.73 acres of offsite mitigation. Inadequate avoidance, minimization, and mitigation measures for impacts to sensitive vegetation communities will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or (USFWS).

Recommendation #1

CDFW recommends the County DPR retain a suitable offsite mitigation location for impacts to native grassland communities. Once the site has been chosen, it will need to be approved by CDFW and USFWS (Wildlife Agencies) prior to commencement of Project activities.

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II. Additional Comments and Recommendations

Comment #3: Monitoring Bat Boxes

CDFW appreciates the MM-BIO-5 that states County DPR will work with a bat expert to design and install bat boxes prior to removal activities. We also appreciate the level of monitoring that is proposed after the bat boxes are installed. CDFW requests to be notified of any ongoing coordination and that the monitoring information be included in annual reports and/or be included in the County's annual report for the MSCP.

Comment #4: Alternative Project Design

CDFW acknowledges that the County could construct an active use park and be consistent with the requirements of the MSCP and appreciates the coordination that has occurred with County Parks to minimize impacts from an active park project. CDFW nonetheless recommends that a design for a more "passive park" be further considered as an alternative because of the presence of highly sensitive habitats (clay soils, native grassland, oak woodland) and species on and/or adjacent to the conserved areas of Wright's Field. In Section 6 of the DEIR, four parks were proposed as alternatives. Of these four parks, Alternative 4, Reduced Project Alternative, proposes a reduced active park acreage of 20 acres and 76 acres of open space. CDFW appreciates that this alternative is included in the DEIR, but Alternative 4 would still include active use features such as multi-use fields, baseball field, basketball and pickleball courts with the estimated daily capacity of up to 500 visitors. The impacts from these activities include lighting, noise, and other human disturbance.

Recommendation #2

CDFW recommends adding an alternative for a fully passive park design. This design would include the passive-use elements that are included in the Alternative 4 park design but would eliminate the active-use features. A passive park would allow the County to meet some of the recreational objectives for the Alpine community, provide an open space preserve and minimize impacts to the habitat encompassing the Wright's Field conservation area. Project alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources. A project alternative should be considered even if an alternative would impede to some degree the attainment of the Project objectives or would be more costly (CEQA Guidelines, § 15126.6).

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to

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CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist the San Diego County Department of Parks and Recreation in identifying and mitigating Project impacts on biological resources and for consistency with the MSCP.

Questions regarding this letter or further coordination should be directed to Emily Gray, Environmental Scientist at Emily.Gray@wildlife.ca.gov.

Sincerely,

DocuSigned by:
David Mayer
D700B4520375406...
David Mayer
Environmental Program Manager
South Coast Region

Ec:
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Jonathan Snyder, – Jonathan_Snyder@fws.gov

References

California Environmental Quality Act (CEQA). California Public Resources Code in section 21000 et seq. The “CEQA Guidelines” are found in Title 14 of the California Code of Regulations, commencing with section 15000.

California Office of Planning and Research. 2009 or current version. CEQA: California Environmental Quality Act. Statutes and Guidelines, § 21081.6 and CEQA Guidelines, § 15097, §15126.4(2)

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California Department of Fish and Wildlife. 2020. California Natural Diversity Database. Accessed at: https://wildlife.ca.gov/Data/CNDDB.

California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline. Fish & Game Code §3503

County of San Diego Multiple Species Conservation Plan, https://www.sandiegocounty.gov/content/sdc/pds/mscp/sc/docsmaps.html#docs

County of San Diego. 1998. San Diego Multiple Species Conservation Program, Plan. Final MSCP Program Plan, August 1998.

Halstead, B.J. et al. 2021. Conservation Implications of Spatiotemporal Variation in the Terrestrial Ecology of Western Spadefoots. The Journal of Wildlife Management 85(7):1377-1393;2021. DOI: 10.1002/jwmg.22095.

Attachment A:

CDFW Mitigation Measures and Recommendations:

	Mitigation Measures	**Timing**	**Responsible Party**
Mitigation Measure #1: **Species-specific Surveys, Habitat Creation, Post-relocation Monitoring**	Prior to the start of the Project, ground disturbance, construction, or site preparation activities, the applicant shall retain the services of a qualified biologist to conduct pre-construction surveys for western spadefoot toad within all portions of the Project site containing suitable breeding habitat. Surveys shall be conducted during a time of year when the species could be detected (*e.g.*, the presence of rain pools). If western spadefoot toad or additional egg masses are identified on the Project site, the following measures will be implemented. (1) Under the direct supervision of the qualified biologist, western spadefoot toad breeding habitat shall be created within suitable natural sites outside the developed	Prior to/after construction	County DPR

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	area plus a minimum 50-foot buffer from the forthcoming development; a minimum 100-foot buffer is recommended if it can be accommodated by the Project design. The amount of occupied breeding habitat to be impacted by the Project shall be replaced at a minimum of 2:1 ratio. CDFW recommends that two pools be created at disparate locations to off-set the loss of the existing breeding pool. The actual relocation sites design, and locations shall be approved by the Wildlife Agencies. The locations shall be in suitable habitat as far away as feasible from any recreation activities. The relocation basins shall be designed such that they only support standing water for several weeks following seasonal rains in order that aquatic predators (*e.g.*, fish, bullfrogs, and crayfish) cannot become established. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing pools as feasible. No site preparation or construction activities shall be permitted in the vicinity of the currently occupied ponds until the design and construction of the pool habitat in preserved areas of the site has been completed and all western spadefoot toad adults, tadpoles, and egg masses detected are moved to the created pool habitat. (2) Based on appropriate rainfall and temperatures, generally between the months of February and April, the biologist shall conduct pre-construction surveys in all appropriate vegetation communities within the development envelope. Surveys will include evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas of the site. All western spadefoot adults, tadpoles, and egg masses encountered shall be collected and released in the identified/created relocation basins described above (3) The qualified biologist shall monitor the relocation site for five years, involving annual monitoring during and immediately		

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	following peak breeding season such that surveys can be conducted for adults as well as for egg masses and larval and post-larval toads. Further, survey data will be provided to CDFW by the monitoring biologist following each monitoring period and a written report summarizing the monitoring results will be provided to CDFW at the end of the monitoring effort. Success criteria for the monitoring program shall include verifiable evidence of toad reproduction at the relocation site.		
Recommendation #1	CDFW recommends the County DPR retain a suitable offsite mitigation location for impacts to native grassland communities. Once the site has been chosen, it will need to be approved by CDFW and USFWS (Wildlife Agencies) before the start of the Project.	Prior to construction	County DPR
Recommendation #2	CDFW recommends adding an alternative that includes a fully passive park design. This design would include the passive-use elements that are included in the Alternative 4 park design but would eliminate the active-use features. A passive park would still allow the County to meet some recreational objectives for the Alpine community, provide an open space preserve and minimize impacts to the habitat encompassing the Wright's Field conservation area. Project alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources. A project alternative should be considered even if an alternative would impede to some degree the attainment of the Project objectives or would be more costly (CEQA Guidelines, § 15126.6).	Prior to construction	County DPR

Kyle Ogle and Dominique Norton
2623 Calle de Compadres
Alpine, CA 91901

February 26, 2023

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project, State Clearinghouse No. 2021030196 Chapters and Associated Technical Appendices

Dear Ms. Prowant,

I98-1 We believe that the Draft Environmental Impact Report (DEIR) and the Recirculated Sections of the DEIR (RS DEIR) have not addressed the issues raised in our original comment letter dated November 15, 2021. We request responses to the concerns and comments our letters raised.

INADEQUATE ALTERNATIVES CONSDIERED

I98-2 The RS DEIR fails to comply with California Code of Regulations (CCR) Title 14 Section 15126.6. Per CCR Title 14 Section 15126.6(a) "…An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." An EIR "must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." EIR should include "a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects" (CCR Title 14 § 15126.6(c). The RS DEIR fails to comply with CCR Title 14 § 15126.6 based on the "No Project" and "Passive Park" alternatives.

I98-3 The RS DEIR includes a "No Project" Alternative (Alternative 1) stating "the site would remain undeveloped and would not include 25 acres of active recreational uses..." and further states "the creation of a Habitat Conservation Plan for the remaining 71.6 acres would also **not** occur under this alternative". The RS DEIR fails to comply with CEQA in that what is included is NOT a "No Project" Alternative. A true "No Project" Alternative should have been included which assumes the continuation of existing conditions on the Project site through a Habitat Conservation Plan, meaning the site would remain an undeveloped open space area.

I98-4

While I appreciate that a “Passive Park” Alternative was included in the RS DIER as many members of the public including myself requested that this alternative be selected at this site, it is still disappointing that a thoughtfully included passive park was not included and thus dismissed since it didn’t meet "most of the basic objectives of the project”. The RS DEIR “Passive Park” Alternative (Alternative 5) states the “…site would be developed with a 0.23-acre passive park” and further states “…a formalized parking area with access to the existing trails through disturbed areas to ensure that no vegetation would be affected. The Passive Park Alternative would establish the existing 1.1 miles of multi-use trails for public use.” The passive park that was included missed the mark. The RS DEIR fails to include a passive park that the public has continuously advocated for, a nature-based passive park, which could have included numerous features to “feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects” and thus been the “environmentally superior alternative”. This passive park could have been included to meet the definition of either a “open-space area” or “preserve” as defined in the County’s General Plan and the Alpine Community Plan thus furthering the goals of these plans. Decision makers were not presented with an alternative that could have been reasonability considered as part of this CEQA process.

I98-5

The RS DEIR states the “Reduced Project” Alternative (Alternative 4) “would be the environmentally superior alternative because it would feasibly attain most of the basic objectives of the project while lessening significant effects of the project. Under the Reduced Project Alternative (Alternative 4), the largest number of significant impacts would be reduced by eliminating the bike and skate portions of the active park.” However, this Alternative would directly impact native grassland and Engelmann oak woodland which provides habitat to listed species and species of special concern. This property is within the Multiple Species Conservation Program (MSCP) and a core wildlife area within a Pre-Approved Mitigation Area (PAMA). Per the MSCP, PAMA “…was developed based on a series of models that determine the best area to assemble the Preserve. The PAMA encompasses the area with highest biological value in the South County Plan Area, where the Covered Species and their habitats are most likely to be found.” Any loss of native grassland habitat will impact the overall function and viability of the grassland including the lands that have already been preserved in Wright’s Field using County funds. Alternative 4 conflicts with the goals of the County’s County General Plan Conservation and Open Space Element to “…minimize future development in areas with significant natural resources that are identified in the Conservation and Open Space Element”.

I98-6

The RS DEIR states the Alpine Community Plan includes a “Policy/Recommendation 1: Encourage the development and preservation of a system of open space for wildlife corridors linking residential areas to permanent open space in the Cleveland National Forest and nearby lakes and wildlife preservation areas.” The RS DEIR claims that “The project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites would also disrupt the existing wildlife corridor” and the site is effectively an “island” and not utilized as a wildlife corridor. This is an unfounded claim as mule deer have been observed by residents in close proximity south and southeast of the project site and by residents close to Alpine’s Post Office on the north side of Wright’s Field. The observation of mule deer can indicate the presences of predator species such as mountain lions.

I98-6 cont. The RS DEIR fails to adequately survey for the presence of species that utilize the site as a corridor.

I98-7 The Hazards and Hazardous Materials Section of the RS DEIR references a 2008 letter regarding a proposed high school on the same site as the proposed park. The RS DEIR states, "A March 20, 2008, letter from DTSC to the Grossmont Union High School District dated March 20, 2008, concluded that there were no hazardous material releases or presence of naturally occurring hazardous materials at the project site". This reference is used in this Section as a way to avoid the need for a present-day assessment of the project site for hazardous materials. Yet a letter dated February 20, 2009 in which the San Diego Department of Parks and Recreation co-signed regarding the same high school proposal (attached) has been completely ignored. The 2009 letter states development of this EXACT site has "…significant and not mitigable… biological resources". The site is in a "…Pre-Approved Mitigation Area (PAMA) and adjacent to Wright's Field Preserve, an integral part of the County of San Diego's South County Multiple Species Conservation Program (MSCP) Subarea Plan…Loss of this much grassland habitat would impact the overall function and viability of the grassland including the lands that have already been set aside as preserve with significant expense to the County and community." Development of this site "…would result in a direct and cumulative conflict with the San Diego County MSCP Subarea Plan…Any loss of native grassland habitat will impact the overall function and viability of the grassland including the lands that have already been preserved with significant expense to the County and community. Additionally, indirect effects associated with lighting, noise, invasive plants from landscaping, and ground moisture changes from irrigation runoff and impervious surfaces would also negatively affect the surrounding natural and preserved areas…" Since the 2009 letter was signed, the resources have not changed thus any development of this site would cause the same direct and indirect impacts. Development of the site as anything short of a passive park/open space would cause unmitigable impacts and thus be a violation of the CEQA.

I98-8 The RS DEIR fails to include "…a reasonable range of potentially feasible alternatives" and falls short to "…foster informed decision making and public participation." (CCR Section 15126.6(a)) thus the RS DEIR is in violation of CEQA.

LACK OF JUSTIFICATION OF NEED

I98-9 The justification of need for additional park acreage used in the DEIR and the RS DEIR is based on misguided future population growth projections.

I98-10 Per page 144 of the County Parks Master Plan (December 2020), "Given both the small count of facilities and acreage of local parks in Alpine, the CPA is experiencing a 22.91-acre deficit of local park facilities to meet the standard." However, these needs are based on old populations growth projections and does not take into consideration San Diego Association of Governments' (SANDAG) Series 14 growth projections which were available prior to the release of the original DEIR as noted in the attached letter.

I98-11 In addition, even if Alpine was deficient in parkland, the County's own Parks Master Plan (December 2020) states "…Given the significant amount of vacant land in Alpine, conversion of

I98-11 cont.

vacant lands to parks should prove relatively easy if funding can be identified for park construction and ongoing operation and maintenance". The RS DEIR states "mini-parks" or "pocket parks" were dismissed in Section 6 of the RS DEIR because they would not meet the DEIR's objectives. The County's own Parks Master Plan includes a map of many locations throughout Alpine that could have been evaluated and improved under JEPA and could have easily been done to meet "most of the basic objectives of the project". Since the original DEIR was released for public comments the County finished upgrades to existing fields at Joan MacQueen Middle School under a Joint Exercise of Powers Authority (JEPA). More effort should have been made to evaluate space in Alpine to create pocket parks under JEPA.

I98-12

Further, the various County documents including the Alpine Community Plan and the General Plan Environmental Justice Parks and Recreation Access reference the goal for 10 acres of local park land for every 1,000. However, the County should take a critical look at the use of this ratio for unincorporated areas of the county. A 1968 study titled "Recreation in the Nations" funded by the National League of Cities, Department of Urban Studies level of service for CITIES should be "…10 acres of park and recreation land for each 1,000 inhabitants. The American Society of Planning Officials, although accepting 10 acres of parks for each 1,000 population for cities having less than 500,000 inhabitants…" however, "park and recreation departments in practice have set out to establish realistic goals tailored to community needs rather than accept theoretical standards." (attached) https://www.govinfo.gov/content/pkg/CZIC-gv53-n26-1968/html/CZIC-gv53-n26-1968.htm. In trying to understand if this standard should be used in the unincorporated rural areas of San Diego County, I spoke with the American Planning Association on 2/17/2023. The representative shared the level of service (LOS) ratio based on acres to population has not been an "industry standard" for 30+ years. The representative shared a paper (attached) which explains new standards for LOS. For clarity purposes, the American Planning Association is a professional organization representing the field of urban planning in the United States and was formed in 1978, when two separate professional planning organizations, the American Institute of Planners and the American Society of Planning Officials, were merged into a single organization.

I98-13

I also learned that the National Parks and Recreation Association has a tool/database that municipalities can use to understand how their LOS compares to other similarly sized municipalities. An October 2020 article titled "A New Approach to Parks and Recreation System Planning" on the National Parks and Recreation Associations webpage states "…there are no longer any nationally accepted standards for parks and recreation planning. Each community must determine its own standards, LOS metrics, and long-range vision for its parks and recreation system based on community issues, values, needs, priorities and available resources." https://www.nrpa.org/parks-recreation-magazine/2020/november/a-new-approach-to-parks-and-recreation-system-planning/ (attached). Forcing the use of an outdated parkland-to-people ratio on unincorporated areas of the County is misguided. The County needs to take a critical look at the LOS standards being prescribed County-wide.

I98-14

The DEIR and RS DEIR continue to fail to include the true interest of the community. The community has tried to participate in this public process but continues to be dismissed and bullied by San Diego County staff. Our interests are not adequately reflected in the proposed

I98-14 cont.

park. Rather, members of the San Diego County Parks and Recreation staff and multiple members of the Alpine Community Planning Group have steered the project and continue to misrepresent the community's interest. Documentation that was developed as part of the February 2019 Board of Supervisors meeting that included the vote to approve funding for the acquisition of the project site states the "Alpine Community Planning Group continues to request that the County construct sports fields." Yet, when pressed in meetings, the Alpine Community Planning Group has never substantiated their claims that the public has requested additional sports fields. Nor were these claims substantiated in records obtained from the Alpine Community Planning Group via a Public Records Act request. The County has never produced data that supports the claims that the community desires the amenities included in the park.

I98-15

CUMULATIVE IMPACTS

Since the comment period of the DEIR was completed, signs stating bikes can use the full lane have been installed along South Grade Road from Tavern to Calle de Compadres, the prosed main entrance for the park. This was done without any community involvement or knowledge. In addition, the Alpine Community Planning Group has been working with the Department of Public Works to establish the "Alpine Loop" which is a DG earth path that creates a loop from the center of Alpine around the project site. This effort has been discussed publicly in Alpine Community Planning Group meetings and with the stated goal of - to provide safe access to the park. Neither improvement were included in the DEIR or RS DEIR cumulative impacts section.

I98-16

FAILURE TO WRITE A THOUGHTUFL DEIR

Information in the RS DEIR was not thoughtfully or thoroughly updated. For example, the RS DEIR states that construction will occur in Fall 2022, references were not included correctly as in the Wildfire Section states "Rohde and Associates as 2020" yet this is a 2021 report, and the RS DEIR inappropriately references the Updated Alpine Community Plan which has not been adopted. Without a complete document, the public and decision makers are UNABLE to make an educated and thoughtful review of the proposed project.

I98-17

As a layperson, the Hazards and Hazardous Materials section is very hard to understand. But it is alarming that thresholds are set based on the distance to a school yet homes with young children are within closer proximity to the project site than students in the nearby schools. The RS DEIR states that it is unclear if contaminated soils are present and relied on a 2008 letter and no efforts were made to evaluate this risk in present day. The RS DEIR states "Impact HAZ-1: Potential Release of Contaminated Soil" "MM-HAZ-1 would ensure proper identification, handling, and disposal of contaminated soils if they are encountered on the project site." I am concerned for the health of my children and children in our community. Exposure to contaminated soil may occur prior to identification and proper handling, already exposing our children. The entire CEQA process for this project has eroded my trust in the lead agency and County's ability to do trusted thorough work.

I98-18

WILDFIRE SECTION

I would like it to be clear to decision makers that South Grade Road is the ONLY route to evacuate the local population and is already heavily used daily. The 2021 Rohde and Associates Report provided with the RS DEIR states "Vehicle access onto South Grade Road should be carefully evaluated since this route serves as a regional route for evacuation traffic and carries

I98-18 cont.

significant traffic daily. Care should be undertaken to promote best uninterrupted traffic flow while providing safe access and egress to park facilities. Use of median turn lanes and traffic visual constraints should be included in development of access design as blind corners currently exist on South Grade Road." HOWEVER, the RS DEIR clearly states, "The project would not include any roadway improvements to South Grad Road." No improvements will be made by the County to improve safety of the roads even though their own hired consultants stress that modifications should be made to provide safe access. In addition the RS DEIR states "The project would not include any roadway improvements to South Grad Road, beyond constructing a decomposed granite pathway in the existing right-of-way adjacent to the park. The bike lanes would act as a by-pass in an emergency situation". South Grade does not have existing bike lanes. As noted above, the County recently added signs that state the bikes can share the lane for this very reason.

I98-19

The Wildfire Section goes on to state "Operation of the project could introduce new conditions that could exacerbate wildfire risk at the project site". Alpine is a Very High Fire Hazard Severity Zone and much care needs to be taken to not contribute to this fire risk. Any increase in time to evacuate, even if it is not considered significant, could result in loss of life and property. The Wildfire Section later states "While development of the project would reduce the fuel load on the project site by developing natural habitat with built environment, operation of the project would introduce visitors to the project site that were not previously present. Given the high percentage of wildfires in Southern California that are ignited by human-related causes, this could exacerbate the existing wildfire risks on site." How can the County promote any development and use County-wide funds that would contribute to an increased fire risk? Is the proposed park in alignment with the February 2022, policy adopted by the Board of Supervisors which was intended to limit development in rural high fire risk areas?

I98-20

BIOLOGICAL RESOURCES SECTION

While I appreciate the improved Biological Resources Section, I am alarmed to see how much has changed. What I mean by this is it is alarming to see how much was originally omitted in this section in the original DEIR. The public is relying on the County as the lead agency to do a detailed review of the resources along with a thoughtful consideration of impacts. The first DEIR failed to even acknowledge the presence of numerous listed species and species of special concern until the first round of comments was completed and members of the public raised these concerns in their comment letters.

I98-21

The RS DEIR states "Impacts on Wright's Field Operation of Alpine Park and its associated trails has the potential to increase usage on trails within the adjacent Wright's Field Preserve." Thank you for acknowledging the very likely potential that the Alpine Park will cause spillover effect on Wright's Field. However, the claims that "…Impacts on the Wright's Field trail system from the presence of the active park are not expected to dramatically change the nature or intensity of trail usage at Wright's Field because of both the distance from the park to Wright's Field and the different usage preferences..." and "operation of Alpine Park is not anticipated to result in significant impacts on special-status plants or animals in the adjacent Wright's Field Preserve." The RS DEIR states "The presence of the active park has the potential to draw additional people onto the trails and open space/preserve areas" yet the preserve area is so limited that people will also be drawn to Wright's Field. In addition, the proposed active park

will bring a new group of people to the site who might not have otherwise visited the area. It is not unreasonable for someone to continue to explore the area and venture into Wright's Field if they have just finished using the all-wheel park, or wrapped up their ball sporting match, thus the claim that "users who come to the active park for ball sports or skateboarding are not anticipated to also be hiking the distances required to access Wright's Field..." It is important to clarify that the vast majority of those who currently hike Wright's Field are accessing that property already via the County's property so "…hiking the distances required to access Wright's Field regularly…" is not unfathomable as the following statement in this section states "users can currently park along South Grade Road to access trails within the County's parcel and do so regularly." Parking to the west of Wright's Field is limited at best as the local streets do not allow for parking to access the field. The public will continue to park on the eastern side to access Wright's Field even if the property is developed into an active park since it is the easiest access point. Parking will still occur on South Grade Road and Calle de Compadres unless no parking zones are created.

I98-21 cont.

CONCLUSION

The County continues to make no effort to modify the proposed park to meet the requests of the community. The RS DEIR should be revised to incorporate the publics wishes and to be in compliance with CEQA. Thank you for an opportunity to the RS DEIR and I look forward to reading the Final EIR.

I98-22

Thank you,
Kyle Ogle and Dominique Norton

CC: San Diego County Board of Supervisors:
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ERIC GIBSON
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February 20, 2009

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San Diego, CA 92131

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE GROSSMONT UNION HIGH SCHOOL DISTRICT'S HIGH SCHOOL NO. 12

The County of San Diego has received and reviewed the Draft Environmental Impact Report (DEIR) dated January 6, 2009 for the Grossmont Union High School District's proposed High School No. 12 in the unincorporated community of Alpine. In response to the DEIR the County, as a responsible agency under CEQA Section 15381, has comments that identify environmental issues that may have an affect on the unincorporated lands of San Diego County. County Department of Planning and Land Use (DPLU), Department of Public Works (DPW) Transportation Division, and Department of Parks and Recreation (DPR) offer the following comments regarding the content of the document:

GENERAL

The document is well written and does a good job of identifying the issues and environmental impacts on the three potential sites for the new high school. We appreciate the thoroughness of the document in analyzing all three locations at the same level of review. Due to the significant and not mitigable impacts to biological resources for Alternative B (Wright's Field) and the direct implications to the County's Multiple Species Conservation Plan, the County cannot recommend that this site be

chosen for such an intensive land use. However, the other two sites appear to be viable options for consideration.

BIOLOGY

1. Study Area B is located within the County's Wright's Field Pre-Approved Mitigation Area (PAMA) and adjacent to Wright's Field Preserve, an integral part of the County of San Diego's South County Multiple Species Conservation Program (MSCP) Subarea Plan. To date, the County, in partnership with the Back Country Land Trust (BCLT), has acquired 252 acres for open space within the Wright's Field Preserve, owned and managed by the BCLT. The County contributed approximately $1.4 million toward this open space preservation. Loss of this much grassland habitat would impact the overall function and viability of the grassland including the lands that have already been set aside as preserve with significant expense to the County and community. A significant amount of native grassland, such as at Wright's Field, is a very rare habitat in San Diego County and any impacts to it would be considered significant. Since Wright's Field is one of only approximately three remaining areas of significant amounts of intact native grassland in San Diego County, we agree with the significant and not mitigable finding in the DEIR since in-kind mitigation is probably not be feasible.

2. It is agreed that Alternative B would result in a direct and cumulative conflict with the San Diego County MSCP Subarea Plan and would remain significant with implementation of the measures identified in the EIR. Any loss of native grassland habitat will impact the overall function and viability of the grassland including the lands that have already been preserved with significant expense to the County and community. Additionally, indirect effects associated with lighting, noise, invasive plants from landscaping, and ground moisture changes from irrigation runoff and impervious surfaces would also negatively affect the surrounding natural and preserved areas. From a biological and regional planning perspective Alternative B remains the least preferable of the three alternative sites.

3. Executive summary -The acreage of impacts to native grasslands associated with Alternative B is inconsistently stated at Summary of Impacts, Biological Resources (8.23 acres) and Significant Residual Impacts (27 acres) and Table S-1 MM BIO B.1.b (29 acres).

4. Executive summary - Please correct references to the San Diego County MSCP Subarea Plan instead of the MSCP and San Diego County Subarea Plan in the executive summary and elsewhere in the document.

5. The County concurs with impact BIO B.8 that the impacts to the Pre-Approved Mitigation Area (PAMA) are significant and not mitigable.
6. Executive Summary, Significant, Residual Impacts - Please revise as follows: Alternative B would result in a significant, potentially unmitigable loss of approximately 27 acres of native grassland within the ~~MSCP and~~ San Diego County MSCP Subarea Plan through development of a core wildlife area within a PAMA. The impact on native grassland within the PAMA conflicts with the MSCP Subarea Plan and the goals of the General Plan and the Alpine Community Plan related to preservation of natural resources.

CULTURAL RESOURCES

Staff has reviewed the cultural resources portions of the report titled, *"Draft Program Environmental Impact Report for High School Number 12"*, dated January, 2009, prepared by ICF Jones & Stokes. (Note: The Cultural Resources Technical Report, Appendix E, was not provided.) The DIER provides an overview of the potential impacts to cultural resources that were identified at each of the three alternative locations: Alternate B-Wright's Field, Alternate G-Chocolate Summit and Alternate J-Lazy-A Ranch. Each alternative location will impact significant or potentially significant cultural resources.

7. County DPLU concurs with the record search and survey work summarized in the DEIR for this project relating to cultural resources both historic and prehistoric. Staff found the research thorough and well documented and is satisfied that the known important prehistoric sites will be avoided. Sites to be avoided and preserved by easement include CA-SDI-5199 in Alternative B, and sites CA-SDI-8722, CA-SDI-17194, CA-SDI-17195, CA-SDI-17196 and CA-SDI-17197 in Alternate J.

8. Staff does have concerns with the sites that have not been tested and/or evaluated (both historic and prehistoric) that will be impacted in each of the three alternatives. All site testing and evaluation is proposed after project approval and location selection, prior to grading. However, should human remains be uncovered in the prehistoric sites, or the historic structures prove to be significant, there is no opportunity is provided for alternatives to the proposed mitigation. In addition, no opportunity is given for the public to comment on the testing and evaluation of these resources.

9. Staff is concerned that the proposed mitigation for Historical Documentation (HABS/HAER) alone may not be adequate for the destruction of significant historic structures (should site assessment determine significance). In the case

of Architectural Heritage Association v. County of Monterey, 122 Cal.App.4th 1095 (2004), it was found that "archival documentation cannot normally reduce destruction of an historic resource to an insignificant level". Also in the case of League Protection of Oakland, 52 Cal.App.4th 896 (1997), the Court of Appeal held that the historic resources of the building to be demolished "normally cannot be adequately replaced by reports and commemorative markers".

10. Should future evaluation of the historic structures determine significance pursuant to CEQA criteria, DPLU recommends that adaptive reuse of the historic structures be considered as an alterative. It is understood that some of the buildings may be in poor condition, and that there is a cost associated with rehabilitation; however, CEQA requires mitigation of significant structures to a level below significance and all mitigation measures should be considered. In addition, rehabilitation can use the California Historical Building Code as adopted by the State Historical Building Safety Board, located in Title 24, Part 8. It is also published in the latest adopted California Building Code as Chapter 34, Existing Buildings, Division II, California Historical Building Code. DPLU recommends that the EIR evaluation of the historic structures include an analysis of what would be required for adaptive reuse of the significant structures.

11. Staff has noted that site of Alternative B, Wright's Field is the same site for the proposed Park Alpine project TM 5433, a 142 acre subdivision for 41 single family residential lots.

12. Additionally, a portion of Alternative J, Lazy-A Ranch, is an open County project: Oak Creek at Lazy A Ranch, project numbers: SP 07-002; GPA 07-010, REZ 07-011, TM 5546, MUP 07-016 for a residential subdivision. The parcels included in the Oak Creek project are: 404-231-05 and 404-042-01.

If you have questions regarding cultural resources, please contact Gail Wright with the Department of Planning and Land Use at (858) 694-3003.

LAND USE

13. Summary Page S-41 – LU B.1 states in the second paragraph that "mitigation measures could be implemented to reduce stadium and PA noise" yet on page S-44, it appears that these are required. LU B.1 does not imply that these measures will be required or pursued. Please clarify.

14. Section 3.8 Land Use - Discussion of the effects of the proposed project on planned land uses should include reference to the County's Community Trails

Master Plan (CTMP), which is the implementing document for the County Trails Program described in the Public Facilities Element of the San Diego General Plan. The CTMP contains adopted individual community trails and pathway plans.

Communities participating in the CTMP are doing so because they have reached a consensus on the importance of recreational trails in their area and have expended considerable time and effort in formulating community trails plans. The Alpine Community Trails and Pathways Plan identifies proposed trail corridors within each of the three proposed school sites. The DEIR should be revised to include an analysis of any potential conflicts with or impacts to these proposed trails and pathways.

If you have any questions regarding trails or pathways locations, trail alignment study, or potential options, please contact Maryanne Vancio, County Trails Program Coordinator, Department of Parks and Recreation at 858-966-1372 or e-mail at: maryanne.vancio@sdcounty.ca.gov.

TRANSPORTATION AND TRAFFIC

Transportation Division staff has reviewed the following documents regarding the proposed Grossmont Union High School District, High School #12 in the Alpine community:

- Traffic Impact Analysis (TIA) prepared by Kimley-Horn and Associates dated December 2008

- Draft Program Environmental Impact Report prepared by ICF Jones & Stokes dated January 2009

TRAFFIC IMPACT ANAYSIS (TIA)

15. The proposed high school project will generate substantial new and redistributed trips onto County Circulation Element roads in the Alpine area. The proposed projects will result in significant cumulative traffic impacts to Circulation Element Road throughout the Alpine area.

16. The proposed project should contribute to the County's Transportation Impact Fee (TIF) Program to mitigate the proposed projects cumulative traffic impacts.

17. An opening year traffic assessment with 1,100 students and the existing road network and horizon year (2030) traffic assessment with 2,200 students and

build-out of the County Circulation Element Roads by others assessment is provided. At this time, there is no proposed condition that would restrict expansion of the school to 2,200 students prior to 2020. The TIA should include an analysis of the school's peak capacity of 2,200 students in the Existing/Opening-Year Scenario. There is also no guarantee that other projects will construct the Circulation Element Roads prior to expansion of the school to 2,200 students. A phased traffic assessment should be provided based upon the anticipated road network at the time the school enrollment is expanded.

18. A near term cumulative traffic assessment, (existing plus project plus near term projects) should be provided. Preparation of the list of near-term / cumulative proposed / pending projects should be coordinated with the Department of Planning and Land Use.

19. On page 6-30 it is noted that fairshare contributions toward the installation of traffic signals should be provided to mitigate direct impacts at several intersections. Fairshare contributions alone will not fully mitigate a direct traffic impact.

20. The TIA should identify what uses are allowed under the existing land use permits for each of the proposed alternatives and compare it to the proposed school trip generation.

21. The TIA should include an assessment of potential impacts at the Marshall Road (El Tinge Drive)/Alpine Boulevard intersection.

22. The TIA should specify the traffic volume on Alpine Boulevard between East Victoria Drive and Marshall Road (El Tinge Drive). The TIA should assess potential traffic impacts at this location.

23. Construction permits from the County of San Diego will be required for access onto the County Circulation Element Roads at the proposed driveways and for any other work within the County right-of-way.

24. The TIA should provide greater detail and analysis of the proposed driveways / access points for each of the alternatives. The need for turn pockets and acceleration lanes should be assessed. Based upon the anticipated traffic volumes turn pockets and other access improvements should be constructed by the proposed project prior to construction of the proposed school.

25. Conceptual plans for access, intersection and other improvements in the County right-of way should be provided. The following are access related items which should be addressed:

    - Corner sight distance adequacy at the project driveways.
    - Lane geometric improvements at each of the project driveways/intersections.
        - Conceptual striping and signing plans should be provided for all proposed road improvements and should identify existing and/or proposed bike lanes. (Both South Grade Road and Alpine Boulevard are part of the County's Bicycle Roadway Network.)
        - The TIA should demonstrate that the throat length at driveways and the bay length of any dedicated turn lanes on County roadways will be sufficiently long enough to minimize traffic queues during peak pick-up/drop-off times.
    - County's Design Standards for minimum driveway/road spacing.

26. Frontage improvements along the proposed school sites should be provided.

27. Dedications and preservation of right-of-way along the ultimate County Circulation Element Road cross sections should be identified and provided.

28. The safe routes to school for each project site should be identified. Identification and assess of the provision of pedestrian facilities along the proposed safe routes to school should be provided for each site.

29. The TIA should identify the proposed school operation times and how those proposed times would impact the peak traffic periods.

30. The Traffic Volume Adjustment exhibits should be included in the main body of the text, not in the Appendix. Also, this section should include an exhibit showing the existing school's traffic volumes on roadway segments. At this time, it is not possible to determine if "Plus Project " scenarios/tables/exhibits are correctly showing the net result between adding the proposed projects' trips and subtracting the existing school's trips.

31. Tables 8-1 and 8-2 should be consistent when arranging the study area columns.

32. For the Study Area B alternative, the TIA recommends the installation of traffic signals as mitigation measures for impacts to several intersections. Traffic signal warrants should be prepared to verify that traffic signal warrants are

satisfied. The installation of traffic signals on County maintained roads would also require approval from the County Board of Supervisors.

33. For Study Area G, an evaluation of the potential for pedestrians crossing the South Grade Road at the intersection of South Grade and Via Viejas should be provided.

34. For the Study J alternative, pedestrian facilities should be provided/verified between the intersection of Alpine Boulevard/East Victoria Drive and the access to the proposed high school.

35. For the Study J alternative, the proposed high school project will result in direct traffic impacts to the Alpine Boulevard/East Victoria Drive intersection, the Alpine Boulevard Willows Drive intersection, the I-8 Eastbound off ramp/Willows Road intersection and the I-8 Westbound onramp/Willows Road intersections. Mitigation measures to address these impacts should be proposed.

DEIR

36. Comments listed above for the proposed project's TIA should also be addressed in the DEIR.

Note to Land Development Project Manager: A copy of the TIA should be submitted to Caltrans for their review and comments.

If you have any questions regarding the above comments, please call Bob Goralka, County Traffic Engineer, with the Department of Public Works at (858) 874-4202.

In conclusion, the County would like to reiterate that Alternatives G and J appear to be viable sites for the intensity of development that a new high school would require. The biological impacts associated with Alternative B, considered a Biological Resouce Core Area (BRCA) would have far reaching impacts to the region and jeopardizes the ability of the County to meet the regional conservation goals of the San Diego County MSCP Subarea Plan. The County has made a significant investment in preserving the biology in the area and the development of a high school on the site would impede the connectivity of the wildlife corridors in the area and significantly reduce the sensitive habitats found on-site.

The County of San Diego appreciates the opportunity to participate in the environmental review process for the Grossmont Union High School District's proposed High School No. 12 in Alpine. We look forward to receiving future documents related to this project for review or to provide additional assistance at your request. If you have

any questions regarding these comments, please contact LeAnn Carmichael at (858) 694-3739.

Sincerely,

ERIC GIBSON, Director
Department of Planning and Land Use

cc: Vince Nicoletti, CAO Staff Officer, DCAO, M.S. A-6
Bob Goralka, Transportation Division, Department of Public Works, M.S. O334
Trish Boaz, Department of Parks and Recreation, M.S. O-29
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May 18, 2022

Via Electronic Mail Only

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Re: Comments re Environmental Impact Report for the Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant:

On behalf of the Cleveland National Forest Foundation ("CNFF") we submit these comments on the proposed Alpine Park Project ("Project") and the associated Environmental Impact Report ("EIR"). For the reasons set forth below, the County has failed to demonstrate a need for the Project. The Project is oversized, incompatible with the rural character of Alpine, would substantially increase overall vehicle miles travelled ("VMT"), and would convert open space in an area with substantial sensitive biological resources to an active recreational facility.

The project proposes construction of a sports complex immediately adjacent to Wrights Field, a 230-acre nature reserve. The Project, which would develop 25 acres of various recreational uses, would include parking spaces for up to 275 vehicles. A sports complex of this size in a rural setting would not only serve Alpine area residents, but would attract people from distant areas as well, resulting in increased VMT and corresponding increases in greenhouse gas emissions.

Importantly, the Project is fundamentally inconsistent with SANDAG's Regional Plan and Sustainable Communities Strategy ("SCS"), which includes among its strategies to "focus housing and job growth in the urbanized areas where there is existing and planned transportation" and to "protect the environment and help ensure the success of smart growth land

use policies by *preserving sensitive habitat, open space, cultural resources, and farmland*."[1] The preeminent goal and performance target of SANDAG's Regional Plan, as mandated by SB 375, is to reduce per-capita CO2 emissions from cars and light-duty trucks to meet the California Air Resources Board's 2020 and 2035 reduction targets for the region. Id.

In addition, the July 2020 Regional House Needs Allocation ("RHNA") Plan reduced the housing allocation for the 2021-2029 planning cycle in the County's unincorporated areas by 15,000 units compared to the allocation in the previous cycle. The units were transferred from the rural unincorporated areas to already urbanized areas that have established infrastructure, transit corridors, and jobs for the express reasons of making housing and transportation more affordable and to reduce VMT and greenhouse gas emissions. This means that compliance with SANDAG's Regional Plan and the RHNA would limit development in rural lands in and adjacent to forest lands, such as Alpine.

The Alpine Park Project was purportedly planned to accommodate population growth and demographic changes anticipated in the area. However, the most recent Regional Plan, indicates otherwise. SANDAG adopted the 2021 Regional Plan[2] and certified the associated EIR,[3] both of which incorporate the Series 14 Regional Growth Forecast which SANDAG adopted in October 2019.[4] The Regional Plan shows a drastic reduction in the projected growth in the County's unincorporated areas.

Specifically, whereas SANDAG's Series 13 housing forecast calculated an increase of 51,123 housing units in the unincorporated county between 2012 and 2050,[5] SANDAG's current Series 14 housing forecast *reduces* this projected growth to an increase of just *7,419 housing units* in all unincorporated areas countywide during a similar timeframe (2021 Regional Plan, Appendix F at p. F-13). This reduction in population growth in the county's unincorporated areas consequently means the Project is not necessary to accommodate growth, because the projected growth rate for the Alpine area is now substantially reduced.

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[1] SANDAG 2015 Regional Plan at 26 (emphasis added), available at https://sdforward.com/pdfs/Final_PDFs/Chapter2_A_Strategy_for_Sustainability.pdf (last accessed January 14, 2022).
[2] Available at https://sdforward.com/mobility-planning/2021-regional-plan, last visited January 12, 2022.
[3] Available at https://sdforward.com/mobility-planning/eir/, last visited January 12, 2022.
[4] Available at https://sdforward.com/docs/default-source/final-2021-regional-plan/appendix-f---regional-growth-forecast-and-scs-land-use-pattern.pdf?sfvrsn=8fc1fd65_2, last visited January 12, 2022.
[5] SANDAG Series 13 Regional Growth Forecast at p. 8, available at https://www.sdforward.com/pdfs/Final_PDFs/AppendixJ.pdf, last visited January 12, 2022.

In brief, in order to be consistent with SANDAG's 2021 Regional Plan and Series 14 forecast and RHNA, the County will have to *reduce* Alpine's housing allocation from the current General Plan, which will result in significantly less population growth in the Alpine area. Based on the foregoing, there no reasonable argument supporting the need for a park project of the proposed size.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



Joseph "Seph" Petta

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RECREATION IN THE NATION'S CITIES

PROBLEMS AND APPROACHES

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PREFACE

This report deals with three aspects of municipal recreation. First, it identifies municipal recreation problems and needs and discusses the reasons for increased recreation needs. Second, it examines various solutions to the recreation problems existing in cities, with particular emphasis being given to intergovernmental approaches, to full utilization of resources, and to new and imaginative approaches. Third, the report' outlines the various planning methods used in city recreation departments. Particular attention is given to the emerging role of citizens in the formation and review of park and recreation development plans.

The information on which this report is based was obtained from a study of 15 cities - New York, New York; Chicago, Illinois; Los Angeles, California; Baltimore, Maryland; St. Louis, Missouri; Pittsburgh, Pennsylvania; San Antonio, Texas; Atlanta, Georgia; Minneapolis, Minnesota; Oakland, California; Tampa, Florida; Dayton, Ohio; Nashville, Tennessee; Peoria, Illinois; and Portland, Maine. Selection of the cities was made jointly by the National League of Cities and the Bureau of Outdoor Recreation on the basis of geographical location and population size, as well as on a preliminary examination of their recreation programs. It is believed that the information obtained from these 15 cities presents an accurate picture of the various elements and factors to be considered in the formulation of core city recreation programs. Further, it is believed that the common elements found in the various cities, both with respect to problems and solutions, will have general applicability to cities throughout the United States.

Basic information relative to city recreation problems and activities - including statistical data relative to finances and staffing - was obtained from appropriate recreation department personnel. Such basic data was supplemented by information received from mayors and other municipal and county administrators, including planning, finance, and personnel officials. Finally, unstructured interviews were conducted with community leaders, directors of civic associations, and representatives of semi-public agencies providing, or having an interest in, recreation.

The study was jointly financed by the Bureau of Outdoor Recreation, Department of the Interior, and the National League of Cities. It was carried out by the League's research staff under guidelines developed cooperatively. The purpose of the study was to point up the role of recreation in the total urban system, identify outdoor recreation needs. of the nation's cities, stimulate local officials and concerned citizens to expand programs and seek new solutions to recreation needs, and provide data useful in statewide and nationwide outdoor recreation planning.

The National League of Cities is deeply appreciative of the support provided by the Bureau of Outdoor Recreation, Department of the Interior, and for the valuable assistance provided by those in the Bureau responsible for guiding this project. Our greatest debt is, of course, to the hundreds of local government officials and employees who generously contributed their time to provide us the basic information without which this study could not have been completed. Preparation of this report was the responsibility of Peter D. Veillette, Lawrence A. Williams, and Eddie M. Young of the Urban Studies staff. They were assisted in the accumulation of data by Raymond L. Bancroft, Managing Editor of Nation's Cities, and Michael A. Fischetti and Andrew B. Horgan, III, also of the research staff. It is our hope that the data and viewpoints synthesized in this report will serve as a guide to local, state, and Federal officials and to private citizens as they attempt to meet the recreation needs of the nation's cities.

Patrick Healy
Executive Director

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SUMMARY OF MAJOR FINDINGS

AND CONCLUSIONS

I Location of parks and recreation facilities is a primary factor affecting the success of recreation programs. Consideration must be given to population density and the availability of public, transportation in the location of new facilities. The acquisition of large tracts in outlying areas will not meet the recreation needs of the great majority of city residents. Emphasis must be placed on neighborhood facilities. Rather than just providing acreage for football, baseball, and basketball, and swings and slides, programs meeting cultural, artistic, and creative needs must be provided as must facilities for sports that people can participate in all their lives.

2. City expenditures for park and recreation purposes have increased substantially in recent years. Although recreation has traditionally been given a relatively low priority in relation to other city services, city officials and recreation leaders indicate that recreation is beginning to be recognized as an essential local government function. However, in spite of a virtually unanimous commitment to increase recreation programs and opportunities, cities do not have the financial capability to sustain expanded recreation programs indefinitely.

3. Cities increasingly must look to state and Federal governments for the additional financial assistance necessary to sustain the desired level of recreation programs. Generally, state financial assistance to date has been negligible. Fortunately for cities, Federal aid has been more abundant. Major Federal programs from which city park and recreation programs are benefiting include Land and Water Conservation Fund, Neighborhood Facilities, Open-Space Land, Urban Beautification, and Community Action programs.

4. Optimum utilization of potential recreation resources is not being achieved in most of the nation's cities. The substantial acreage adjacent to, underneath, and above expressways and highway interchanges has been virtually undeveloped for recreation purposes. Publicly owned facilities with existing recreation capabilities are being underused. School facilities in particular, even in jurisdictions having city-school recreation agreements, are not being utilized effectively. To meet the rising demand for recreation, in spite of the declining availability of open space, cities must expand the multiple use of facilities, establish park-school complexes, and employ imaginative designs and new construction techniques.

5. Lack of communication among city, county, and private agencies is a major problem preventing the optimum utilization of existing recreational facilities and programs. As a consequence, coordination is inadequate between city and county recreation departments and between such departments and the various semi-public organizations

carrying on recreation activities. In addition, communication between recreation departments and the citizen is frequently inadequate. In the past, recreation officials have felt it sufficient merely to provide recreation opportunities. Today, citizens not only must be informed of the availability of the various programs, but also convinced that participation and utilization are worthwhile. However, communication alone is not enough. Recreation officials and recreation leaders must have the ability to relate departmental activities and programs to the needs of the community.

6. Cities must take into consideration the recreation needs of special segments of the population - the aged, the young, the handicapped, the economically and socially deprived - in developing priorities. In most. cities surveyed, officials readily admitted that the needs of all population groups were not being adequately met. Only in recent years have cities begun to recognize an obligatioIn to provide recreation for the handicapped and the deprived.

7. Residents of deprived urban neighborhoods are almost entirely dependent upon public recreation facilities, whereas residents of more affluent neighborhoods have a wide range of recreational alternatives. Adequate recreation programs and facilities thus are considered a high priority item among the deprived.

8. Residents of urban slum neighborhoods frequently charge that too much effort is directed toward park and recreation facilities for the middle and upper income groups, and that recreation planning is being performed by persons having no real knowledge of the needs or desires of the deprived. To overcome this charge, planners should encourage the participation of a wide spectrum of the community in the planning process. To be successful, recreation programs must be what the people want, not what the recreation department believes to be best for the people. Increased emphasis on citizen participation can be an essential component for the development of meaningful programs.

CITY RECREATION NEEDS

The recreation needs of the nation's cities are many and varied. Land, facilities, personnel, and financial resources are essential elements required to provide recreation and diversion for America's urban population. The increase in importance of city recreation has brought with it a host of organizational, administrative, and staffing problems. Striking a balance between citizens' demands on one hand, and the availability of funds on the other, has become the lot of the recreation director. Still another type of problem arises from an increased social awareness on the part of recreation officials, an awareness that recreation, like other governmental services, must be made available to all groups, including the economically disadvantaged, the physically and mentally handicapped, and the aged. However, of all city recreation problems, none is more basic, yet more difficult to determine, than the acreage needed for the construction of an adequate park and recreation system. Table 1, on the following page compares, for the 15 cities considered in this study, population, city area, although accepting 10 acres of parks for each 1,000 population for cities having less than 500,000 inhabitants, suggests 10 acres per 2,000 population for cities over 500,000, and 10 acres per 3,000 population for cities over 1,000,000. An alternative is to consider park acreage in relationship to the total area of the city. It has been suggested that 10 percent of the city area should be devoted to recreation and park purposes. The difficulty with such standards is that they do not take into account the recreational use to which the acreage will be put. Because the area required for different forms of recreation varies, type of activity is a major factor determining the amount of land that should be devoted to recreational use.

Park and recreation departments in practice have set out to establish realistic goals tailored to community needs rather than accept theoretical standards. Among the cities surveyed the ratio of park and recreation land to population ranged from a high of 46 acres per 1,000 in Peoria to a

population density, and park acreage. Examination of Table I points up the wide variation that can be found among cities of comparable population and geographical size.

Acreage Needs

Various efforts have been made for years to establish acreage standards that would be appli-. cable to all cities. The best known standard provides that a city should have 10 acres of park and recreation land for each 1,000 inhabitants. The American Society of Planning Officials, low of 2 acres per 1,000 in Chicago. Table 2 lists park acreage ratios for the 15 cities surveyed. Although some of these figures appear low corn-pared to the standard of 10 acres per 1,000, other factors should be considered, including the existence of other publicly and privately operated facilities. For example, in Dayton, the Miami Valley Conservancy District has 885 acres of land available to city residents for recreational purposes, and 10 privately owned facilities provide a total of 1,233 acres for park and recreation purposes. Multiple use of facilities may also permit a reduction in park acreage standards. The primary value of park and recrea-

tion standards lies in their use for long term planning. Adherence to such standards will not guarantee an adequate recreation program, nor will it assure full utilization of facilities, but standards do provide a framework within which both private citizens and professional recreation personnel can plan for future development.

Location

Acreage alone is not enough. Equally important is the location of parks and recreation centers. Despite extensive acreage, the simple fact remains that in all major cities large numbers of inhabitants do not have access to public recreational facilities because the parks are not where the people are. Studies in several cities show the inequities in recreational opportunities. In San Antonio, the Parks Master Plan, the City's parks and recreation plan adopted by the City Council in 1964, points out that two large areas of the City containing 62,000 inhabitants are not served by any parks. In Dayton, the Report on 1968 Summer Recreation, by the Health and Welfare Council, concluded that many West Dayton citizens were not being served because of the lack of parks, playgrounds, and centers in

TABLE 1

COMPARISON OF 1968 POPULATION, AREA, AND PARK ACREAGE IN 15 SELECTED CITIES'

City	Estimated population	Area in square miles	Population density per square mile	Park acreage	Park acreage as percent of totalarea
New York	8,171,000	300	27,237	37,991	19.8
Chicago	3,587,000	222	16,158	6,888	4.8
Los Angeles	2,873,500	A63	6,206	11,900	4.0
Baltimore	923,900	75	12,319	6,097	12.8
San Antonio	722,400	61	11,843	2,932	7.5
St. Louis	684,800	182	3,763	2,728	2.3
Pittsburgh	564,000	55	10,255	2,374	6.7
Atlanta	516,600	136	3,791	2,318	2.7
Minneapolis	493,100	53	9,304	5,314	15.7
Nashville2	457,500	527	868	4,905	1.5
Oakland	391,300	52	7,525	2,000	6.0
Tampa	324,900	85	3,822	1,123	2.1
Dayton	281,000	37	7,324	3,149	13.2
Peoria	137,900	37	3,940	6,647 3	28.1
Portland	71,400	22	3,245	655	4.7

Park data obtained from city recreation officials; area data determined by adding annexations since 1960 to area reported by U.S. Census Bureau; population figures computed by straight line extrapolation of population data obtained from city officials.

2Data is for Nashville-Davidson County consolidated government.

3Includes acreage o@vned by the Park District beyond the district boundaries.

their immediate neighborhoods. A 1965 report prepared for Baltimore, Parks and Recreation - must be considered in the location of recreation facilities. Although many cities have park

Study, Objectives, Standards, Deficiencies, concluded that the success of Baltimore's park and recreation program for the next 20 to 30 years will be dependent upon the location of recreation centers in those neighborhoods now lacking such facilities. Without the proper location, the best recreation programs will not succeed.

Factors Affecting Location

Three major factors - population density, availability of land, and availability of transportation and recreation facilities reasonably well distributed geographically, existing population density and housing patterns vary. The Board of Education in Chicago reports that population density of elementary school children varies from 1,900 to 17,000 students per square mile. Recreation facilities, therefore, should be located on the basis of population rather than geography. However, recreation facility needs almost always are in conflict with availability of land. The need for such facilities is almost always greatest in the densely populated areas where cost per acre is high. If such costs are

TABLE 2

PARK ACREAGE PER 1,000 RESIDENTS
IN IS SELECTED CITIES'

		Park acreage per 1,000 residents		
City	Estimated population 1968	Actual 1960	Estimated 1968	Estimated 1973
New York	8,171,000	4.5	4.6	4.9
Chicago	3,587,000	1.9	2.0	2.0
Los Angeles	2,873,500	4.8	4.5	4.2
Baltimore	923,900	6.0	6.2	6.3
San Antonio	722,400	5.0	5.8	6.0
St. Louis	684,800	3.6	4.2	4.5
Pittsburgh	564,000	3.6	4.1	NA2
Atlanta	516,600	NA 2	4.9	NA 2
Minneapolis	493,100	11.5	11.4	NA 2
Nashville	457,500	20.5	11.5	12.0
Oakland	391,300	5.7	6.2	6.3
Tampa	324,900	NA 2	3.7	NA 2
Dayton	281,000	9.5	10.5	12.7
Peoria	137,900	17.0	46.0	50.0
Portland	71,400	8.2	9.8	18.0

1 Park acreage data obtained from city recreation personnel.
2Not available.

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Intensive land usage, high population density, and a deficiency of open spaces persist in sections of every major American city. Here, a side street in New York's Harlem is closed to traffic and converted into a neighborhood play area. Photo: U.S. Bureau of Outdoor Recreation.

prohibitive, availability of quick, economical transportation must be considered in the location of recreation facilities. In the absence of adequate neighborhood recreational facilities, residents must use those areas that can be reached by public transportation.

Acquisition Methods

Cities have traditionally acquired park and recreation facilities by purchase, by gift, and by transfer. Land acquisition by purchase has become difficult, if not impossible, in most of the nation's cities. Except in outlying areas, vacant land is very scarce, and even in outlying areas it is extremely valuable. Even when there is land available, the need for new acreage far outstrips available funds. The City of Baltimore attributes most of its 6,000 acres of park land to a positive program of planned acquisition based upon recommendations made in various park surveys. The land acquisition program for Baltimore calls for the expenditure of over $7 million for land acquisition during the five-year period 1968 through 1973. Other cities report that land acquisition has been slow and sporadic. In San Antonio, for example, acquisition of park

land averaged only six acres per year between 1945 and 196 1, although it was estimated in the Master Park Plan that 170 acres should be added each year to the park system if the needs of City residents were to be met.

The acquisition of land for park and recreation usage through gifts has been an important factor in the development of municipal, park and recreation systems in American cities. Indeed, prior to 1930, cities reported that nearly one-third of their total acreage was acquired in this manner. For example, the land for the two largest parks in Pittsburgh, containing 955 acres, or 42 percent of the total park and recreation acreage, was donated to the City. Unfortunately, land acquired in this manner is seldom located in areas of greatest need.

Acquisition of park and recreation land by transfer of title has taken on increased significance in recent years. Such transfers may occur between governmental jurisdictions, but more frequently between two city departments. An example of

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this type of acquisition would be the transfer of a municipal reservoir, no longer in use, from the water department to the park department. The New York City Recreation Department reported it has constructed playgrounds on sites acquired from other city departments.,In many cases, this land was vacant and unsuitable for other uses. Other devices used to acquire land for parks and recreation include acquisition by tax liens; condemnation; joint development of land with schools and with public and private housing agencies; development in connection with parkways, expressways, and civic centers; and by reclamation of waterfront and other neglected or submarginal 'areas. It is estimated that New York City has added approximately 1,500 acres of new park and recreation land through the sanitary landfill method alone. The Chicago Park District, under its lakefront development plan set forth in The Comprehensive Plan of Chicago, intends to add 1,200 acres of recreation land through the landfill method. Atlanta is considering the use of land along the network of

Construction of neighborhood playgrounds is frequen rly cited as the most pressing recreational need of cities. In Portland, Maine, the inclusion of a wading pool adds greatly to the value of a recreation facility. Photo: U.S. Bureau of Outdoor Recreation.

creeks, streams, and rivers, that form the City's flood plains. In spite of these efforts, most cities

surveyed indicated a continuing need for additional acreage. Table 3 lists park acreage by major classification for the cities surveyed, and estimates of future acreage needs.

Facility Maintenance

Use of park and recreation facilities is directly related to the condition in which these facilities are maintained. Littered parks, poorly lit recreation centers, and broken park and recreation equipment have a negative recreational value. Conditions such as these discourage use of parks and recreation centers, and contribute to further littering and vandalism. Over the years, routine maintenance of recreation facilities has not kept pace with needs. Consequently, most cities surveyed indicate that approximately 20 to 50 percent of their facilities will require extensive repair within five years. It was generally agreed by both city officials and private citizens that sufficient funds are not being spent for the proper maintenance and upkeep of park and recreation areas. To overcome this problem, the City of Los Angeles instituted in the 1966-67 fiscal year a program to refurbish all recreation facilities. Within three years it is hoped that all facilities will be rehabilitated; then these facilities will be maintained on a two-year basis. A unique aspect of the maintenance of facilities in New York is that the City manufactures much of the equipment used on its 861 playgrounds and recreational sites. The City manufactures in its own shops about 5,000 pieces of equipment each year, including benches, slides, swings, and picnic tables.

Construction of new facilities is one indicator of the extent to which cities are attempting to meet the recreational needs of their citizens. On this basis it would appear that the nation's cities are making a determined effort. Baltimore officials report that during 1967 the City opened five recreation centers and seven new playgrounds, and that the budget for 1968 contains over $2 million for the construction of new recreation facilities. Similarly, in 1968, the Chicago Park District constructed 32 swimming pools, 13 spray pools, 22 multiple purpose basketball and volleyball courts, 4 fieldhouses, and a new running track. Also, tennis courts were built at 5 parks and outdoor lighting installed at 17 locations. Examination of Table 4 points up the existence of extensive recreation facilities among the 15 cities surveyed. However, in spite of existing facilities, and the new recreational facilities and park sites that are being developed at a rapid pace, deficiencies will continue to exist for some time. If cities are to meet the backlog of needs, it is obvious that they will have to draw upon resources not now available to them.

Staff

Recruitment of qualified professional recreation personnel was frequently cited as a major problem. Officials in Nashville, St. Louis, and Pittsburgh attributed their inability to attract qualified personnel to low salaries. In St. Louis the starting salary for a recreation leader is $4,582; in Pittsburgh it is $4,200. Such low salaries discourage the pursuit of recreation as a career for they do not begin to. compete with the salaries offered by private industry or available to other professions in state and local government. Another factor contributing to inadequate staffing is the relatively few schools with degree programs in recreation. This tends to limit the development of professionalism and, in addition, makes it necessary for recreation departments to provide in-service training programs for their new employees. Existing staffing levels and projected needs, where the information is available, are presented in Table 5 for the 15 cities surveyed. On the basis of data reported, it would appear that most cities have given little thought to their future staffing needs and the manner in which such needs will be met in the next five years.

Financing

All successful recreation programs are dependent upon the willingness and ability of elected officials to provide adequate financing. In many

TABLE 3

PARK ACREAGE BY MAJOR CLASSIFICATION
IN 15 SELECTED CITIES

City	Population' 1968	Neighborhood 2	Community2	City-Wide2	Other
New York	8,171,000	1,736	12,787	18,745	4,723
Chicago	3,587,000	-3	3	6,808	80
Los Angeles	2,873,500	1,432	1,088	9,380	-3

Baltimore	923,900	152	1,001	4,711	233
San Antonio	722,400	87	439	1,674	732
St. Louis	684,800	453	-3	1,736	539
Pittsburgh	564,000	350	-3	2,024	-3
Atlanta	516,600	390	540	1,233	155
Minneapolis	493,100	604	-3	2,818	1,892
Nashville	457,500	81	481	4,343	-3
Oakland	391,300	-3	500	1,500	-3
Tampa	324,900	212	-3	911	-3
Dayton	281,000	290	-3	2,670	189
Peoria	137,900	347	584	5,716	-3
Portland	71,400	415	-3	175	65

I The 1968 estimated population determined by straight line extrapolation of population data obtained from city officials.
2 Data obtained from city recreation personnel.
3 Not reported by this classification.
4 Not available.

TABLE 4

NUMBER AND TYPES OF MAJOR PUBLIC RECREATION FACILITIES IN 15 SELECTED CITIES

City	Population' 1968	Golf courses2	Swim-ming PoolS2	Mari-nas2	Tennis courtS2	Picnic areas2	Muse-ums 2	ZOOS2
New York	8,171,000	13	39	8	503	29	8	
Chicago	3,587,000	4	63	7	630	NA 3	1	
Los Angeles	2,873,000	13	49	0	232	NA 3	3	
Baltimore	923,900	5	6	1	112	9	0	
San Antonio	722,400	4	17	0	12	0	0	
St. Louis	684,000	3	16	0	83	30	1	
Pittsburgh	564,000	1	25	0	52	63	1	
Atlanta	516,600	6	14	0	140	19	0	
Minneapolis	493,100	6	1	0	200	12	0	
Nashville	457,500	10	17	0	57	19	2	
Oakland	391,300	5	4	0	46	NA 3	0	
Tampa	324,900	1	7	14	56	NA 3	NA 3	
Dayton	281,000	3	6	0	74	7	NA 3	
Peoria	137,900	4	6	2	5	60	2	
Portland	71,400	2	2	1	25	1	0	

I The 196 8 estimated population determined by straight line extrapolation of population data obtained from city officials.
2Data obtained from city recreation personnel.
3Not available.

TABLE 5

FULL-TIME AND PART-TIME PARKS AND RECREATION PERSONNEL IN 15 SELECTED CITIES

	Parks'		Recre
	Full-time	Part-time	Full-time

City	1960	1968	1973	1960	1968	1973	T9_60	1968	-19-73
New York	5,331	5,695	6,200	3,404	3,832	4,300	611	680	1,200
Chicago	4,000	4,400	NA 2	1,500	2,100	NA 2	-3	-3	-3
Los Angeles	1,422	1,133	1,250	15	53	60	385	555	600
Baltimore	550	729	750	0	0	0	216	363	400
San Antonio	236	300	340	13	23	29	37	56	68
St. Louis	574	406	420	30	52	60	181	191	250
Pittsburgh	297	338	NA2	207	238	NA 2	91	93	NA 2
Atlanta	NA 2	500	NA 2	NA2	320	NA 2	-3	-3	-3
Minneapolis	445	430	NA 2	75	75	NA 2	55	34	NA 2
Nashville	93	109	134	34	35	65	72	146	196
Oakland	177	185	200	9	21	20	113	145	160
Tampa	NA2	174	NA 2	NA 2	1	NA'	NA2	126	NA2
Dayton	127	161	NA 2	35-	100	NA 2	93	110	NA 2
Peoria	80	125	150	325	400	425	NA 2	22	25
Portland	NA 2	65	NA 2	NA 2	25	NA 2	9	9	10

I Employment. data obtained from city recreation personnel.
2Not available.
3Recreation employees included in park personnel statistics.

instances shaving dollars from the recreation budget has proved an expedient way to reduce overall city expenditures. The consequences of these reductions are not always immediately evident to the people, although the ultimate result is invariably a reduced recreation program. The relationship between adequate funding and a creative, aggressive recreation program was stated succinctly by one local citizen of Portland, Maine, who said, "Years of struggling with small amounts of money diminishes the imagination."

There is no perfect method for comparing local

TABLE 6

COMPARISON OF 1963 CITY OPERATING AND PARK AND RECREATION EXPENDITURES IN 15 SELECTED CITIES

		Park and recreation		
City	City operating expenditures'	Operating expenditures'	Capital expenditureS3	Percent of city expenditures4
New York	$2,343,883,000	$31,500,000	$37,100,000	1.3
Chicago'	308,195,000	32,049,093	2,600,000	9.4
Los Angeles	206,785,000	13,940,310	5,634,433	6.7
Baltimore	214,368,000	5,057,892	1,759,353	2.4
San Antonio	23,293,000	1,371,990	403,995	5.9
St. Louis	82,383,000	3,407,779	1,550,000	4.1
Pittsburgh	46,224,000	3,586,448	1,053,885	7.8
Atlanta	38,025,000	2,239,890	381,711	5.9
Minneapolis	41,569,000	3,732,000	1,501,000	9.0
Nashville	31,512,000	1,491,736	800,431	4.7
Oakland	31,139,000	3,605,993	697,656	11.6
Tampa	18,825,000	1,542,481	207,500	8.2
Dayton	19,295,000	1,614,390	954,705	8.4
Peoria6	5,399,000	1,156,437	162,944	17.6
Portland	11,623,000	564,482	51,300	4.9

Excludes Federal grant funds.
2Excludes Federal grant funds and expenditures for park and recreation purposes by other than park and recreation departments.
3Excludes Federal grant funds and capital outlay expenditures for heavy equipment and other items.
4Derived by dividing operating expenditures for parks and recreation by the City's total operating expenditures. Comparison of expenditures for parks and recreation with expenditures for other municipal services is of limited value because of the wide variation in services provided by the general purpose governments and the performance of services by special districts. In St. Louis, New York, Nashville, and Baltimore, for example, the city performs both city and county functions and, consequently, expenditures for parks and recreation constitute a smaller percentage of total municipal expenditures than in cities not providing such functions.
5 Park and recreation expenditure figures axe for the Chicago Park District which is a special district independent of the city government.
6 Park and recreation expenditure figures stated are for the Peoria Pleasure Driveway and Park District which is a special district independent of the city government.

commitment to recreation. Expenditures for parks and recreation as a percent of city general purpose expenditures, as shown in Tables 6 and 7, are not comparable because of the different functions perfon-ned by the various city governments. In Baltimore, Nashville, New York, and St. Louis, for example, the city government performs both city and county functions. Because of the inclusion of health and welfare expenditures, recreation constitutes a smaller percentage of total municipal expenditures than in cities not providing such functions.

Probably the best means of measuri fig the relative emphasis placed on recreation by various cities is to compare expenditures on a per capita basis. Table 8 illustrates the range of per capita expenditures for recreation in the 15 cities surveyed for the years 1960, 1965, and 1968. Examination of that table points up the fact that in two-thirds of the cities surveyed there has been a steady, and in some cases dramatic increase in per capita expenditures for parks and recreation, and in all but two cities - Los Angeles and Nashville - appropriations for 1968 exceed 1960 expenditures. Estimated per capita expenditures for 1973, where available, continue to show the rising trend. However, in spite of virtually a unanimous commitment to increase

TABLE 7

COMPARISON OF 1967 CITY OPERATING AND PARK AND RECREATION EXPENDITURES IN 15 SELECTED CITIES

		Park and recreation		
City	City operating expenditures'	Operating expenditures 2	Capital expenditures 3	Percent of city expenditures4
New York	$3,741,580,000	$47,300,000	$42,700,000	1.3
Chicagos	382,932,000	36,586,748	2,775,898.	8.7
Los Angeles	254,427,000	15,022,505	4,189,052	5.9
Baltimore	299,899,000	9,174,036	2,787,696	3.1
San Antonio	28,607,000	1,836,775	492,545	6.4
St. Louis	100,349,000	3,558,294	1,405,000	3.5
Pittsburgh	59,144,000	4,740,357	1,800,000	8.0
Atlanta	51,770,000	3,744,000	530,000	7.2
Minneapolis	43,567,000	3,885,000	663,000	8.9
Nashville	92,415,000	2,084,087	1,635,476	2.3
Oakland	43,198,000	4,660,355	170,000	10.8
Tampa	24,669,000	2,219,854	Not Available	9.0
Dayton	24,233,000	2,297,152	661,662	9.5
Peoria 6	.7,375,000	1,607,287	522,869	17.9
Portland	14,234,000	572,540	70,636	4.0

I Excludes Federal grant funds.

2Excludes Federal grant funds and expenditures for park and recreation purposes by other than park and recreation departments.

3Excludes Federal grant funds and capital outlay expenditures for heavy equipment and other items.

4Derived by dividing operating expenditures for parks and recreation by the city's total operating expenditures. Comparison of expenditures for parks and recreation with expenditures for other municipal services is of limited value because of the wide variation in services provided by the general purpose governments and the performance of services by special districts. In St. Louis, New York, Nashville, and Baltimore, for example, the city performs both city and county functions and, consequently, expenditures for parks and recreation constitute a smaller percentage of total municipal expenditures than in cities not providing such functions.

5 Park and recreation expenditure figures stated are for the Chicago -Park District which is a special district independent of the city government.

6Park and recreation expenditure figures stated are for the Peoria Pleas ure Driveway and Park District which is a special district independent of the city government.

Cities increasingly must look to state and Federal governments for the additional financing necessary to sustain the desired level of recreation programming. However, to date, state financial assistance generally has been negligible. Fortunately for cities, Federal aid has been more

land projects a revenue-expenditure gap by 1972 that will force the City to (1) alter the levels of municipal programs, (2) increase the property tax rate, or (3) adopt revenue sources not now being utilized. Similar decisions will have to be made by other cities, and none of these alternatives are viewed with enthusiasm by city officials.

recreation programs and opportunities, cities do not have the financial capability to sustain these expanded programs indefinitely. For example, in its Financial Capability Study, the City of Oakland has estimated that the cost of providing a total recreation program for New York City, including the renovation of local and community facilities, would be about $50 million each year for 20 years, or a total of about $1 billion. This illustrates the extent of the need that cities have for capital funds. Traditionally, these funds have come from bond issues that are dependent upon voter approval. Often such approval is difficult to achieve. The City of San Antonio, for instance, was unable to obtain voter approval for any recreation bond issues prior to 1961.

Adoption of a capital improvement program promotes the systematic scheduling of land acquisition and facilities construction. However, capital improvement programs are of little benefit if adequate funds for implementation are not appropriated. Failure to adhere to the capital improvement program necessitates rescheduling of acquisitions and :construction to subsequent years. Obviously, adherence to a capital improvement program facilitates development of an effective park and recreation system.

TABLE 8

PER CAPITA OPERATING EXPENDITURES FOR PARKS AND RECREATION IN 15 SELECTED CITIES'

City	Expenditures 1960	Expenditures 1965	Budget 1968	Estimate 1973
New York	$4.22	$6.48	$ 6.19	$10.81
Chicago	7.57	8.97	11.72	14.45
Los Angeles	4.78	5.67	4.77	NA 2
Baltimore	5.31	8.67	12.32	16.64
San Antonio	1.72	2.56	2.83	NA 2
St. Louis	4.82	5.57	5.85	6.90
Pittsburgh	5.71	7.73	9.13	NA2
Atlanta	3.67	4.76	9.11	NA 2
Minneapolis	7.14	6.17	9.09	NA 2
Nashville	5.09	4.50	4.52	7.81
Oakland	8.59	9.87	13.21	15.56
Tampa	2.30	5.82	7.33	NA2
Dayton	5.70	7.15	8.90	11.12
Peoria	8.63	10.63	14.69	NA
Portland	4.44	9.12	8.76	9.21

1 Derived by dividing financial data obtained ftom recreation personnel by actual or estimated population figures.
2 Not available.

for these Federal programs. However, city needs for financial help in recreation are for programs that provide a stable financial contribution rather than those based on individual projects at the local level.

City needs for capital expenditure funds are tremendous. According to a report prepared by the National Recreation and Park Association in cooperation with the Bureau of Outdoor Recreation, A Study of New York Outdoor Recreation Needs, the cost of providing a total recreation program for New York City, including the renovation of local and community facilities, would be about $50 million each year for 20 years, or a total of about $1 billion. This illustrates the extent of the need that cities have for capital funds. Traditionally, these funds have come from bond issues that are dependent upon voter approval. Often such approval is difficult to achieve. The City of San Antonio, for instance, was unable to obtain voter approval for any recreation bond issues prior to 1961.

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Local Government Functional Priorities

Inadequate funding of parks and recreation programs is due in large part to the fact that city officials have traditionally assigned low priority though of as an amusing pastime type of activity or a welfare program for children unable to afford other recreational facilities. To a certain extent, this image exists today. But city officials who still tend to give recreation a relatively low priority may be mis-reading the citizens' desires for recreational facilities. In Atlanta, a survey of six poverty areas revealed that the need for recreation ranks second only to the need for job opportunities. Similarly, a survey in Oakland ranked recreation third in priority following jobs and housing.

The high priority accorded recreation by the disadvantaged is increasingly being recognized. City officials in Tampa believe that residents of economically deprived areas rank recreation fourth in priority, with housing, jobs, and education being the first three local government services that citizens want improved and augmented. City officials in Baltimore placed recreation fifth on the priority list of the deprived, following jobs, housing, education, and sanitation.

Recreation Priorities

Assignment of priorities within the field of -recreation, with respect to both types and location of programs and facilities, also constitutes a major problem. In Baltimore, for example, citizens expressed the. opinion that too much effort was being given to the.'development of the stadium and municipal golf courses, and not enough to overall recreational activities. A similar comment was forthcoming-in Chicago where criticism, of the priorities established by the Park Commissioners centered on the proposed Lake-Fr6nt Development Plan. The proposed development of Lake Michigan includes marinas and horseback riding facilities. Representatives of various neighborhood associations pointed out that

to these functions. Mayors and recreation officials in the 15 case study cities held widely differing opinions when asked if recreation was receiving a fair portion of city funds. Nevertheless, they shared the opinion that. in recent years recreation has received a higher priority than it had previously. Historically, recreation has been

these activities are not those in which economically @deprived people, particularly the young, are able to participate.-It is this type of recreation and park planning that brings forth comments that recreation is being planned by persons having no real knowledge of the needs or desires of the underprivileged.

Most cities surveyed have developed some system for assigning priorities for program and facility development. Questions invariably considered, although the ranking may vary, include the following:

I . Do proposed facilities provide for year-round recreation activities?

2. Are programs directed toward ghetto youths?

3. Do proposed facilities meet neighborhood recreation needs?

4. Are a sufficient number of "active" recreation programs being provided?

5. Do programs provide for meaningful social relationships between adults and underprivileged children?

6. Are facilities designed for multi-purpose use?

7. Has provision been made for citizen participation in the determination of needs?

The Los Angeles Department of Parks and Recreation has developed a formula for determining need in order to locate facilities in such a way. as to serve all city residents. The formula is based on an index computed from four sociological and economic factors. These four factors are (1) the density of population, (2) the number of persons between the ages of 5 and 19, (3) the median family income, and (4) the juvenile delinquency rates. By assigning weights to these four factors, it is possible to compare the needs of one area with another. The Park and Recreation Department has applied this technique for determining needs to 65 previously defined statistical areas within the City, and the results have become the basis for determining the priority of future acquisitions and construction of recreational facilities. In Minneapolis, an agency called the Capital Long@Range Improvement Committee reviews the capital improvement programs of all City agencies and makes recommendations to the City Council regarding capital improvement priorities and bond issues. In evaluating departmental plans, the Committee uses a priority formula that gives numerical weights to various aspects of need. After all program proposals have been evaluated, the Committee

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Proper lo@ation of recreation facilities is vital to'a successful program. In this picture, a block park in Baltimore provides, recreational opportunity for the people and establishes a base for community activity. Photo: Baltimore Urban Renewal and Housing Agency.

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Day camping programs include many activities popular with children. Expansion of such programs, which was reported in most of the cities surveyed, can provide person-oriented recreation programs in which supervisors can work with small groups. Photo: Peoria Journal Star.

makes up a master priority list that is submitted to the City Council. Since the Committee's creation in 1953, the City Council has accepted approximately 95 percent of its recommendations.

Specialized Recreation Programs

Cities must take into consideration the special needs of special segments of the population - the, aged, the young, the handicapped, the economically disadvantaged - in developing recreation priorities. In most of the cities surveyed, officials readily admitted that the needs of all population groups were not being adequately met. Only in recent years have cities recognized an obligation to provide recreation for the handicapped. Traditionally, this has been provided by various semi-public agencies. Quite probably, cities will look increasingly to the state and Federal governments for assistance in providing the specialized facilities and specially trained personnel required to meet the recreation needs of the handicapped.

Many city officials believe that the recreational needs of economically disadvantaged persons are essentially the same as the rest of the community. Nevertheless, the Report on 1968 Summer Recreation by the Health and Welfare Council of Dayton documented the dependency of the poor on public recreation facilities and concluded that the deprived require greater opportunities for recreational and cultural experiences than do the economically advantaged. The special needs of the poor require more neighborhood recreation facilities in inner-city areas and more person-oriented recreation programs in which supervisors can work with small groups in meaningful interpersonal relationships.

In addition to the problems of providing specialized recreational services, a number of city officials stated flatly that existing recreational programs simply do not meet the needs of teen-

agers and young adults. In the past, recreation officials frequently have failed to provide programs of interest to young people, and the programs that have been provided often have been poorly scheduled.

Communication and Coordination

Lack of communication and coordination are considered to be major factors inhibiting the optimum utlization of existing recreational fac.ilities and programs in most of the 15 cities visited. Many city officials acknowledge that coordination is inadequate between the city and county park 'and recreation departments and between such departments and the various semi-public oTganizations carrying on separate recreation programs. The duplication of effort, overlapping of programs, and the competition for recreation consumers: often result in an unfortunate waste of resources.

Inadequate communication not only exists among public and private agencies providing rec-rea-tion, but also between such agencies and their clients. Over the years, city and county recreation officials have felt it sufficient merely to provide recreation opportunities. Today, however, citizens not only must be informed of the availability of the various programs, but also convinced that participation or utilization is worthwhile. This communication problem is reported to constitute a major impediment to the fulloutilization of facilities and programs among the disadvantaged. However, communication alone is not enough. Recreation officials and recreation leaders must have the ability to relate departmental activities and programs to the needs of the community. To be successful, recreation must be what the people want; not what the recreation department believes to be best for the people. Increased emphasis on citizen participation can be an essential component for the development of meaningful programs.

FACTORS AFFECTING AMOUNT AND TYPE OF RECREATION PROVIDED

Many factors affect the amount and type of recreation that cities must provide in today's fast-moving society. Population growth, increased leisure time, division of labor, and expanded community participation in public affairs, each, in its own way, has created a greater demand for recreation or contributed to the lack of sufficient recreational facilities. Population growth and the migration of people into urban areas have required both the high density and the intensive use of land characteristic of the city. At the same time, labor saving devices have created more leisure time. Both in the factory and in the home, people can perform their necessary work in shorter time. Division of labor has further increased the need for recreational activity. With increased specialization, many people are no longer able to find satisfaction or a sense of accomplishment in their work, and, thus, they must seek opportunities for-creativity outside of their jobs. Finally, in recent years, residents of deprived urban neighborhoods have discovered that they are able to influence governmental activities and levels of service through political activity. In many communities, citizen groups and neighborhood associations consider the expansion of recreational opportunities a matter of highest priority.

City Population -Characteristics

The number of inhabitants has traditionally been the primary factor affecting the need for recreational programs and facilities. However, Table 9, which shows actual and projected populations for the 15 surveyed cities, points up the fact that only eight of the cities anticipate a significant increase in population, although all anticipate a continuing expansion of their recreation effort. Today, of even greater significance than the number of inhabitants are the economic and sociological characteristics of central city residents.

First, in spite of an increasing family income level, more city residents are economically deprived today than ever before as a consequence of the in-migration of the rural poor and the flight to the suburbs of many middle and upper income families. Because an increasing number of city residents are economically unable to meet their recreation needs, cities are now called upon to provide more recreation programs and facilities than in the past. At the same time, because of the increased affluence of the majority of urban residents, and because of reduced production costs resulting from mass production techniques, larger numbers of people are able to obtain recreational equipment previously available to only a relative few. This is apparent in the increased ownership of boats and camping equipment and greater participation in such activities as skiing. Cities are thus faced with the problem of providing recreational programs and facilities to meet the needs of various divergent groups.

Second, the percentage of young people 19 years of age and under is increasing more rapidly

than is the total population. Table 10 shows years. A comparison of the data presented in

actual and projected preschool and school-age residents in the 15 cities visited for selected this Table and the data in Table 9 points up the fact that in both absolute and relative terms the

TABLE 9

ACTUAL AND PROJECTED POPULATION
IN 15 SELECTED CITIES

City	1950'	1960'	1965	1970	198
New York 2	7,891,957	7,781,984	8,100,000	8,242,000	8,547
Chicago'	3,620,962	3,550,404	3,575,000	3,600,000	3,774
Los Angeles4	1,970,358	2,479,015	.2,743,500	3,004,000	3,666
Baltimores	949,708	939,024	917,752	930,000	945
San Antonio 6	408,442	587,718	677,358	767,000	946
St. Louis7	856,796	750,026	702,000	667,500	663
Pittsburgh 8	676,806	604,332	571,060	557,100	558
Atlanta9	331,314	487,455	506,900	526,300	'56
Minneapolis"	521,718	482,872	478,468	507,800	516
Nashville"	174,307	170,874	448,000	467,000	518
Oakland 12	384,575	367,548	385,700	396,900	419
Tampa 13	124,681	274,970	302,000	347,800	439
Dayton 14	243,872	262,332	266,474	296,000	325
Peoria' '	111,856	103,162	135,146	140,700	151
Portland 16	77,634	72,566	71,750	71,100	69

U. S. Bureau of the Census. U. S. Census of Population: 1960. Number of Inhabitants. Final Report PC (1), 196 1.
21965, 1970, and 1980 data supplied by Planning and Development Department, Port of New York Authority.
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.1965, 1970, and 1980 data supplied by Population Research and Training Center, University of Chicago.
41965 data supplied by Population Research Unit, California Department of Finance; 1970 and 1980 data supplied by Research Section, Los Angeles Planning Department.
5 1965 and 1970 data supplied by Research and Planning Section, Baltimore Health Department; 1980 data derived by the Straight-Line Method of population projection.
61965, 1970, and 1080 data supplied by San Antonio Planning Department.
71965 and 1970 data supplied by St. Louis Plan Commission; 1980 data derived by the Straight-Line Method of population projection.
81965, 1970, and 1980 data supplied by Center for Regional Economic Studies, University of Pittsburgh.
91965, 1970, and 1980 data supplied by Physical Health Statistics Division, Georgia Department of Public Health.
101965 data supplied by Twin Cities Metropolitan Planning Commission; 1970 and 1980 data supplied by Minneapolis Planning Department.
111965, 1970, and 1980 data supplied by Metropolitan Nashville and Davidson County Planning Commission.
12 1965 data supplied by Population Research Unit, California Department of Finance; 1970 and 1980 data derived by the Straight-Line Method of population projection.
13 1965, 1970, and 1980 data supplied by Tampa Planning Department.
14 1965, 1970, and 1980 data supplied by Development Department, Ohio Economic Research Division.
is 1965, 1970, and 1980 data supplied by Peoria Planning Department.
16 1965, 1970, and 1980 data supplied by Portland Planning Board.

TABLE 10

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POPULATION OF PRESCHOOL AND SCHOOL-AGED
RESIDENTS IN 15 SELECTED CITIES FOR THE YEARS
1950, 1960, 1965, 1970, and 1980'

City	1950	1960	1965	1970	1980
New York	2,111,592	2,344,736	2,891,700	2,991,900	2,929,100
Chicago	991,063	1,187,224	1,264,300	1,342,000	1,293,300
Los Angeles	504,325	810,950	1,071,100	1,142,700	1,256,400
Baltimore	284,854	339,431	357,000	359,400	323,900
San Antonio	151,658	255,152	293,800	332,800	324,300
St. Louis	232,676	250,483	241,000	248,500	227,200
Pittsburgh	198,159	200,783	192,100	189,900	191,400
Atlanta	99,780	176,844	183,900	191,000	193,600
Minneapolis	143,316	155,096	186,900	193,200	174,800
Nashville	51,915	61,420	175,000	177,700	177,500

Oakland	99,994	115,647	125,800	150,900	143,600
Tampa	35,314	97,461	118,000	132,300	150,400
Dayton	70,619	95,691	104,000	112,600	111,400
Peoria	32,479	36,359	52,800	53,500	52,000
Portland	23,385	25,201	12,200	12,000	23,600
Total	5,031,129	6,152,478	7,269,600		7,572,500

A breakdown by age groups is presented in appendixes A, B, C, D, and E.

number of young people is increasing. As a consequence, cities must increasingly consider the needs and interests of this segment of the population when recreation programs and facilities are structured.

Third, more people have leisure time than ever before. Not long ago only the affluent had any substantial amount of leisure time. Today, shorter work weeks, lower retirement ages, and longer life expectancies have made leisure time available to virtually all members of the work force. In addition, because of these three factors, leisure time for recreation is now available the year round, whereas a few years ago recreation was almost entirely a summer activity.

Geographical Location

Geographical location is obviously a major factor determining the types of recreation programs and facilities that a city can, or in some cases must, provide. In Minneapolis, for example, the existence of 23 lakes within the city limits facilitates water-based recreation - swimming, boating, fishing in the summer and ice skating in the winter. The cold winters of Minneapolis, and the rolling terrain of parks and play areas, provide 66 natural sliding hills for skiing, sledding, and

tobogganing. The mild climates of San Antonio, Tampa, and Los Angeles, on the other hand, permit year-round use of athletic fields and pavilions for outdoor activities and thus there is less need for facilities for indoor recreation. Location adjacent to major bodies of water provides excellent opportunities for water-based recreation to residents of Chicago, Los Angeles, and New York. Even where virtually unusable for swimming purposes, as in Peoria and St. Louis, bodies of water can be used for boating and sailing.

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Changing Attitudes and Interests

Public interest in sports and athletics is undergoing a change. City residents are beginning to realize that there is more to recreation than just football, baseball, basketball, and swings and slides. Increased interest in water-based recreation activities is only one example of this broadening of the recreational horizon. Demands for cultural, artistic, and creative forms of individual and group activities are increasing; emphasis is being given to recreational activities that teach skills as well as provide exercise; and there is an expanding interest in such sports as bowling, golf, and tennis that permit an individual to participate all of his life.

The communication media, particularly television, have generated public interest in many sporting and recreational activities previously unknown. The sport of curling, for instance, is

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growing so rapidly in Minneapolis that rinks cannot be provided fast enough to meet the demand. Similarly, the televising of champion European soccer matches has generated, at least temporarily, substantial interest in this sport.

Full utilization of natural resources is essential because of their unique recreational value. Minneapolis is fortunate in having 23 lakes within its boundaries. Photo: U.S. Bureau of Outdoor Recreation.

The Impact of Crime and Social Unrest

Crime and social unrest have had a two-fold

impact on recreation since the end of World War 11. Increased criminal activity has made park and recreation areas, particularly such areas in the center city and in neighborhoods undergoing

racial transition, dangerous to use by day and totally unsafe at night. Vigorous efforts to "re-open" parks for use by holding special evening programs for young people have been tried successfully in New York City. In Minneapolis recreation leaders have been used to- escort children to and from parks in unsafe neighborhoods. While criminal activity has had a crippling effect, social unrest and the threat, of civil disturbance by Negroes seeking an end to years of discrimination and inequities have forced recreation departments to provide "instant" recreational opportunities for teen-age and young adults in slum neighborhoods. The installation of portable swimming pools, the attachment, of spray caps

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to fire hydrants, the use of portable basketball courts, and the holding of block dances have

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been tried the last few years in Baltimore, Chicago, and New York to "cool off" deprived urban neighborhoods.

Citizen Participation

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Increased citizen demand for services and participation in planning has come about as a direct outgrowth of minority demands for social justice. In most large cities, residents of slum neighborhoods have found that they have the power to demand and receive services from their local governments. The use of this power, and an increasing knowledge of the governmental process that is being acquired through participation in various new social programs, are being translated into planning activities that recreation officials must consider in development of recreation programs. Determining and satisfying the recreational needs of city residents is essential if programs are to succeed. In Baltimore and St. Louis

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those programs and activities that have actively

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involved citizens at the planning and develop-

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ment stages are those that, for.the most part, have been found most successful.

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Geography and climate both play an important role in

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shaping a recreation program. While cities in southern states take advantage of their year-round temperate climate, Minneapolis capitalizes on its winter recreation opportunities. Photo: Minneapolis Star and Tribune Co.

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"Before" and "after" scenes from a section of the San Antonio River Walk. Located in the center ?f the business district, the Walk offers a relaxing alternative to city traffic. Photo: San Antonio Chamber of Commerce.

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MEETING RECREATION NEEDS

Public -tastes are constantly changing, and a variety of sociological, economic, and psychological developments are creating new trends and needs to which city recreation departments must respond. In terms of money, total local government operating and capital expenditures for recreation and parks have increased from $770 million in 1960 to $1,104 million in 1965. For cities, such increased costs have meant higher taxes, more bonded debt, and, in some cases, new local fees and service charges. During this same six-year period, local governments acquired 335,376 acres for park and recreation purposes, bringing the total land available for such usage up to approximately one and one-half million acres.

Today however, more than ever before, the nation's cities are faced with a myriad of problems, each requiring immediate attention, each requiring the allocation of a sizeable portion of cities', limited resources. To adequately meet the recreation needs of city residents, a coordinated effort by Federal, state, and local governments is required. In addition, where the resources of the private sector can be brought to bear, the problems of those responsible for overall recreation planning. can be immeasurably reduced.

Federal Assistance

The Federal Government now has over 50 grant programs that can be used by state and local governments for park and recreation purposes. Major programs in which cities are participating include Land and Water Conservation Fund, Neighborhood Facilities, Open-Space Land, Urban Beautification, Model Neighborhoods in 'Demonstration Cities, Community Action Programs, Federal Surplus Property, and Beach Erosion Control. A summary description of these programs and the administrating agencies are presented in Table 11. A comprehensive table of all such supportive programs is presented in Federal Outdoor Recreation Programs, published by the Bureau of Outdoor Recreation, Department of the Interior, and in Federal Aids to Local Governments, published by the National League of Cities.

The widespread use of these programs is readily apparent in the 15 cities surveyed in this study. All totalled, these cities have received approximately $70 million in Federal assistance for park and recreation purposes since 1963. Table 12 presents a city-by-city breakdown of receipts by the major Federal programs. Examination of the table points up the extent to which these programs have been used.

Unquestionably Federal grant programs have been of substantial benefit to the nation's cities. But such programs are not a panacea for either park and recreation problems or any other local government problems. Participation in categorical aid programs invariably involves restrictions on use of funds and complicated reporting procedures. Although designed to assure responsible and effective use of funds by local jurisdictions, compliance with such restrictions and procedures frequently is overly burdensome and time consuming.

TABLE 11

MAJOR FEDERAL AID PROGRAMS UTILIZED FOR PARKS AND RECREATION PURPOSES IN 15 SELECTED CITIES

Program title	Authorizing legislation	Administering agency	
Land and Water Conservation Fund	Land and Water Conservation Fund Act of 1965	Bureau of Outdoor Recreation, Department of the Interior	Grants local g develop and fac percent
Neighborhood Facilities	Housing and Urban Development Act of 1965	Office of Urban Neighborhood Services, Department of Housing and Urban Development	Grants finance viding cover u three-f
Community Action Programs	Economic Opportunity Act of 1964	Office of Economic Opportunity	Through grants antipov ects ar cover 5
Model Neighborhoods	Demonstration Cities and Metropolitan Development Act of 1966	Model Cities Administration, Department of Housing and Urban Development	Grants develop for reb areas f federal sources planni grams, tributi project

TABLE I I (Continued)

MAJOR FEDERAL AID PROGRAMS UTILIZED FOR
PARKS AND RECREATION PURPOSES IN 15 SELECTED CITIES

Program title	Authorizing legislation	Administering agency	F
Open-Space Land	Housing Act of 1961	Office of Urban Neigh-borhood Services, Department of Housing and Urban Development	Grants are made for the acquisi space use. Basi qualify for gra for both acquis
Urban Beautification	Housing Act of 1961	Office of Urban Neigh-borhood Services, Department of Housing and Urban Development	Grants up to 5(local governmer owned land in a beautification
Federal Surplus Real Property	Federal Property and Administrative Services Act of 1949	Property Management and Disposal Service, General Services Administration	Surplus land, t no longer requi ferred to state recreation uses value. The Bure in determining able for public
Beach Erosion Control	River and Harbor Actof1962	U.S. Army Corps of Engineers, Department of Defense	The purpose of age to beaches Grants are avai ments for up to cost for protec beaches, and up publicly owned areas.

TABLE 12

FUNDS ACTUALLY RECEIVED BY 15 SELECTED CITIES FOR
PARKS AND RECREATION UNDER MAJOR.FEDERAL AID PROGRAMS

	Bureau of Outdoor Recreation Land and Water Con-servation'	Office of Economic Opportunity Com-munity Action Program 2	Department of Housing and Urban Develop-ment Open-Space Program 3	De H Urb me cat
Atlanta	49,909	1,500,834	1,634,721	
Baltimore	433,366	1,004,581	336,044	
Chicago	403,488	4,449,946	1,028,768	
Dayton	-	479,448	930,767	
Los Angeles	266,667	2,094,393	1,504,329	
Minneapolis	-	179,982	842,502	
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Nashville	-	861,088	866,144	
New York	2,095,213	21,170,827	6,621,628	
Oakland	-	408,000	304,687	
Peoria	24,850	43,060	1,022,404	
Pittsburgh	-	529,884	315,548	
Portland	56,375	-	14,188	
St. Louis	139,263	1,654,828	50,449	
San Antonio	-	669,668	699,586	
Tampa		234,998	-	

1 Funds received by cities and park districts from 1966, when program began, to November 15, 1968.
2Includes only funds for recreation purposes received by agencies within the cities from the inception of the program in 1965 to
3Includes funds received by cities and park districts from July 1, 1963, to November IS, 1968.
4Includes funds received by cities and park districts between July 1, 1965, and November 15, 1968.
5 Grants under this program are for multi-purpose facilities and are not exclusively for recreational purposes. Includes funds r
November 1968.

State Assistance

Most states provide advice and technical assistance to cities on recreation matters through departments of conservation or recreation, but generally little direct financial assistance is available to cities for park and recreation purposes. However, notable exceptions do exist. New York City received $17 million of a $100 million state bond issue passed in 1966 for the acquisition of land for outdoor recreation. In 1967, a statewide referendum was approved authorizing a $200 million bond issue for the purpose of financing the acquisition and development of outdoor recreation facilities such as parks, marine, facilities, and historic sites. The extent. to which New York City will participate in this bond issue has not as yet been determined.

The State of California has a number of programs available to support local park and recreation programs. Los Angeles has received $486,666 from the 1964 State Bond Fund for purchase of land and ground development, $300,000 from the California State Wildlife Conservation Bond Fund for the construction of a fishing pier, and $38,503 for the construction of a senior citizens center. Oakland, on the other hand, has received only $12,600 from the California Youth Authority for a community recreation program for young people.

The Peoria Pleasure Driveway and Park District has received $116,373 from the State Boat License Fund for the construction of a marina on the Illinois River. Chicago, however, reports that no State funds have been received for recreation purposes.

City-School Cooperation

Agreements for recreation purposes between city .. governments. and @ school districts exist formally or informally in almost every large city in the United States. These agreements usually provide for mutual use of facilities and often for the joint development of park-school complexes. The use of these agreements provides a partial solution to several school recreation problems and needs. Joint park-school programs permit the full-time use of both school and recreation sites, thus eliminating needless expenditures for construction of separate facilities. In addition, such coordinated recreational effort allows for the most efficient utilization of the limited number of trained recreation professionals available.

Formal city-school agreements were found to exist in 12 of the 15 cities surveyed. In the remaining three cities the school district and the recreation department had established informal working arrangements. The agreement signed by the Board of Education and the New York Department of Parks in 1941 is a good example. Under this arrangement, the City agreed to acquire sites large enough to provide space for school construction with an additional area to be under the management of the Department of Parks after school hours. As of 1966, there were 233 jointly operated park-school areas in the City. The Parks Department is responsible for recreation programs after 3:00 p.m. on weekdays and on weekends; however, indoor facilities of New York schools are not open on weekends and this has considerably weakened the effectiveness of the cooperative program. In Pittsburgh, school yards, athletic fields, swimming pools, and gymnasiums have been made available to the City for recreation purposes after school, during the evenings, on weekends, and during vacation periods. As of April 1968, the Bureau of Recreation was operating basketball, arts and crafts, and swimming programs after school at 26 high schools. The formal agreement between the Pittsburgh School District and the City provides that the City Bureau of Recreation will provide adequate supervisory personnel to carry out the indoor and outdoor programs that utilize school property, and provide the supplies required to carry out these activities.

Similarly, the City of St. Louis and the Board of Education have had an agreement to cooperate with and assist each other in operating recreation programs since 1961. Cooperative activities include summer playground programs, school

year swimming lessons, after school activities, and evening school programs. The agreement also provides for the sharing of facilities, programs, and personnel. Two somewhat unusual features of the St. Louis agreement are: (1) the City has complete charge of all school facilities during the summer, and (2) the City provides, in City pools, free swimming instruction for children in the St. Louis elementary schools as part of the Board of Education's physical education program. Similar agreements for the juxtaposition of school and recreation facilities and for joint recreation programs exist in Chicago, Los Angeles, Minneapolis, Nashville, Oakland, and Peoria.

Assistance From Other Local Government Agencies and Units

In addition to the facilities and programs offered by municipal park and recreation departments, other units of local and regional government assist cities, either directly or indirectly, meet their recreation needs. Such assistance may be provided by a housing authority that provides land and/or funds for the development of recreation facilities within the housing area, or by the development by a regional agency of an extensive park system, thus reducing the pressure on the city. In New York City, for instance, the Housing Authority develops children's playgrounds and passive recreation areas for adults. lished to conserve and develop the water and soil resources of the region, has developed two parks within the City of San Antonio. These parks emphasize boating, fishing, and picnicking activities.

Recreation Programs of Semi-Public, Religious, and Private Organizations

Semi-public, religious, and private organizations make a substantial contribution to recreation in most cities. Some such organizations provide activities that supplement city recreation programs, while others provide financial assistance, coordination, and support. Perhaps their greatest contribution has been made through supplementing city summer recreation programs. Such organizations as neighborhood and settlement houses, Boy's Clubs, Boy Scouts, Girl Scouts, Salvation Army, Young Men's Christian Association, and Young Women's Christian Association are active in most cities.

In 1964, with a grant from the Astor Foundation, the Greater New York Council of the Boy Scouts of America prepared a plan to promote the Boy Scout program in ghetto areas of the City. The aim of this program was to reach and influence a large number of boys in areas in which the Scouting movement had not penetrated. The YMCA has also located facilities in ghetto areas and is providing recreational, educa-

In 1966, the Housing Authority operated 171 playgrounds and provided space for community center programs in 109 housing developments. The housing and redevelopment agencies in Minneapolis, Nashville, and Peoria have established similar recreation facilities. The Chicago Park District has leased land from the Chicago Housing Authority for the installation of swimming pools at 30 locations within the City.

The East Bay Regional Park District in the Oakland area has approximately 18,000 acres of land. Some of the largest parks operated by the District are located adjacent to Oakland and, thus, pressures on the City for the expansion of park and recreation programs are reduced. Similarly, the San Antonio River Authority, establ-

tional, and other services in deprived neighborhoods. Such programs as these tend to counter the oft heard complaint of ghetto residents that these semi-public and religious organizations are middle-class oriented, and not mindful of the needs of the poor.

The Protestant Council of the City of New York sponsors a youth services program through which church facilities are used for recreation, education, and job placement programs.

The Arts and Education Council of Greater St. Louis attempts to stimulate the widest possible community interest and participation in cultural, recreational, and educational activities and to assist its 90 member organizations provide

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A recreation-school complex now be
visited, school and recreation personnel endorsed such joint development
which serves both public and parochial schools, the City ofPeoria vacatec

programs and services. The Council runs a Community Music School that provides low cost professional musical training to talented children in financial need, and it is presently funding a program of art instructors-in-residence at community centers in poverty neighborhoods. Project Street Corners in Peoria is sponsored by 12 governmental and non-governmental agencies including the Park District, YMCA, Boy's Club, Boy Scouts, Girl Scouts, and Council of Churches. The purpose of the Project is to contact hard-to-reach teen-age youths, gain their confidence, and encourage them to go back to school, or to get vocational training or jobs. The Project sponsors basketball, volleyball, softball, and baseball teams, but recreation is used as a tool to reach those young people who have "dropped out" rather than as an end in itself. In each of its two years of operation, over 700 boys and girls have been enrolled in Project sponsored teams and programs.

Community action agencies funded by the Office of Economic Opportunity have contributed substantially to summer recreation programs in cities as previously indicated. An extremely effective program is Operation Champ conducted by the Baltimore community action agency. The Champ recreation program is geared specifically to the needs of inner-city youths. The program provides organized physical fitness and recreational activities that help young adults and teenagers acquire the physical and social skills thaf will aid them in overcoming the handicap of poverty. In addition, it also provides employment opportunities for those young people in poverty areas serving as junior counselors and assistant program supervisors in the administration of the program.

Industrial concerns throughout the country sponsor recreation programs for their employees. However, in the 15 cities surveyed, local business concerns were seldom involved in supporting public recreation. Notable exceptions were found in New York, Chicago, and Peoria. A Citizens Summer Committee in New York, composed of private citizens and corporation offi-

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Semi-public agencies make significant contributions to overall city recreation programs. Pictured is the staff of the Peoria Project Street Corners jointly sponsored by 12 governmental and non-governmental agencies. Photo: Peoria Journal Star.

cials, has been established to promote and coordinate private contributions to the summer recreation effort. Private businesses and corporations in the city contributed more than half a million dollars to the Committee for summer recreation programs.

In Chicago, Sears Roebuck and Co. has sup-

underused because they are not available in the evening or on the weekend. This is particularly the case with public schools, even in those communities in which the city and the school district have formal agreements for joint recreation programs. For example, in Peoria, elementary school gymnasiums are available for Park District recreation programs, but high school

ported s ix community center playlots for the last four summers. Games and activities available include dancing, basketball, volleyball, skating, and arts and crafts. On special activity days, outdoor movies are shown. In addition, Sears provides equipment and uniforms for summer recreation programs conducted at 26 public playground and school sites. In 1968, over 6,000 boys and girls participated in baseball, softball, basketball, and volleyball leagues in this program. Supervision for this program is provided by Youth Action, a cooperative agency created and supported by such organizations as the Chicago Boys Club, Hull House, YMCA of Metropolitan Chicago, and Youth Centers, as well as private business.

in Peoria, a baseball diamond, basketball courts, and horseshoe pits were constructed on land leased to the Park District by the Pabst Brewing Company. These facilities, adjacent to a public housing project, are jointly maintained and operated. An eleemosynary foundation in Peoria has shifted its area of interest in order to include outdoor recreation. The foundation has been instrumental in assisting the rapid growth of the park system by the outright donation of land, by leasing acreage to the District at no cost, by providing the local 'Matching share required under the Federal Open-Space Land program, and by holding options on land until the Park District accumulated the necessary funds to purchase desired parcels.

Unused, Underused, and Potential Recreation Resources

Optimum utilization of potential recreation resources is not being achieved in most cities in the nation. Many publicly owned facilities are gymnasiums are not available for public use in order to preserve the wooden basketball floors. In Baltimore, only a quarter of the schools are open after school hours during the school year for recreation purposes, and none of the schools are open during the summertime.

Expressways and highway interchanges are absorbing substantial areas of land within the nation's cities. To date, among the 15 cities studied, only Oakland indicated any real effort to utilize this land. The City now operates a totlot under an existing freeway and is exploring possible uses for two acres within a cloverleaf. However, even more unfortunate is the underutilization of existing parks and recreation facilities. This often occurs because such facilities are unsafe or because disadvantaged citizens, particularly the slum children, do not have a means of transportation to such facilities.

The Open Lands Project in Chicago - an organization supported by the Community Trust, the Field Foundation of Illinois, and the Woods Charitable Fund, Inc. - has as its objectives the acquisition, preservation, and conservation of open land in the metropolitan area. The director of the organization has outlined several potential recreation ideas and resources, as follows:

1. Adventure playgrounds that minimize the use of fixed equipment in favor of children building their own equipment from tools and materials available.

2. Park District and school system cooperation for the development of a nature education program.

3. Development of recreation malls and the utilization of streets for recreation space.

4. New types of recreation buildings including an experimental high rise structure.

5. Multiple use of air rights for new recreation facilities.

6. Temporary use of land for recreation purposes, especially in urban renewal projects where land is awaiting development.

7. Closer realization of the relationship between recreation and housing.

8. Utilization of the Chicago riverfront for sitting space."

NEW AND IMAGINATIVE APPROACHES
TO RECREA TION

Two significant.. attitudi fial changes have occurred with respect to recreation in response to the social and economic forces at work in America's cities. First, and perhaps most important, it is now generally accepted, both within and without local government, that providing recreation for the nation's urban inhabitants is basically a local responsibility, and must be considered an essential municipal service as are fire and police protection and sanitation. The old concepts that recreation is a quasi-welfare activity and that parks are window dressing for the city are gone. Without this change and the accompanying acceptance of responsibility by local governments, all efforts to achieve viable and responsive recreation programs would be futile. The second change Js one of emphasis. Cities have found that just providing facilities is not enough. Activities must be organized and promoted and supervision and leadership provided. Programs dominated by swings, slides, sports, and athletics are not enough. Recreation officials must provide something for everyone - programs responsive to neighborhood needs.

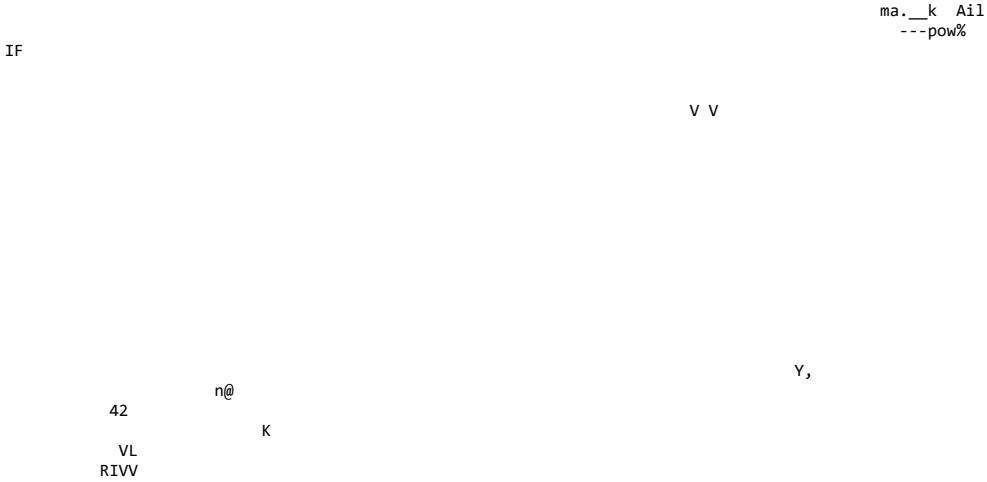
Demands for expanded recreation programs and additional. facilities increase without regard to the availability of resources to provide them. City recreation officials, therefore, must devise new, imaginative, and creative approaches to recreation that will facilitate the utilization of existing resources to the fullest extent, possible.

Land Use and Development

Multiple use of facilities is an effective method of optimizing the use of limited space. New York City recreation officials recognize that good design is the basic tool for achieving quality and effective utilization of space. A planetarium, located in a small vest-pocket park, has been constructed below grade, and the dome of the planetarium has been built in the shape of a pyramid for climbing so that no play area is sacrificed.

Revolutionary planning concepts in the design of new parks and playgrounds have resulted in a new look. Swings, seesaws, and slides are out of vogue; tunnels, earth mounds, and concrete forms are "in." The use of parks and playgrounds is also "in" because more and more children are beginning to use the playgrounds to take advantage of the new designs and facilities. In place of blacktopped areas, many parks and playgrounds in New York are covered with sand. Slides are placed on earth mounds and children slide into the sand. They crawl in tree houses and through concrete forms. In one new playground, water runs down a hill in an open concrete channel and children float boats in it.

Similarly, play equipment takes the form of rigid steel frames for climb 'ing, open cubes, wooden logs bolted together to make climbing pyramids, and concrete U- and V-shaped modules. With the help of private sponsors, five "adventure playgrounds" are being constructed at several sites in the City. These playgrounds utilize a variety of mounds and pyramids for climbing and sliding; tunnels, concrete volcanos, tree houses, and a wooden stockade permit a wide range of interpretation by children. At another



Creative play experiences are encouraged by use of equipment designed to permit interpretation by children. New York City has retained a landscape architect to obtain the maximum advantage that can be achieved through proper design techniques. Photo: New York City Administration of Parks, Recreation and Cultural Affairs.

site, a recreation center for teen-agers is being turned into a "fun palace.." This center will feature activities that young people want but do not find in the usual municipal recreation center. There will be a dance floor with a juke box overlooking a swimming pool, club rooms, game rooms, and sport courts. Another park features a central pool and fountain that are used for wading by day and can be drained for plays and dancing in the evening. At another site, a combination parking garage-playground has been created. The garage roof is a sports playfield; a deck over an adjacent ravine and railroad tracks is a children's playground. To encourage' creative play experiences, standard equipment in unstandard uses such as slides pressed into mountains, sculptured stepping stones with sprayheads for hot weather, and playful structural frames for shade were specially designed.

Another example of multiple use of facilities is a swimming pool-recreation complex in Bedford-Stuyvesant that was constructed half a level below grade to permit use of its roof for a children's playground. Exhaust fan housings were designed as pyramid slides and vent stacks were designed as climbing poles. Under a grant from the Department of Housing and Urban Development, a local landscape architect has designed a variety of kinds of play equipment that can be placed on city-owned vacant lots and easily demounted and moved elsewhere when necessary.

The Department of Parks plans to transform the, Corona-Flushing Meadows Park, @site of the 1964

World's Fair, into a truly urban park featuring an endless variety of active and passive forms of recreation. There will be outdoor playing fields of all kinds; indoor courts, tracks, ski and tobogan runs; and ingenious devices for improving one's baseball or golf game. Swimmers will enjoy a romantic spa-like environment featuri 'ng statuary, plants, and live music from platforms suspended over the pools. It is estimated that the park willaccommodate some 100,000 persons at a time - 38,000 in specific activities, the others walking, sitting, or picnicking on the park's 1',257 acres.

A new approach to providing recreation in the City of Baltimore has been the construction of play lots in new housing projects undertaken through the Baltimore Urban Renewal and Housing Agency. When completed, these play lots are operated and maintained by the Department of Recreation and Parks. Baltimore has also employed a professional architect to design the new playground facilities. Resulting facilities are more attractive and therefore of greater recreational value to the City.

The City of Oakland is experimenting with multi-purpose use of land. It has developed a totlot under an existing freeway and consideration is now being given to the development of land encompassed by cloverleafs at freeway interchanges for recreation purposes. The recreation department has also developed an 18-hole golf course under the flight pattern at the local airport. The use of parks by younger, children in Oakland has been promoted through the devel-

Standard playground equipme nt in unusual settings creates enthusiasm among children. This "adventure playground" in New York's Central Park illustrates the point. Photo: U.S. Bureau of Outdoor Recreation.

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Theme parks developed by the Oakland Recreation Department offer opportunities for imaginative play experiences. Portable units, such as this one, are periodically moved to other locations throughout the City. Photo: City of Oakland Recreation Department.

opment of "theme" parks. Four such parks have been developed, one as an Old West city, one developed with a Japanese theme, one with a Swiss theme, and one with a Mother Goose theme.

Park facilities in most cities are painted a drab color such as "army green." The Superintendent of Parks in Minneapolis is having all park facilities painted bright colors so that they will look more cheerful. A lakeside beach house, previously utilized only during the summer, has been winterized so that it can be used by skaters during the winter. The Park Board has built "trike tracks" on several City playgrounds. Children can ride their tricycles on these hard surface "roads," that feature lane markings and miniature signs. These have proved quite popular with young children. With the recent popularity of jogging, Minneapolis has developed jogging trails at eight lake sites, and opens a local stadium daily from 7:00 a.m. to 8:30 p.m. to permit use of the quarter-mile track. There are many triangles and bits of land throughout Minnoapolis that are too costly to maintain properly. Senior citizens who live near these pieces of land are encouraged to plant flowers and maintain gardens there. This provides a great deal of useful recreation, eases municipal property maintenance problems, and helps beautify the City.

Atlanta has persuaded owners of previously undeveloped land in slum neighborhoods to lease their property for recreation purposes. A survey was made of land availability in the six slum areas of the City. The Department of Parks and Recreation located the owners of some 48 vacant lots, junk heaps, and other littered areas and contracted with them to lease the land for recreation purposes for a token sum. The City formally agreed to absolve the owners from any liability resulting from accidents or other mishaps occurring on the property and also agreed to absorb the cost of cleaning up the areas, clearing them, and installing surfacing and necessary play equipment. This program served to beautify run-down areas as well as providing neighborhood recreational facilities.

In Chicago, the "alley-oop" project, sponsored by the Chicago Committee on Urban Opportunity, encourages closing off alleys and adjacent

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land. These alleys, which have already been lighted, are made into recreation areas and painted with hopscotch courts on the pavement and games on the walls. Twenty-five of these facilities were created during the summer of 1968.

The Nashville Department of Parks and Recreation has reclaimed an eight-acre abandoned quarry located in the heart of a slum section of the City. A baseball diamond and park are now located on the site of the old quarry.

Program Development

To make New York City "a city for people and for living," the present City administration has undertaken a number of imaginative approaches to recreation. Three years ago a program was initiated to fill the City's parks at night through a series of events and "happenings" designed to draw the people back into the parks they had been afraid to use. This program has been successful; people are coming back into the parks and their presence and continuing use have made the parks both safe and pleasant.

A new program, called "Broadway in the Streets," was started in the spring of 1968 to bring Broadway productions to slum neighborhoods. The shows use a mixture of prominent Broadway performers and local neighborhood talent. Neighborhood performers are auditioned from each area a few weeks before the show and worked into the program. A flatbed truck serves as a portable stage for these performances and direct dialogue between actor and audience is always invited. Everybody is encouraged to sing or clap with the performers and shout a "YES"

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The new look in parks includes futuristic playground equipment designed to capture the imagination ofyoungsters. The City ofMinneapolis has installed play equipment like this in several parks throughout the City. Photo: Minneapolis Star and Tribune Co.

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or "NO" to air their feelings. The real triumph of the show is the mixture of top professionals with judiciously-picked local talent. It has been a source of pride to the community to see that its own members are being recognized.

One of Atlanta's most unusual and effective efforts in the field of recreation is being made by the owner of a local radio station serving the Negro community who started working with the Recreation Division about 12 years ago. The station owner and a local phonograph record dis-

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year will include water shows featuring diving exhibitions and synchronized swimming at each of the 25 City swimming pools. Pittsburgh was one of the first cities to realize that the Little League baseball program was not sufficient to provide for all of the City's youngsters who wished to participate in baseball activities. Thus the Parks and Recreation Department organized numerous community playground baseball leagues around the City. Pittsburgh also has an excellent recreation program for senior citizens which includes an annual picnic, games of

tributor combined forces in a musical effort to prevent troubles during the summer of 1968. In an unprecedented action, the two marshalled the services of the Office of Economic Opportunity, the Atlanta Police Department, the Board of Education, the Parks and Recreation Department, and the Atlanta Youth and Children's Services Commission, to use recorded music to prevent disorders. Using a $3,000 grant from OEO, the radio station staged between 5,000 and 6,000 record hops in underprivileged areas throughout the spring and summer. The local record distributor provided all the records free of charge. The station utilized ten assistant disc jockeys, all of whom were from ghettos and many of whom had problem pasts. These individuals were trained to handle the record hops by the operations manager of the radio station. The OEO grant was used to pay the bulk of their salaries. The Police Department provided five new station wagons equipped with sound amplifiers which circulated through the disadvantaged areas putting on daytime record hops in the streets. Members of the crime prevention bureau of the Police Department.accompanied the station wagons to ward off trouble. The purpose of the program was to learn where trouble was likely to occur and to go there before the trouble started in hopes of heading it off by getting a dance going. The station owner states that dancing is the only social activity for teenagers and young adults in the lower socio-economic groups. He feels that his program has reduced ghetto tension and created.better avenues of communication among the races.

The Pittsburgh summer recreation program this chance, and auctions conducted with play money provided by the Parks and Recreation Department.

The Chicago Park District operates a traveling zoo to bring small animals into the slums for children to see. The District has employed a sculptor to design playground equipment with both aesthetics and durability in mind. In addition, the Chicago Police and Fire departments have undertaken recreation and sports programs designed primarily for children in slum neighborhoods to supplement the extensive recreation and sports activities of the Park District. The Fire Department has opened its gymnasium to children from 10:00 a.m. to 10:00 p.m.- seven days a week throughout the year. Professional instructors are available to supervise basketball, handball, gymnastics, boxing, wrestling, judo, tennis, and volleyball programs. Nine swimming pools have been located adjacent to fire houses and Department personnel supervise swimming activities when not responding to a fire. Handball courts at 17 fire houses have also been opened to the public. Also, the Department sponsors 320 softball teams, provides tours on fire boats, and sponsors outings to major league baseball games. Swimming pools have also been located next to three police stations with police officers supervising pool activities. In addition, the Police Department sponsors overnight camping trips, fishing trips, and trips to major league ball games.

The Department of Parks and Recreation in Nashville has instituted two programs that provide both recreation and job skill training. For

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Many city recreation departments are aided by other city departments in their efforts to provide a complete program of recreational alternatives. Here, athletic activities sponSored by the Chicago Fire Department supplement the Park District's Program. Photo:

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Chicago Fire Department

older youth, the Department of Parks and Recreation has hauled old cars to school grounds throughout the City. Here, neighborhood youth can work on these cars and obtain practical mechanical experience. This is a completely unstructured recreational opportunity in which

to major league baseball games; and local appearances by various entertainers and sports personalities.

The City of Los Angeles has several programs and means of implementing programs that are

tools are provided and an adult is present only to answer questions and to share his mechanical knowledge. In the second program, professional musicians teach teen-agers and young adults to play musical instruments. This provides an indirect means of entry into the music industry, the largest industry in the City.

The City of Oakland has several recreation programs oriented toward the City's poverty areas. Included are a teen arts program; instruction in dressmaking, design and painting, and crafts; a free swimming program; talent shows and talent clinics; free tickets to motion picture theater parties; block dances for teen-agets; free tickets

worthy of special note. One such program is the Athletes For A Better America program. Under this program professional athletes conduct sports clinics for the City's youth. The program is not only useful in teaching athletic skills, but also serves as a physical fitness program. A second sports activity was the organization of the Los Angeles Municipal Games. With this type of program, interest in sports activity is maintained throughout the entire summer as competition leads up to the final city-wide championships. Particular emphasis in this program is given to expanding the range of sports activities to offer opportunities to many children who have not previously competed in sports. In addition, the

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Athletics other than team sports are becoming more and more popular.' The annual Los Angeles Municipal Games provide meaningful competition for participants in 17 different events. Photo: LosAngeles City Recreation andPark Department.

Los Angeles Department of Recreation and Parks provides free slot car racing facilities in empty stores in slum neighborhoods. and arranges with a local airline for free flights over the City and Pacific Ocean, thus providing many children a first experience in flying, and a chance to have a pre-flight tour of flight facilities. The Police and Fire departments in Los Angeles, as in Chicago,' make a significant contribution to recreation. During 1967, they provided buses and drivers for the transportation of young, people to beaches, parks, Disneyland, and other recreation sites in the metropolitan area.

The Pleasure Driveway and Park District of Peoria has only recently begun to enlarge the types of recreational programs available to city residents. Two extremely successful programs have been the day camp and fishing trips. The programs were for all City children, but residents of deprived neighborhoods were given two opportunities to participate in each program. For the fishing program, a total of 1,400 pounds of bullheads were stocked in two lakes on Park District land. A total of 1,105 children went on the fishing trips and caught 390 fish. The day camp was designed to provide city children with

a "taste of nature." Among the unusual park and recreation facilities operated by the District is a "nature trail" in one park in which visitors can see a wide variety of plant life, including rapidly vanishing prairie grass.

Communications and Public Relations Programs

The Street Club Service is. a special program estabiiftd by the Baltimore Bureau of Recreation to communicate with hard-to-reach young adults and teen-agers in order to encourage their participation in available recreation activities. Street Club Service workers spend the majority of their time on the street, in pool halls, or other places where young people congregate. Once initial contact has been made and the street worker has the confidence of the young, the worker attempts to interest them in constructive activities provided by both the City and private agencies. Individual and family counseling are provided through cooperation with public and private welfare agencies. The Service has also arranged special talent shows and camping programs for young people from deprived neighborhoods.

The Minneapolis recreation division has adopted a new approach to recreation based upon the

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Successful recreation programs are those that provide something for everyone, and meet the specialized interests of various segments of the population. The fishing program in Peoria included stocking two lakes on Park District land. Photo: Peoria Journal Star.

idea that the effect of a recreation leader on younsters can be all important. Consequently, the entire recreation division is being restructured for the development of recreation leaders in order to provide a lower leader-child ratio. It is hoped that this will have a significant effect on anti-social behavior.

To overcome a communication gap, officials in Nashville have used newspaper advertisements to inform the general public of recreation programs and special events. With the cooperation of the Metropolitan Action Committee, the local outlet of the Office of Economic Opportunity, a meeting was held with young Negroes to get their ideas on recreation and other community services. The use of comic books in remedial reading programs is another innovative concept of the Recreation Department.

For promotional purposes, Oakland has developed a series of four brochures designed to outline the recreational activities available in each of four neighborhoods in the City. In addition to providing general information on city-. wide recreation facilities, these brochures also describe the activities taking place within these neighborhoods.

RECREATION AND PARK PLANNING

Through the years, the Federal and state governments have planned and developed excellent national and state park systems in rural America, while many municipal recreation areas have been acquired through gifts of land or money, frequently without benefit of an overall plan. The development of effective park systems and recre-@tion programs depends to a great extent upon the continuing availability of adequate financial resources. However, there is almost universal agreement that some kind of park and recreation planning is necessary if the best interests of city residents are to be served. All too often, acute land deficiencies, especially in high density neighborhoods, are directly attributable to inadequate planning.

Reasons for Planning

Planning is particularly important with regard to land acquisition and the designation of open spaces within a metropolitan area. There is little available land for parks and recreation in most cities, and what land is available is rapidly being developed. A park and recreation plan indicating the future needs of the city for land and facilities can be a valuable tool to city officials in meeting city recreation needs. Although the plan is the planned acquisition of land. The City has control over the development of all land for a distance of five miles outside its corporate limits. This permits control over subdivision growth and enables planners to designate specific sites for the development of an area-wide park system.

The primary emphasis of Baltimore's master park and recreation plan is on open spaces. The stated objectives of the plan are to: (1) establish a park and recreation ope n space policy that provides a structure for the future development of the City, insures high quality in the living environment, and provides adequate public open space and a well-rounded recreation program properly distributed in relation to future population; (2) promote expanded city participation in outdoor recreation, open space, and natural resources programs; Q) develop recreation, open space, and environmental considerations relating to the City's transportation system; (4) outline the possible contribution of private individuals, institutions, and industries; and (5) relate the total outdoor park and recreation program to Federal and state aid programs and to develop an outline of the capital budget for City expenditures for the next 20 years.

itself does not solve any problems, it presents a consensus of community views toward overall park and recreation development if properly conceived.

Most park and recreation master plans at present are land and facility oriented. In San Antonio, for instance, the basic objective of the master

Portland is an example of a city that did not follow its recreation and park plan. The plan, developed in 1943, stated that ". . . the greatest deficiency is the manner, distribution, size, and equipment of children's playgrounds." Between 1943 and 1964, when a new plan was developed, only 2 of 17 playgrounds recommended for acquisition had been acquired. Of the remainder,

five had been lost through development for other purposes, five were in the planning stage, and five were still available but no plans had been developed for acquisition or use.

In Chicago and Oakland, the park and recreation plans are incorporated in the general city plan for land use and development. As such, they set forth broad community goals as a guide for city action, but do not set forth specific recreational objectives. The city councils use the plans as guides in evaluating proposals for physical changes and the scheduling of municipal improvements. City departments use the plans as guides in recommending changes in the construction of facilities. The plans constitute the framework within which the zoning boards make decisions, and they guide businessmen making decisions concerning the development of private facilities.

Participation in Planning

The end products of recreation planning depend in large part on the factors considered in plan preparation. In addition to professional planning and recreational personnel, elected officials, semi-public organizations and interest groups, and neighborhood associations should be encouraged to, participate in the planning process. City councils are more inclined to approve plans in which a broad spectrum of the community has participated, and the plan itself will more likely be relevant to needs because it considers the advice and interest of land- facility- and people-oriented groups. Public participation 'is also important because it contributes to the citizen's feeling of involvement in decisions that affect him and his community. Insofar as possible, all recreation planning should be based on the desires of the consuming public, but always a balance must be struck between what people want, and what can be provided.

In Atlanta, citizen groups extending down to the block level participated in the formulation of the recreation plan. The Mayor, the Parks Committee of the Board of Aldermen, the City Planning Department, the Department of Parks and Recreation, the staff of Economic Opportunity Atlanta, the Community Council of the Atlanta area, and the Model Cities staff were just a few of the many departments and organizations which participated in the preparation of the plan. Similarly, the master park plan in San Antonio was prepared by the Planning Department in cooperation with the Department of Parks and Recreation, the Department of Urban Renewal, the Land Acquisition section of the City Attorney's office, the Board of Education, and local neighborhood citizen groups. The Health and Welfare Council of Metropolitan Chicago, the Chicago Association of Commerce and Industry, the Chicago Area Transportation Study Commission, and private consultants participated with City officials and professional personnel in developing the City's comprehensive plan.

In addition to citizen participation, opinion surveys, questionnaires, and random canvassing can be utilized to determine the recreation preferences of neighborhood residents. In Los Angeles, personal interviews and questionnaires were used to obtain the views of persons using neighborhood recreation centers. In Nashville, a survey of programs and activities by the Council of Community Services provided information for the City recreation plan.

The information obtained from surveys and through citizen participation in the planning process is of significance for two reasons. First, the data obtained from these sources represents a humanistic factor in planning that cannot be calculated on an "acres per capita" basis. Second, citizen participation helps recreation officials solve the problem of establishing recreation priorities and determining program needs.

Capital Improvement Plans

Capital improv ement programs are virtual prerequisites for the implementation of the master park and recreation plan. Such plans usually cover five or six years, the first of which is for-

mally approved at budget time each year. The remaining years of the plan are tentatively approved subject to annual revision to assure that the program objectives are still relevant to community needs. In cities that do not have a master park and recreation plan, the capital improvement plan assumes even greater importance. In St. Louis, for example, the recreation plan has not been revised since January 1944. The City has had, however, a series of five-year capital improvement programs that have effectively provided for park and recreation needs. Similarly, in Minneapolis, the capital improvement plan has been expanded from a narrow budget-oriented tool to a comprehensive plan incorporating a

Approach to Planning

Each city must develop a philosophy of planning and an actual plan which reflect the community's recreation and park needs while taking into consideration the area's unique characteristics. Thus, there are almost as many different kinds of plans and approaches to planning as there are cities. In developing its 15-year plan, all of Atlanta's parks were reclassified according to their suitability for community, neighborhood, or block parks. In order to make maximum use of existing parks, service areas were defined around the reclassified community parks using preliminary drafts of the new land use plan

program for park and recreation development.

Operating Without a Master Plan

Examination of Table 13 shows that 4 of the 15 cities visited - Minneapolis, Pittsburgh, St. Louis, and Tampa - are currently operating without a park and recreation plan. The absence of an overall park and recreation plan in Minneapolis apparently can be attributed directly to the City structure that provides for both an independent Park Board and City Planning Department. However, the need for a master plan is recognized and it is hoped that recently initiated Federal programs will result in the mutual development of such a plan. Pittsburgh, St. Louis, and Tampa utilize a capital improvement program for park and recreation facility planning. The danger of operating without a master park and recreation plan is that often the city finds that it is responding almost entirely to localized pressures with very little attention being given to comprehensive community-wide problems. This has been found to be the case in Pittsburgh.

and population projections for 1983. Patterns of resident areas, natural boundaries, traditional neighborhoods, and industrial areas were given considerable weight. Chicago's comprehensive plan calls for the City to be developed as 16 separate units. The development plans of each separate unit will be distributed to various organizations and citizens concerned. Meetings will then be held between citizens and representatives of the City to discuss and revise development plans where appropriate. Projects proposed in the 16 development plans will be implemented through capital improvement programming.

The City of Dayton does not have an overall recreation and park plan but is developing individual area plans. These area plans, which must be approved by City Council, do not cover any particular time period, but are presented as stages that may be carried out whenever possible or desired. Park and recreation objectives vary in each individual area. This can be an effective approach to park and recreation planning in the absence of a master plan.

TABLE 13

PARK AND RECREATION PLANNING IN 15 SELECTED CITIES

City	Type of plan	Duration of plan	Updating	Financing for plan	Participants in developing the plan
Atlanta	Park and Recreation Master Plan	15 years	Periodically	50 United Appeal 5017o Citizens Park and Advisory Commission	Board of Aldermen, Mayor, City Planning Department, Park and Recreation Department, Community Council
Baltimore	Park and Recreation Master Plan	20 years	Periodically	City general fund	Recreation and Park Board, Planning Commission, City Council, City Departments, Citizens Groups, Private Consultant
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Chicago	Comprehensive Plan for City	15 years	Continuous	City general fund	Plan Commission, City Council, Mayor, City Departments, Park District, Citizens, Semi-Public Organizations
Dayton	Area Plans for Parks and Recreation	Indefinite	No	City general fund	City Council, Neighborhood Group, Private Architect
Los Angeles	Park and Recreation Master Plan	10 years	Annual	City Planning Department	City Council, Planning Department, Citizens Groups, City Departments
Minneapolis	No Plan	-			
Nashville	Park and Recreation Master Plan	6 years		City general fund	Park and Recreation Department is now in the process of developing the plan.

TABLE 13 (Continued)

PARK AND RECREATION PLANNING IN 15 SELECTED CITIES

city	Type of plan	Duration of plan	Updating	Financing for plan	Participants in developing the plan
New York	Park and Recreation Master Plan	Indefinite	Annual	State and Federal Funds	City Planning Commission, City Operating Departments, State Department of Conservation, Neighborhood Groups
Oakland	General De-velopment Plan for City	25 years	Annual	City Plan Commission	City Planning Commission, Mayor City Council, City Departments Community Groups
Peoria	Park and Recreation Master Plan	Indefinite	At Request of Staff	Park District funds	Park District, City Planning De partment, School District, Tri County Planning Commission, Recreation Advisory Committee
Pittsburgh	No Plan				
Portland	Park and Recreation Master Plan	Indefinite	Annual	City general fund	Park and Recreation Department City Manager, City Council, Planning Board, City Department
St. Louis	No Plan	-			1944 Plan has never been update
San Antonio	Park Master Plan	20 years	Every 5 years	City getieral fund	Department of Planning, Park ar Recreation Advisory Board, Neighborhood Groups, City Departments
Tampa	No Plan				

CONCLUSION

Cities must continue to expand their efforts to provide the kind Of recreation the people want, when they want it, where they want it. Recog-nition of this 'constitutes the basis for all the changes and trends in recreation noted through-out this report. In muc 'h the same way that urban renewal.and Model City programs are now attempting to emphasize human development as opposed to physical development, so must recre-ation be strengthened by citizen participation. To implement the policies and programs formu-lated in this manner requires the cooperation of all levels of government. Local governments need the active support of the Federal and state governments in such fields as land acquisition, facility construction, personnel training, and technical assistance. Without such support, parks and recreation programs may again be sacrificed for the maintenance of the basic protective func-tions of local government. Given such support, city officials and recreation personnel can con-tinue to demonstrate their creative ability to innovate and develop recreational programs rele-vant to today's urban society.

APPENDIXES

APPENDIX A

ACTUAL 1950 POPULATION OF PRESC110OL AND
SCHOOL,AGED RESIDENTS IN 15 SELECTED CITIES'

City	Total	Age groups Under 5	5-9	10-14	15-19
New York	2,111,592	665,889	535,039	443,599	467,065
Chicago	991,063	327,176	256,150	205,323	202,414
Los Angeles	504,325	174,120	132,323	99,568	98,314
Baltimore	284,854	92,456	.73,495	59,371	59,532
San Antonio	151,659	53,634	39,592	30,095	28,357
St. Louis	232,676	77,223	55,972	47,984	51,497
Pittsburgh	198,159	62,013	49,689	43,254	43,203
Atlanta	99,780	32,467	23,404	20,220	23,689
Minneapolis	143,316.	48,632	35,247	27,528	31,909
Nashville	51,915	16,097	11,653	10,563	f3,602
Oakland	99,994	35,256	25,104	19,622	20,012
Tampa	3 5,3 r4	11,351	9,291	7,284	7,388
Dayton	70,619	25,362	17,252	14,123	13,882
Peoria	32,479	10,326	7,863	6,806	7,484
Portland	23,385	7,226	5,785	4,912	5,462
Total	5,031,129	1,639,228	1,277,849	1,040,242	1,073,810

All data for this year derived from: U. S. Bureau of the Census. U. S. Census of Population: 1960. General Population Characteristics, Final Report PC (1), 1961.

APPENDIX B

ACTUAL 1960 POPULATION OF PRESCHOOL AND SCHOOL-AGED RESIDENTS IN 15 SELECTED CITIES'

City	Total	Age groups Under 5	5-9	10-14	15-19
New York	2,344,736	686,717	595,847	575,321	486,851
Chicago	1,187,224	380,672	312,929	271,083	222,540
Los Angeles	810,950	249,232	221,451	192,416	147,851
Baltimore	339,431	102,609	90,093	81,472	65,257
San Antonio	255,152	79,593	71,415	60,590	43,S54
St. Louis	250,483	82,184	66,033	55,736	46,530
Pittsburgh	200,783	58,101	53,137	48,035	41,510
Atlanta	176,844	52,894	46,821	41,492	35,637
Minneapolis	155,096	45,883	38,316	34,605	36,292
Nashville	61,420	18,571	15,646	13,296	13,907

Oakland	115,647	34,771	30,273	28,220	22,383
Tampa	97,461	M,669	26,559	23,925	18,308
Dayton	95,691	29,382	25,651	22,558	18,100
Peoria	36,359	10,793	9,374	8,426	7,766
Portland	25,201	7,135	6,478	6,230	5,358
Total	6,152,478	1,867,206	1,610,023	1,463,405	1,211,844

All data for this year derived from: U. S. Bureau of the Census. U. S. Census of Population: 1960. General Population Characteristics, Final Report PC (1), 1961.

APPENDIX C

ESTIMATED 1965 POPULATION OF PRESCHOOL AND SCHOOL-AGED RESIDENTS IN 15 SELECTED CITIES

		Age groups			
city	Total	Under 5	5-9	10-14	15-19
New York'	2,891,700	785,700	769,500	704,700	631,800
Chicago'	1,264,300	372,500	j33,000	302,500	256,300
Los AngeleO	1,071,100	277,100	274,400	270,200	2419,400
Baltimore 4	357,000	102,200	95,000	84,100	75,700
San Antonios	293,800	91,600	.82,100	70,000	@0,100
St. LoUiS6	241,000	79,600	64,300	53,400	43,700
Pittsburgh 7	192,100	55,000	46,700	46,600	43,800
Atlanta8	183,900	55,000	48,700	43,100	37,100
Minneapolis3	186,900	48,200	48,100	47,100	43,500
Nashville 3	175,000	45,200	45,000	44,100	40,700
Oakland9	125,800	.32,000	33,600	31,700	28,500
Tampa 3	118,000	30,400	30,400	29,700	27,500
Dayton 3	104,000	27,000	26,600	26,200	24,200
Peoria 3	52,800	13,600	13,600	13,300	12,300
Portland"	12,200	3,300	3,300	3,100	.2,500
Total	7,269,600	2,018,400	1,914,300	1,769,800	1,567,100

I Data supplied by Planning and Development Department, Port of New York Authority.
2Data supplied by Population Research and Training Center, University of Chicago.
3Data derived by the National Rate Method of population projection.
4Data supplied by Research and Planning Section, Baltimore Health Department.
5 Data supplied by City Planning Department.
6 Data supplied by City Plan Commission.
7Data supplied by Center for Regional Economic Studies, University of Pittsburgh.
8 Data supplied by Physical Health Statistics Division, Georgia Department of Public Health.
9Data supplied by Survey Research Center, University of California at Berkeley.
10 Data supplied by City'Planning Board.

APPENDIX D

PROJECTED 1970 POPULATION OF PRESCHOOL AND SCHOOL-AGED RESIDENTS IN I@ SELECTED CITIES

City	Total	Age groups Under 5	5-9	10-14	15-19
New York'	2,991,900	807,700	758,300	741,800	684,100
Chicag02	1,342,000	365,000	353,000	334,000	290,000
Los AngeleS3	1,142,700	258,300	301,600	302,800	280,000
Baltimore 4	359,4oo	95,200	91,900	93,200	79,100
San Antonios	332,800	103,700	93,000	79,300	56,800
St. LoUiS6	248,500	73500	73,600	54,900	46,500
Pittsburgh7	189,900	57:600	46,000	42,400	43,900
Atlanta8	191,000	57,100	50,600	44,800	38,500
ol*3					
Minneap is	193,200	43,700	51,000	51,200	47,300
Nashville 3	177,700	40,200	46,900	47,100	43,500
Oakland 3	150,900	34,100	39,800	40,000	37,000
Tampa 3	132,300	29,900	34,900	35,100	32,400
Dayton 3	112,600	25,500	29,600	29,900	27,600
Peoria 3	53,500	12,100	14,100	14,200	13,100
Portland9	12,000	3,000	3,300	3,100	2,600
Total	7,630,400	2,006,600	1,987,600	1,913,800	1,722,400

I Data supplied by Planning and Development Department, Port of New York Authority.
2Data supplied by Population Research and Training Center, University of Chicago,
3Data derived by the National Rate Method of population projection.
4Data supplied by Research and Planning Section, Baltimore Health Departmen t.
5 Data supplied by City Planning Department.
6Data supplied by City Plan Commission.
7Data supplied by Center for Regional Economic Studies, University of Pittsburgh.
8Data supplied by Physical Health Statistics Division, Georgia Department of Public Health.
9Data supplied by City Planning Board.

APPENDIX E

PROJECTED 1980 POPULATION OF PRESCHOOL AND SCHOOL,AGED RESIDENTS IN 15 SELECTED CITIES'

		Age groups			
City	Total	Under 5	5-9	10-14	15-19
New York	2,929,100	777,800	694,000	673,500	783,800
Chicago	1,293,300	343,400	306,400	297,400	346,100
Los Angeles	1,256,400	333,600	297,700	288,900	336,200
Baltimore	323,900	86,000	76,700	74,500	86,700
San Antonio	324,300	86,100	76,800	74,600	86,800
St. Louis	227,200	60,300	53,800	52,306	60,800
Pittsburgh	191,400	50,900	45,300	44,000	51,200
Atlanta	193,600	51,400	45,900	44,500	51,800
Minneapolis	174,800	46,400	41,400	40,200	'46,800
Nashville	177,500	47,100	42,100	40,800	47,500
Oakland	143,600	38,200	34,000	33,000	38)'400
Tampa	150,400	39,900	35,600	34,600	40,300
Dayton	111,400	29,600	26,400	25,600	29,800
Peoria	52,000	13,800	12,300	12,000	13,900
Portland	23,600	6,300	5,600	5,400	6,300
Total	7,572,500	2,010,800	1,794,000	1,741,300	2,026,400

All data for this year derived by the National Rate Method of population projection.

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PAS MEMO

Alternatives for Determining Parks and Recreation Level of Service

By David Barth, PhD, AICP

Public agencies use Level of Service (LOS) standards to plan and monitor the quality of services provided to their constituents. For example, transportation planners use roadway LOS to categorize traffic flow and assign "grades" to roadways (e.g., A, B, C, etc.) based on speed, density, and other performance measures. Similarly, utility departments and agencies use LOS standards to characterize the performance of various levels of potable water and wastewater systems.

In contrast, parks and recreation system planning has historically been more art than science. Unlike other elements of the public realm, there are no nationally accepted standards for determining ideal levels of service for parks, indoor recreation centers, athletic fields, trails, and other recreation facilities.

The last set of national guidelines published by the National Recreation and Park Association (NRPA) in 1996 encourages communities to develop their own LOS standards rather than rely on any national standards: "A standard for parks and recreation cannot be universal, nor can one city be compared with another even though they are similar in many respects" (Mertes and Hall 1996, 59). Each city or county must determine the appropriate LOS required to meet the specific needs of its residents.

Peter Harnik (Harnik 2010, 5) summarizes the complexities of parks planning in *Urban Green:*

> A major problem for [park] advocates and managers is that parks seem relatively simple and straight forward. People frequently say, "It's not rocket science, it's just a park." No! For rockets ... you need to be good at math. Parks require math plus horticulture, hydrology, psychology, sociology and communication. They are immensely complicated.

Determining LOS standards for parks and recreation systems can be challenging for several reasons. One is the many different ways in which parks and recreation systems can be measured: typical metrics may address parkland acreage, numbers of recreation facilities, distance to parks and facilities, quality of parks and facilities, operating costs, revenues, or other factors. In addition, LOS metrics can differ between various components of a parks system; for example, LOS may be measured differently for a neighborhood park than a tournament sports facility. Appropriate LOS standards may also differ based on the community context — whether the setting is urban, suburban, or rural.

The purpose of this *PAS Memo* is to assist planners in determining the most appropriate LOS metric(s) to use for their parks and recreation systems, collecting the necessary data, and developing appropriate LOS standards that meet their communities' specific needs.

Overview of Parks and Recreation LOS

Parks and recreation LOS standards are used in a variety of ways. For example, a LOS analysis can be used to help determine community needs and priorities in conjunction with other techniques such as surveys, interviews, focus group meetings, site visits, public workshops, social media, and online forums. LOS standards can be used to help determine if parkland, facilities, programs, and funding are distributed equitably across geographic, political, and socioeconomic boundaries.

In long-range planning, LOS standards can help planners determine the general size and location of proposed new parks and recreation facilities needed to accommodate anticipated growth. And land development codes and policies (comprehensive plans, land development codes, impact fees, etc.) incorporate LOS standards to help determine the "fair share" of parks and recreation capital and operating costs to be borne by the developers of new residential or mixed use projects.

Table 1 describes the most common parks and recreation LOS metrics, followed by a description of each metric.

Table 1: Common Parks and Recreation LOS Metrics

Metric	Purpose
1. Acres per capita	To determine if a community has enough parkland To determine if parkland is equitably distributed based on population and geography
2. Facilities per capita	To determine if a community has enough recreation facilities such as athletic fields, playgrounds, tennis courts, swimming pools, etc. To determine if the facilities are equitably distributed based on population and geography
3. Building square footage per capita	To determine if a community has enough indoor recreation space such as recreation centers, community centers, senior center, or gymnasiums To determine if the indoor space is equitably distributed based on population and geography
4. Access distance/ time (bike, ped, car, transit)	To determine if parkland and facilities are easily accessible to residents via preferred modes of transportation including driving, transit, bicycling, or walking
5. Quality of facilities and experience	To determine if park facilities and geographies are consistent and equitably distributed across geographies
6. Operating expenditures per acre managed	To help determine if adequate funding is being provided for effective operations and maintenance
7. Operating expenditures per capita	To help determine if adequate funding is being provided for effective operations and maintenance
8. Revenue per capita	To help determine if a community is recovering enough costs to meet expectations and goals
9. Revenue as a percentage of operating costs	To help determine if a community is recovering enough costs to meet expectations and goals

Acres per Capita

The "acres of parkland per 1,000 residents" metric is the most common technique for determining whether a community has "enough" parkland. It is also known as a community's "acreage level of service." Acreage LOS is often used as a basis for "benchmarking" or comparing a community's parks and recreation system against another community, for determining how much parkland should be provided in a new development to meet the needs of new residents, or as a basis for calculating parks and recreation impact fees.

The Acreage LOS metric was first established in the 1930s by George Butler of the National Recreation Association, who proposed a standard of "10 acres of park and open space per 1,000 population within each city, plus an equal area in parkways, large parks, forests, and the like, either within or adjacent to the city" (Mertes and Hall 1996, 6). Butler acknowledged that the standard may vary based on location and other factors, and today there is no published Acreage LOS standard in the U.S. Each community must determine its own standards based on local history, culture, demographics, density, development patterns, and other factors. Today, most communities calculate their current acreage LOS and simply try to maintain the current ratio of acres to population as they grow. It is important to note that Acreage LOS does not address the equitable distribution of the parkland, the capacity or quality of the facilities, or the level of programming provided.

An often-asked question is, "What should be counted in an Acreage LOS?" Unfortunately, there is no standard answer. Some communities include public golf courses and beaches, while others include publicly accessible lakes and wetlands. Some cities and counties also include public parkland owned by other agencies, such as state parks and national forests. Some communities also count private recreation areas, owned and managed by homeowner's associations, because these areas help meet residents' local recreation needs.

Because the primary purpose of Acreage LOS is to measure and monitor a community's supply of parkland, it is recommended that communities count only developable, publicly accessible parkland within their jurisdiction. Undevelopable lands such as conservation areas, wetlands, water bodies, golf courses, and beaches cannot help a community meet its needs for parks, playgrounds, athletic fields, open play space, recreation centers, and other basic parks and recreation facilities. Privately owned parkland is not open to the public, and could be sold or redeveloped. Public parkland owned by another jurisdiction (such as county-owned parks within a municipality) is already counted by that jurisdiction for its own LOS, and should not be included in a community's acreage calculation.

Facilities per Capita

Another oft-asked question is, "Do we have enough recreation facilities?" such as athletic fields, swimming pools, playgrounds, and tennis courts. Similar to the parkland acreage metric, there are no LOS standards for recreation facilities in the U.S., and the number of facilities needed can vary widely due to a number of variables between communities. For example, a community with a high percentage of senior citizens might have a much lower need for athletic fields than a community with a high percentage of youth.

When calculating current Facilities LOS, a community may wish to develop a "first-tier" and "second-tier" LOS. The first-tier LOS should count only the community's own, publicly accessible recreation facilities to develop an accurate baseline LOS. The second-tier Facilities LOS calculation could include additional facilities that help meet residents' needs, such as publicly accessible school athletic fields and gymnasiums, homeowners' association pools and playgrounds, and nonprofit facilities such as YMCA pools and Boys and Girls Club gymnasiums. During the needs assessment process, the community can discuss whether the second-tier facilities are actually meeting residents' needs, thereby potentially reducing the need to build additional first-tier facilities.

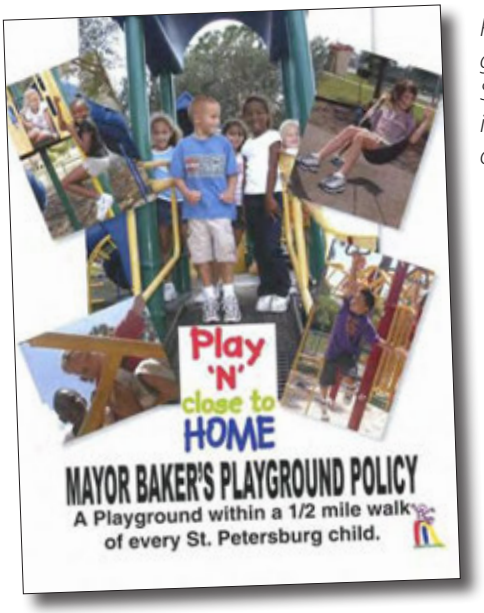
Building Square Footage per Capita

In addition to calculating the number of indoor facilities in the Facilities LOS, a community should also calculate the total square footage of indoor facilities. Recreation and community centers can range from less than 1,000 square feet to over 300,000 square feet, so a simple calculation of the number of facilities (rather than actual square footage) is not sufficient to analyze the true level of service for indoor recreation space. Similar to the Facilities LOS calculations, a community may wish to create a first-tier Facilities LOS of their own indoor facilities and a second-tier LOS of other publicly accessible facilities to enable more thoughtful discussion during the needs assessment process.

Access LOS

Access LOS is expressed as the distance, or amount of time, a resident or visitor must travel to a park or facility. As communities have become more densely populated and congested, it has become more important to ensure equitable access. Many residents do not drive cars in urban areas — either by choice or necessity — and residents are encouraged to take transit, bicycle, or walk to save energy, reduce pollution and congestion, and improve health. Thus access is an important measure of service.

Similar to the other LOS metrics, there are no standard criteria for access LOS. Each community must determine its own, based on land development patterns; street, bicycle, and pedestrian networks; transit access; and demographics. Depending on the area's values, a standard for a neighborhood park may be a five-minute or quarter-mile walk, while a standard for a community park may be one to five miles. For example, the City of Denver set a goal of a green space within six blocks of every resident, and the City of St. Petersburg, Florida, has a goal of a playground within a half-mile of every resident.



Playground access goal poster, City of St. Petersburg, Florida. Courtesy City of St. Petersburg

Communities may also wish to establish differential Access LOS standards for specific facilities based on existing or desired land development patterns. For example, in urban core areas

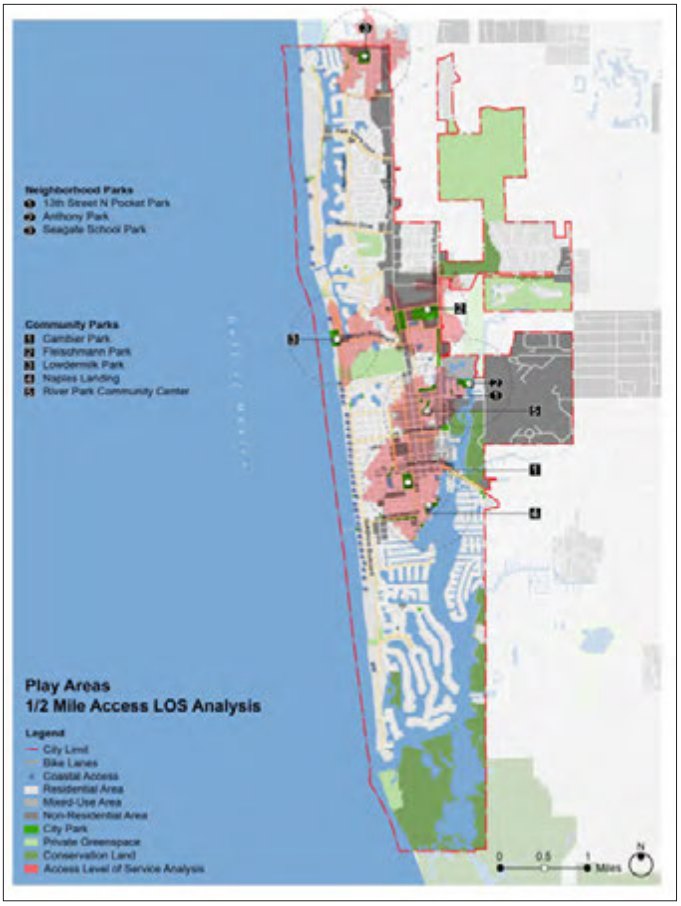


Figure 1. City of Naples, Florida, play area access LOS map. Residents who live within the pink-shaded area have access to a playground within a half-mile of their home. Courtesy Barth Associates

that encourage walkability, an Access LOS of a quarter-mile may be desirable for playgrounds, basketball courts, plazas, and other types of urban spaces or facilities. Conversely a three- to five-mile service area may be acceptable in suburban or rural communities for facilities such as soccer fields and swimming pools.

Communities should conduct a spatial analysis of the parks and recreation system to identify the existing Access LOS for both parklands and facilities. The analysis can also identify gaps in transit, roadway, bicycle, and pedestrian networks. Access to a landlocked park, for example, may be increased by creating new roadway, bicycle, or pedestrian connections, thereby reducing or eliminating the need to purchase additional park land. At the same time, access improvements also can create new recreational amenities, such as sidewalks, bike lanes, or trails. See Figure 1 for an example of an Access LOS map for play areas created through the parks and recreation planning process for the City of Naples, Florida.

Quality LOS

Quality LOS standards are used to measure whether parks and recreation facilities are meeting the design and maintenance criteria established by the local community. Even though a community may be meeting its acreage, facilities, and access LOS standards, it cannot be meeting residents' needs if it provides poorly designed or maintained facilities.

Very few communities have established Quality LOS standards for their parks and recreation facilities. Again, each community should develop its own quality criteria based on community values and priorities. Typical Quality LOS criteria may include the quality of construction materials, the frequency of maintenance, safety inspections, aesthetics, multimodal access, cleanliness, or others. Numerous publications list suggestions for maintenance criteria, including the National Recreation and Park Association's *Commission for the Accreditation of Parks and Recreation Agencies (CAPRA) Standards*, Fifth Edition (2014), and also its publication *Management of Park and Recreation Agencies*. Similarly, a wide variety of organizations publish park design guidelines, including the Project for Public Spaces and the Landscape Architecture Foundation.

Once the community has established its Quality LOS criteria, parks and recreation facilities can be evaluated and mapped to illustrate the distribution of different levels of quality throughout the community. For example, Washington, D.C., mapped the quality of its recreation centers based on their condition (deferred maintenance), size, and capacity (see Figure 2).

Operating Expenditures per Acre, Operating Expenditures Per Capita

Two metrics that can be used to gauge whether a community is adequately funded to manage, operate, and maintain its parks and recreation areas are "operating expenditures per acre managed" and "operating expenditures per capita." The first metric is calculated by dividing total operating expenditures by total parkland acres managed by the agency. The second metric is calculated by dividing total operating expenditures by the population of the jurisdiction served by the agency.

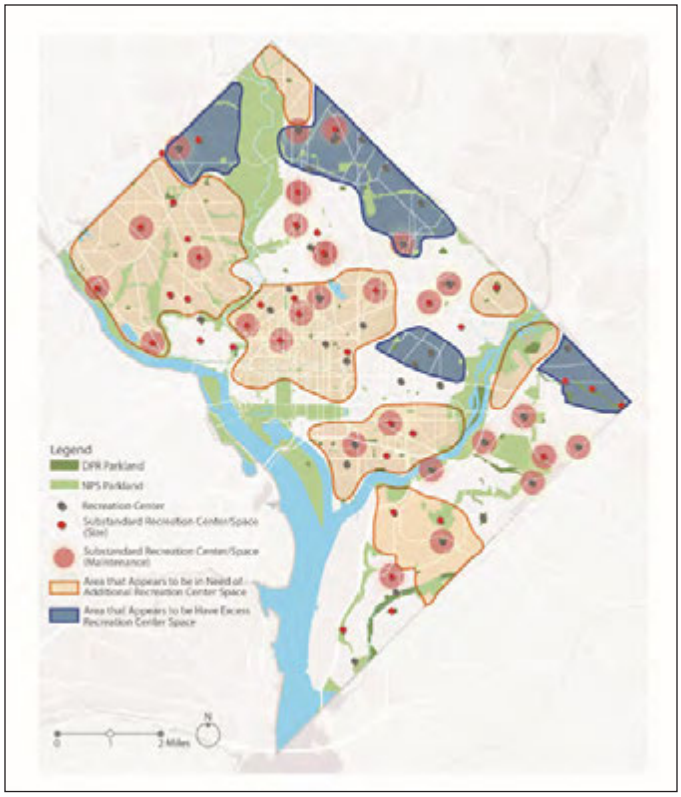


Figure 2. Washington, D.C., recreation center Quality LOS map
Courtesy AECOM Technical Services, Inc.

Operating expenditures include all of the costs to provide parks and recreation services to the community, including personnel salaries, benefits, utilities, equipment, and materials. Operating expenditures may also include debt service if it is paid out of the annual operating budget, as well as any expenditures incurred as part of a special or enterprise fund (such as a golf course) managed by the public agency.

It is important to note that operating costs can vary widely between communities due to differences in parks and recreation facility standards, types of equipment, repair and replacement schedules, types and topography of parkland, degree of maintenance required, levels of use, and other variables. Operating costs and efficiencies can also vary with the number of acres managed and the size of the population served. For example, a community that manages extensive conservation lands will have a lower ratio of expenditures to acreage than a community that primarily manages developed parkland.

Communities that benchmark operating expenditures (see below for discussion of benchmarking) should conduct follow-up research to analyze and document the specific reasons for differences in operating expenditures. For example, it may be helpful to visit and photograph the facilities at benchmarked communities and meet with agency staff to document key differences in facility quality or levels of maintenance. It may also be helpful to determine if a community is serving a larger population than its own residents. Elected officials, managers, and residents may be more supportive of increased operation budgets if they clearly understand the reasons for

variations in funding between communities and the implications of different funding levels.

Revenue per Capita, Revenue as a Percentage of Total Operating Expenditures (Cost Recovery)

Two metrics that can be used to track revenues and compare revenue generation to other agencies are "revenue per capita" and "revenue as a percentage of total operating expenditures." The first metric is calculated by dividing the total revenues generated by the agency by the population of the jurisdiction served by the agency. The second metric (also known as "cost recovery") is calculated by dividing the total revenues generated by the agency by the total operating expenditures of the agency. A community's parks and recreation revenues (also known as "annual direct revenues") include all of the monies generated directly from parks and recreation classes, programs, memberships, concessions, permits, rentals, and other nontax sources. Revenues do not include funding from taxes, grants, foundations, bonds, assessments, or other indirect sources.

In addition to revenue tracking and benchmarking, these metrics can also be used to establish cost recovery policies and goals. There are no industry standards for cost recovery; each community must establish its own goals. This is typically a policy decision determined by the agency department head, city/county manager, or elected officials. Some communities have established different cost recovery policies for senior, adult, and youth programs, while others have established overall cost recovery goals as a percentage of operating expenses. For example, a community may wish to subsidize youth programs to encourage accessibility, but require 100 percent cost recovery for adult sports leagues. Databases such as PRORAGIS (see sidebar, "PRORAGIS and Other Parks and Recreation Data Sources") can help agencies to determine reasonable and realistic cost recovery goals based on data from other agencies.

The Use of Parks and Recreation LOS Metrics Within the Planning Process

Parks and recreation LOS is most commonly addressed within the context of a parks and recreation master plan or needs assessment process.

The typical parks and recreation master planning process consists of four phases: (1) Existing Conditions Analysis, (2) Needs and Priorities Assessment, (3) Long-Range Vision, and (4) Implementation Strategy. Each phase of the process builds on the findings and conclusions from the previous phase(s). The following sections describe the important roles that LOS standards play in each of the first three phases of the process.

Existing Conditions Analysis

The first phase of the planning process, the Existing Conditions Analysis, includes an assessment of both the community and the parks and recreation system. The community analysis focuses on understanding the context of the parks and recreation system within the community's history, vision, values, demographics, land-use patterns, and standards. This phase typically includes the review of previously prepared guiding documents such as comprehensive plans, vision plans, strategic plans, redevelopment plans, and previous parks and recreation master plans. It is particularly important to evaluate existing and projected future land development patterns and

PRORAGIS and Other Parks and Recreation Data Sources

Several detailed sources for parks and recreation-related data are available to planners for LOS research and benchmarking efforts for their communities. These include:

PRORAGIS: The National Recreation and Park Association (NRPA) developed its Parks and Recreation Operating Ratio and GIS (PRORAGIS) system to replace outdated standards with a database that allows agencies to benchmark their parks and recreation systems against other systems across the country. It is the largest collection of parks and recreation operating data in the U.S. PRORAGIS is typically used in concert with other parks and recreation system planning tools such as mail or telephone surveys, service area analyses, and stakeholder interviews. Its reporting functions provide the ability to perform side-by-side comparisons based on filtered searches including jurisdictional population, department budget, employee number, location, and acres managed. These comparisons allow agencies to benchmark and evaluate performance against most similar agencies and aggregated data from across the country.

The Trust for Public Land (TPL) City Park Facts and ParkScore: The Trust for Public Land is a national nonprofit organization working to create and improve neighborhood parks. TPL's ParkScore index measures how well the 75 largest U.S. cities are meeting the need for parks, providing in-depth data to guide local park improvement efforts. TPL's City Park Facts is an annually published almanac of the parks and recreation systems of the 100 most populous cities that can be used for benchmarking.

State Comprehensive Outdoor Recreation Plans (SCORPs): States must prepare and regularly update statewide comprehensive outdoor recreation plans in order to be eligible for federal Land and Water Conservation Fund grants from the National Park Service and U.S. Department of the Interior. Most SCORPs address the supply of and demand for local, state, and federal recreation resources, identify needs and new opportunities for recreation improvements, and set forth implementation programs to meet plan goals (NPS 2008). Many SCORPs also include regional and statewide parks and recreation LOS standards or data that can be used for benchmarking.

demographics to gain a thorough understanding of the types of people who are and will be living in the community; their preferred lifestyles; the density of development in different parts of the community; and other factors that may provide insights into parks and recreation needs, priorities, and desired levels of service.

The existing conditions analysis also includes an analysis of the parks system based on the community's existing LOS standards, if available. They are most commonly found in the comprehensive plan or parks and recreation master plan, and are typically expressed in terms of parkland acreage and/or facilities per 1,000 population. The initial analysis will determine if the existing system is meeting the current LOS standards established by the community.

The assessment of the parks and recreation system includes site visits to evaluate individual parks, based on agreed-upon criteria (as discussed in the previous Quality LOS description), and evaluation of the actual existing LOS, based on the existing LOS standards. While existing standards may include only one or two metrics such as parkland acreage or facilities, the actual LOS would ideally be calculated for all of the LOS metrics listed in Table 1. Each metric is necessary to help determine actual LOS, but no metric is sufficient by itself to develop a comprehensive perspective.

Needs and Priorities Assessment

The purpose of the Needs and Priorities Assessment, the second phase of the planning process, is to determine the gaps between existing and desired conditions. Communities typically use a "triangulated" approach to identifying needs, including various types of qualitative and quantitative techniques to determine top priorities from different perspectives. Qualitative techniques typically include interviews with elected officials, community leaders, and other key stakeholders; focus group meetings with user groups such as sports leagues, seniors, and teenagers; workshops with a project advisory committee and the public; and informal discussions with residents at special events. Quantitative techniques include statistically valid surveys, nonstatistically valid online surveys, and LOS benchmarking.

Benchmarking has replaced standards in determining appropriate parks and recreation LOS. Benchmarking is generally defined as a comparison of the quality of an organization's policies, products, or programs with standard measurements or similar measurements of its peers. In parks and recreation system planning, benchmarking is used to compare one parks and recreation system to another. State and national parks and recreation associations no longer publish recommended LOS standards, but encourage communities to benchmark themselves against other communities. Several databases tracking parks and recreation-related information for hundreds of communities across the country are available to planners for this purpose (see sidebar, "PRORAGIS and Other Parks and Recreation Data Sources").

Some cities and counties benchmark themselves against communities with similar demographics, geography, or climate. Other communities select "aspirational" benchmarks using cities or counties they wish to emulate. Both PRORAGIS and TPL reporting functions provide the ability to perform side-by-side comparison based on filtered searches including jurisdictional population, department budget, employee number, location, and acres managed. These comparisons allow agencies to benchmark and evaluate performance against the most similar agencies and aggregated data from across the country.

Findings from the LOS benchmarking can be compared against findings from surveys, focus groups, and other needs assessment techniques to determine if the existing LOS is adequate. For example, if the Facility LOS benchmarking for athletic fields indicates that the community provides a lower number of fields per capita than comparable communities — and the statistically valid survey indicates a high unmet need for athletic fields — then the community may decide to establish a higher Facility LOS standard to reflect demand and need.

Long-Range Vision

The third phase of the planning process is to develop a long-range vision. Elements of the vision should include parks and recreation subsystems; preferred service delivery model(s) for each subsystem; a classification typology for each subsystem; and differential land development patterns and lifestyles identification.

Subsystems. Subsystems include the various components of the parks and recreation system, such as parks, trails, athletics complexes, community centers, aquatics centers, civic plazas, and natural areas. Figure 3 shows some of the typical components or subsystems of a parks and recreation system. Each subsystem may use different metrics to measure and monitor LOS.

Service Delivery Models. Once the subsystems are defined, communities need to determine the preferred Service Delivery Model (SDM) for each. The four typical SDMs are: (1) centralized,



Figure 3. Typical components of a parks and recreation system Courtesy Glatting Jackson Kercher Anglin Inc.

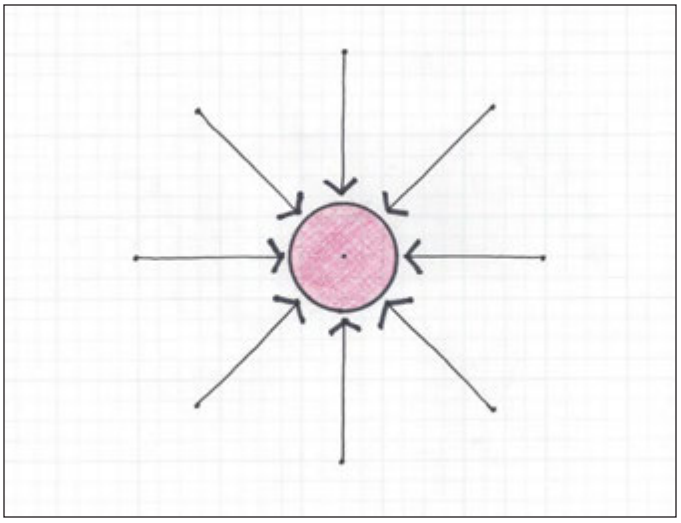


Figure 4. Centralized Model for SDM. Courtesy Barth Associates

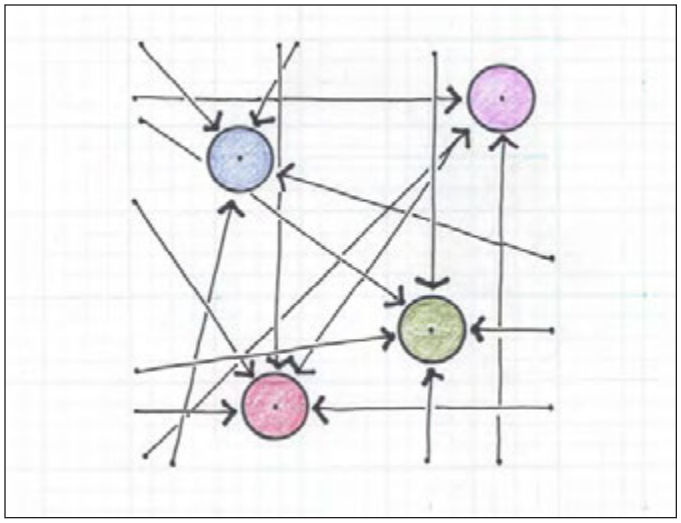


Figure 6. Venues Model for SDM. Courtesy Barth Associates

(2) decentralized, (3) venues-based, and (4) activities-based.

The centralized SDM (Figure 4) assumes that residents and visitors from throughout the community will drive to the central facility. This model typically applies to regional or signature facilities and subsystems such as an aquatics center, a sports complex, an urban festival park, or a cultural center.

A decentralized SDM (Figure 5), on the other hand, focuses on the equitable distribution of services, measured in terms of distance (Access LOS) or population served (Facility or Acreage LOS). A decentralized SDM assumes that facilities or parks will be distributed equitably throughout the community, e.g., one facility per quadrant, as opposed to a single centralized facility.

A venues SDM (Figure 6) is a variation on the centralized model; it assumes that the system is comprised of specialized facilities that will serve the entire community, regardless of access distance or population densities. For example, the City of Naples, Florida, has a tennis complex, a downtown/ urban festival park, a sports park, a dog park, an environmental preserve, a cultural arts park, a boat ramp park, a city beach, a city pier, and an aquatics/community center. Each venue has been planned and designed as a first-class venue to serve the needs of residents citywide.

Finally, an activity-based SDM (Figure 7) focuses on providing desired recreation opportunities throughout the community without regard for the type of park or recreational facility. This model is most common in large, urbanized sites where land is at a premium. A dog park or tennis courts may be located on top of a parking deck, a playground may be provided through a local church, and an athletic field may be provided through partnerships with local schools. For example, the City of Seattle built a mountain bike trail underneath one of its freeway overpasses. The emphasis is not on park or facility types, but on providing access to recreational opportunities wherever and however they can be provided.

As mentioned above, each subsystem may deliver services using a different SDM. For example, an Aquatics Subsystem may deliver services through a single, large, centralized, multipurpose aquatics complex that includes a family water

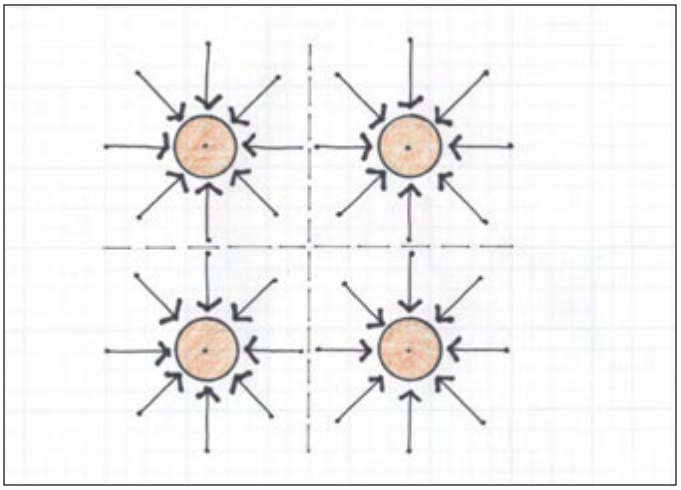


Figure 5. Decentralized Model for SDM. Courtesy Barth Associates

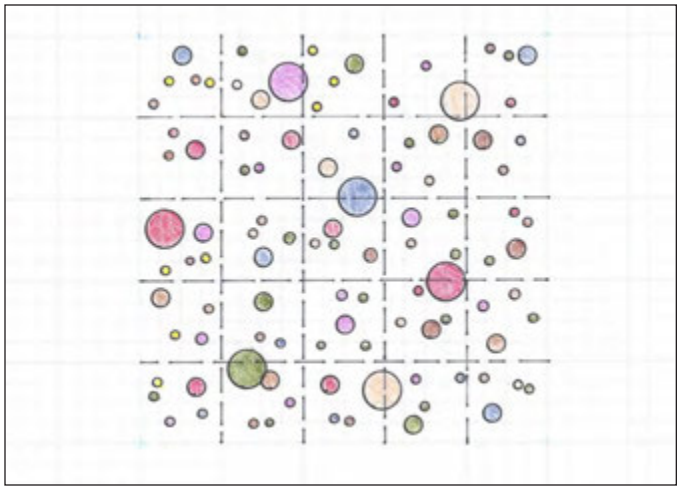


Figure 7. Activity-based Model for SDM. Courtesy Barth Associates

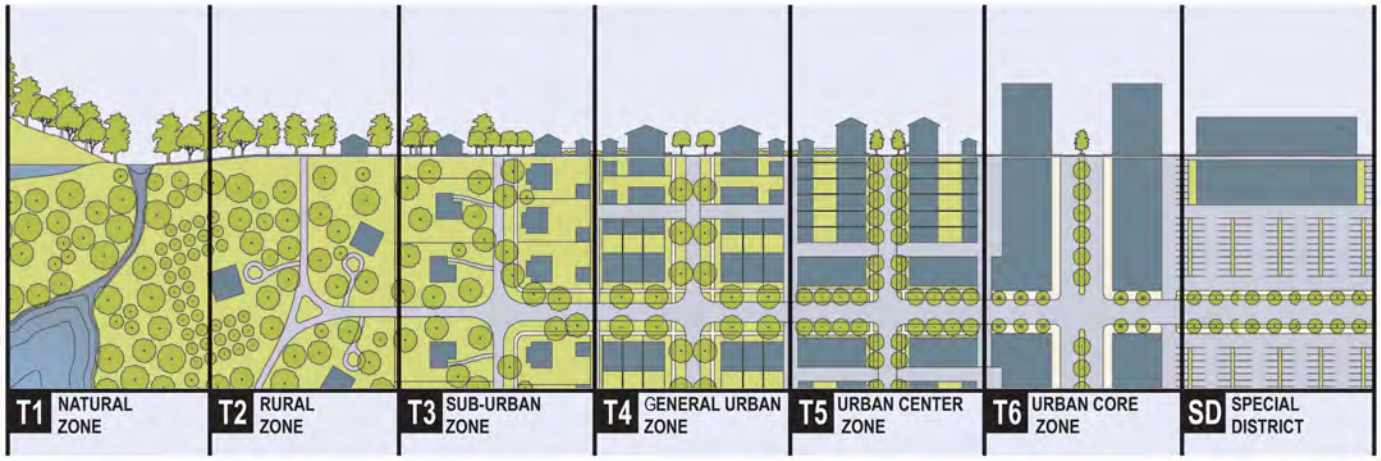


Figure 8. The "transect" illustrates the differences between urban, suburban, and rural development patterns. Courtesy Duany Plater-Zyberk & Company

park, lap pool, and competitive pool. A Neighborhood Parks Subsystem, on the other hand, may deliver services through an equitably distributed decentralized model, where every neighborhood has access to a small public or private recreation area that includes a picnic shelter, playground, basketball courts, and multipurpose lawn. The LOS for each of these two subsystems may be measured very differently.

Classifications. Traditional parks and recreation classifications have included mini-parks, neighborhood parks, school-parks, community parks, large urban parks, natural resource areas, greenways, sports complexes, and special use facilities (Mertes and Hall 1996). However, these classifications do not recognize the wide variety of facilities and spaces found in modern parks systems, including dog parks, skate parks, splash pads, festival ground, mountain bike parks, and others. They also do not reflect variations in levels of amenities and maintenance between facilities within the same subsystem. Therefore, many communities are developing their own classifications systems to better reflect their needs and priorities.

One Florida county is using a three-tiered classification system for each of its subsystems. "Top Tier" facilities include those that are least common and have the highest level of amenities, highest level of maintenance, highest level of staffing, and highest cost recovery goals. "Bottom Tier" facilities include those that are most common and have the lowest level of amenities, maintenance, staffing, and cost recovery goals. Top tier athletic facilities are classified as "Signature Facilities," middle tier facilities are classified as "Competitive Practice and Game Fields," and bottom tier facilities are classified as "Recreational Practice and Game Fields." Similarly, the classification system for the county's Natural Areas Subsystem comprises Destination Preserves, Enhanced Natural Areas, and Basic Natural Areas; and the classification system for their Community Centers Subsystem is made up of Signature Recreation Centers, Community Centers, and Neighborhood Recreation Centers.

Differential Land Development Patterns and Lifestyles. Another determinant of a community's parks and recreation vision — and resulting LOS — is its existing and future development patterns. The "transect" (Figure 8) illustrates the differences between urban, suburban, and rural development patterns.

Recreational lifestyles and needs can vary greatly between these patterns. For example, residents in downtown San Diego indicated that one of their top recreation activities was strolling downtown sidewalks and eating in restaurants, while the top facility priorities for many suburban residents may include bicycling and walking trails, dog parks, and multipurpose fields. Similarly, urban residents often express a desire for facilities such as indoor fitness/ exercise centers within walking distance (about a half-mile) of their homes, while rural and suburban residents are often willing to drive as much as five to 10 miles to a recreation center.

A long-range vision should reflect these differences in both existing and future land development patterns and lifestyles, and a community may wish to create differential LOS standards to reflect these differences as well.

Developing New LOS Standards

There is no single methodology for calculating a community's desired parks and recreation LOS, but it should be based on the findings and decisions from the planning process including the existing conditions analysis, needs assessment, and long-range vision. The first step is to determine which of the LOS metrics are most appropriate for each subsystem.

The selection of metrics should be based on the values of the community and the ability to collect and maintain the appropriate data. For example, the LOS metrics for a Community Center Subsystem may include Square Footage per Capita, both communitywide and within specific geographic areas; Access LOS (for a decentralized SDM), including differentials for urban, suburban, and rural areas; and Revenues as a Percentage of Operating Costs, based on agreed-upon cost recovery goals for each center.

LOS metrics for an Athletics Subsystem may include fields per capita, broken down between competition, practice, rectangular, diamond, and multiuse fields, and Access LOS for urban, suburban, and rural areas. Depending on the governing body's philosophy and policies, there may be no cost recovery metrics required for recreational fields, but Revenues as a Percentage of Operating Costs may be an important LOS for a tournament-quality sports complex.

LOS metrics for a Neighborhood Park or Playground Subsystem may include Per Capita LOS both communitywide and within specific geographic areas; Quality LOS to ensure equal opportunity for quality experiences; and Access LOS for different development patterns. The Access LOS for a Signature Playground may be very different than the Access LOS for a Neighborhood Playground, and both types of experiences may be important to the community.

Once the desired metrics have been determined for each subsystem, the question must be asked: "Do we have enough?" The summary of findings from the Needs Assessment typically provides the answer, including findings from surveys, public workshops, interviews, focus group meetings, benchmarking, and other LOS techniques. If the Needs Assessment summary indicates a strong need or priority for a certain type of park or facility, the existing LOS is probably too low. By calculating the approximate deficiency in parkland or facilities — based on voids in service areas, lack of capacity, or other deficiencies determined during the needs assessment process — communities can estimate the approximate LOS required to satisfy community needs. The new LOS standards can be used as a basis for determining the types, locations, and size of proposed new parks or facilities for the long range vision. The new LOS standards can also be incorporated into the community's comprehensive plan and land development codes to help implement the new vision.

Trends and Additional LOS Metrics

In addition to the traditional LOS metrics outlined above, communities may wish to add other metrics to gauge their LOS regarding social equity, connectivity, water quality, or other community values and initiatives. These types of metrics are closely related to the Sustainable Development Indicators (SDIs) developed by many communities since the late 1980s to measure and monitor progress towards sustainability goals. SDIs are now viewed as both "a means for assessing the distance between a current state of affairs on the ongoing task of achieving a sustainable way of life" and "a means of instituting dialogue over the very conditions of sustainability" (Scerri & James 2010, 223). Similar to LOS standards, there are no universally agreed-upon sustainable development indicators to help measure and monitor progress towards sustainability.

Several current trends lend themselves to nontraditional parks and recreation LOS metrics, including age-friendly communities, connectivity and walkability, access to nature, sports tourism, and placemaking.

Age-Friendly Communities

Communities throughout the U.S. are recognizing the benefits of creating age-friendly communities. John Crompton at Texas A&M notes that "seniors are moving from being a relatively small fringe group to being a large central focus" of parks and recreation service. "Five changes in the status of seniors suggest that recreation and park departments should ... move them to the center of their service efforts: extension of active retirement time, enhanced discretionary income, contributions to economic development, enhanced leisure literacy and disproportionate political influence" (Crompton 2013). Parks and recreation departments wishing to promote and measure LOS related to age-friendly communities may wish to establish alternative LOS metrics such as:

- Multimodal/ Transit Access to Recreation Facilities and Programs for Seniors
- Percentage of Senior Participants
- Percentage of Multigenerational Programs and Activities
- Percentage of Programs that promote Wellness and Active Aging
- Percentage of Opportunities for Paid Work and Volunteering for Older Adults

Connectivity and Walkability

A trend directly related to Age-Friendly Communities is improved bicycle and pedestrian Connectivity and Walkability. Movements such as Smart Growth, New Urbanism, and Complete Streets have been developed in response to increased traffic congestion, automobile-dependent suburban development patterns, and the decline of safe routes for walking and biking. Many parks and recreation departments are actively involved in the development of trails systems as well as safe sidewalk and bike lane connections to parks, community centers, and other recreation facilities.

To indicate their progress towards connectivity and walkability goals, communities may wish to develop LOS metrics such as:

- Percentage of Complete Streets
- Miles of Multipurpose Trails
- Percentage of Parks with Multimodal Bike/Ped/Transit Access

Access to Nature

Recent parks and recreation needs assessment processes across the country indicate that residents feel a real need for access to nature. This need is most acute in urbanizing communities that are losing natural areas and open spaces to higher density development or redevelopment. Richard Louv notes in *Last Child in the Woods* that adults are the predominant users of natural lands, and that today's youth are losing any sense of connection with nature: "In the space of a century, the American experience of nature ... has gone from direct utilitarianism to romantic attachment to electronic detachment" (2008, 16). In response he calls for a new back-to-the-land movement,

including green cities and towns "that, by their very design, reconnect both adults and children to nature" (2008, 276).

Communities wishing to measure access to nature could establish such metrics as:

- Access Distance/ Time to Natural Areas
- Percentage of Residents Who Participate in Nature-Based Programs

Sports Tourism

Sports tourism and travel ball have had a significant impact on parks and recreation agencies in recent years, as many parks and recreation agencies are serving an increasing number of nonresidents. In "Stealing Home: How Travel Teams are Eroding Community Baseball," author Davie Mendell (2014) laments that "community league games have lost a certain sense of community." Mendell is concerned about the high costs of travel ball, the added pressure to perform, mental burnout, overly competitive parents, and the added wear and tear on young players. A significant impact of the shift from recreational leagues to travel ball is the added pressure on local governments to pay for "tournament-quality" sports facilities, regardless of where the players reside.

Peter Harnik of the Trust for Public Land (TPL) notes that "visitors put a different kind of strain on city park resources than do full-time residents. Tourists may make little use of pools, recreation centers and dog parks, but they are a big factor in ... signature destinations … If heavy out-of-towner park use truly diminishes the experience for residents, the response should be the acquisition of more parkland, preferably with some of the funds derived from nonresidents" (Harnik and Martin 2016). Parks and recreation agencies concerned with the impacts of travel ball or sports tourism may wish to track the number of visitors using local facilities — as well as related costs and revenues — and create separate LOS metrics such as:

- Percentage Use of Facilities by Visitors
- Percentage Use of Facilities by Residents
- Cost per Visitor User
- Cost per Resident User

Such data could be helpful in establishing capital and operating budgets and determining the true costs and benefits of accommodating travel teams and sports tourism.

High Performance Public Space Criteria

The following 25 criteria for a HPPS were developed through a "Delphi process" at the University of Florida involving 22 sustainability experts:

Social Criteria:

- The space improves the neighborhood
- The space improves social and physical mobility through multimodal connectivity — auto, transit, bike, pedestrian
- The space encourages the health and fitness of residents and visitors
- The space provides relief from urban congestion and stressors such as social confrontation, noise pollution, and air pollution
- The space provides places for formal and informal social gathering, art, performances, and community or civic events
- The space provides opportunities for individual, group, passive, and active recreation
- The space facilitates shared experiences among different groups of people
- The space attracts diverse populations
- The space promotes creative and constructive social interaction

Environmental Criteria:

- The space uses energy, water, and material resources efficiently
- The space improves water quality of both surface and ground water
- The space serves as a net carbon sink
- The space enhances, preserves, promotes, or contributes to biological diversity
- Hardscape materials were selected based on longevity of service, social/cultural/historical sustainability, regional availability, low carbon footprint, and/or other related criteria
- The space provides opportunities to enhance environmental awareness and knowledge
- The space serves as an interconnected node within larger-scale ecological corridors and natural habitat

Economic Criteria:

- The space creates and facilitates revenue-generating opportunities for the public and/or the private sectors
- The space creates meaningful and desirable employment
- The space indirectly creates or sustains good, living-wage jobs
- The space sustains or increases property values
- The space catalyzes infill development and/or the reuse of obsolete or underused buildings or spaces
- The space attracts new residents
- The space attracts new businesses
- The space generates increased business and tax revenues
- The space optimizes operations and maintenance costs (compared to other similar spaces)

High Performance Public Spaces

Many parks within the U.S. were developed within the "Recreation Era" between 1930 and 1965, characterized by architectural historian Galen Cranz as emphasizing basic, universal facilities to meet the increased demand for recreation, such as playgrounds, ball fields, and picnic shelters. In 2004 Cranz and Boland identified a new trend in parks and recreation design, the "Sustainable Park," which responds to the needs for communities to become more ecologically and socially sustainable. Characteristics of Sustainable Parks include self-sufficiency of resources and maintenance, solving larger urban problems outside of park boundaries, and adopting new standards for aesthetics and landscape management (Cranz & Boland 2004).

Communities are becoming more aware of the need to design all parks and recreation facilities as great public spaces that generate multiple benefits. In my recent research at the University of Florida, I created the concept of a High Performance Public Space (HPPS), defined as "any publicly accessible space that generates economic, environmental, *and* social sustainability benefits for their local community" (Barth 2015). A HPPS can be a park, trail, square, green, natural area, plaza, or any other element of the public realm that generates all three types of benefits. See the sidebar on page 10 for a description of the defining criteria for a HPPS.

While it is not realistic to think that every public park or public space could meet all 25 defining HPPS criteria, every public space has the potential to generate some type of sustainability benefits either directly or indirectly. Parks and recreation agencies interested in promoting any of these criteria could establish appropriate LOS metrics to measure and track their progress.

Final Thoughts for Planners

A thoughtful, meaningful set of Parks and Recreation LOS Standards can be very useful to communities for long-range planning, needs assessments, and growth management. There are very few, if any, state or federal mandates that dictate which metrics must be used; communities are free to develop the LOS metrics and standards that best serve their needs.

Key considerations for selecting LOS metrics include:

- Do the metrics reflect the values and needs that are most important to residents?
- Are the LOS standards, metrics, and definitions logical and easy to understand?
- Is accurate data available for each metric and relatively easy to collect?
- Do the metrics truly represent the actual levels of service provided?
- Collectively, do the metrics and standards provide a comprehensive perspective of LOS, including quantity, quality, and access to facilities and programs, as well as other factors that are important to the community?

LOS metrics and standards should be developed through a comprehensive planning process, as outlined above, including a robust public review process. Preliminary metrics and standards should be reviewed and discussed with staff, user groups, an advisory or steering committee, key stakeholders, the general public, and elected officials in order to build consensus regarding how Parks and Recreation LOS should be defined, measured, and counted.

Most importantly, LOS standards should not be viewed as static. They should be reviewed and recalculated annually, and updated every five years (at a minimum) in conjunction with a needs assessment process to ensure that they remain reflective of the community's needs, values, and goals. A comprehensive set of LOS standards, tested and updated regularly, helps ensure that a community is truly meeting residents' needs and generating the greatest benefits from its parks and recreation system.

About the Author

Dr. David Barth is a registered landscape architect, certified planner, and certified parks and recreation professional who specializes in the planning, design, and implementation of the public realm. He has developed parks and recreation system master plans for over 70 communities throughout the United States including Washington, D.C.; Miami-Dade County, Florida; Norfolk, Virginia; downtown San Diego; and the City of Raleigh, North Carolina; and has led the planning and design of hundreds of parks and trails. He was a co-author of the American Planning Association (APA) PAS Report From Recreation to Re-Creation*, as well as a contributor to APA's* Planning and Urban Design Standards *for parks and recreation needs assessments.*

References and Resources

Barth, David. 2015. "The Adoption of Innovation in the Planning and Design Process; Creating High Performance Public Spaces." University of Florida.

Cranz, Galen, and Michael Boland. 2004. "Defining the Sustainable Park: a Fifth Model for Urban Parks." *Landscape Journal* 23: 102–20.

Crompton, John. 2013. "Are Your Seniors Moving to Center Stage?" *Parks and Recreation*, December. Available at www.parksandrecreation.org/2013/December/Are-Your-Seniors-Moving-to-Center-Stage/.

Harnik, Peter. 2010. *Urban Green*. Washington, D.C.: Island Press.

Harnik, Peter, and Abby Martin. 2014. "How Many Out-of-Towners are in your Parks?" *Parks and Recreation*, May. Available at www.parksandrecreation.org/2014/May/How-Many-Out-of-Towners-Are-in-Your-Parks/.

Louv, Richard. 2008. *Last Child in the Woods*. 2nd edition. Chapel Hill, N.C.: Algonquin Books of Chapel Hill.

Mendell, Davie. 2014. "Stealing Home: How Travel Teams are Eroding Community Baseball." *The Washington Post*, May 23. Available at www.washingtonpost.com/opinions/stealing-home-how-travel-teams-are-eroding-community-base-

ball/2014/05/23/5af95d34-df6e-11e3-9743-bb9b59cde7b9_story.html.

Mertes, James D., and James R. Hall. 1996. *Park, Recreation, Open Space and Greenway Guidelines.* Arlington, Va.: National Recreation and Park Association.

Moiseichik, Merry, ed. 2010. *Management of Park and Recreation Agencies.* 3rd Edition. Ashburn, Va.: National Recreation and Park Association. Information available at www.nrpa.org/Store/detail.aspx?id=MANAGEM06.

National Park Service (NPS). 2008. "Land and Water Conservation Fund: How States Plan and Select Projects." Available at www.nps.gov/ncrc/programs/lwcf/plan_prjts.html.

National Recreation and Park Association. 2016. "PRORAGIS." Available at www.nrpa.org/PRORAGIS/.

National Recreation and Park Association. 2014, amended 2015. *Commission for the Accreditation of Parks and Recreation Agencies (CAPRA) National Accreditation Standards.* Fifth Edition. Available at www.nrpa.org/capra/.

Scerri, Andy, and Paul James. 2010. "Accounting for Sustainability: Combining Qualitative and Quantitative Research in Developing 'Indicators' of Sustainability." *International Journal of Social Research Methodology* 13(1): 41–53. Information available at http://dx.doi.org/10.1080/13645570902864145.

Trust for Public Land. 2015. "2015 City Park Facts." Available at www.tpl.org/2015-city-park-facts.

Trust for Public Land. 2016. "ParkScore." Available at http://parkscore.tpl.org/.

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A New Approach to Parks and Recreation System Planning

October 29, 2020, Feature, by David Barth, Ph.D., CPRP, AICP

For an enhanced digital experience, read this story in the ezine.

How today's environment is shifting our thinking about the future of the profession

Much has changed since NRPA published its *Park, Recreation, Open Space and Greenway Guidelines* in 1996. In those simpler times, park and recreation agencies focused on things, like playgrounds, ball fields, boat ramps and youth athletics. Now they're also involved in socioeconomic and environmental



issues, such as the coronavirus (COVID-19) pandemic, wildfires, urbanization, social equity and services, habitat restoration and economic development.

In recognition of these increased complexities, there are no longer any nationally accepted standards for parks and recreation planning. Each community must determine its own standards, level-of-service (LOS) metrics, and long-range vision for its parks and recreation system based on community issues, values, needs, priorities and available resources. Even NRPA's 1996 guidelines recognized that "a standard for parks and recreation cannot be universal, nor can one city be compared with another even though they are similar in many respects." Therefore, it's time for a new approach to parks and recreation system planning; one that not only addresses traditional park and recreation challenges, but also is robust and comprehensive enough to address these broader community-wide issues.

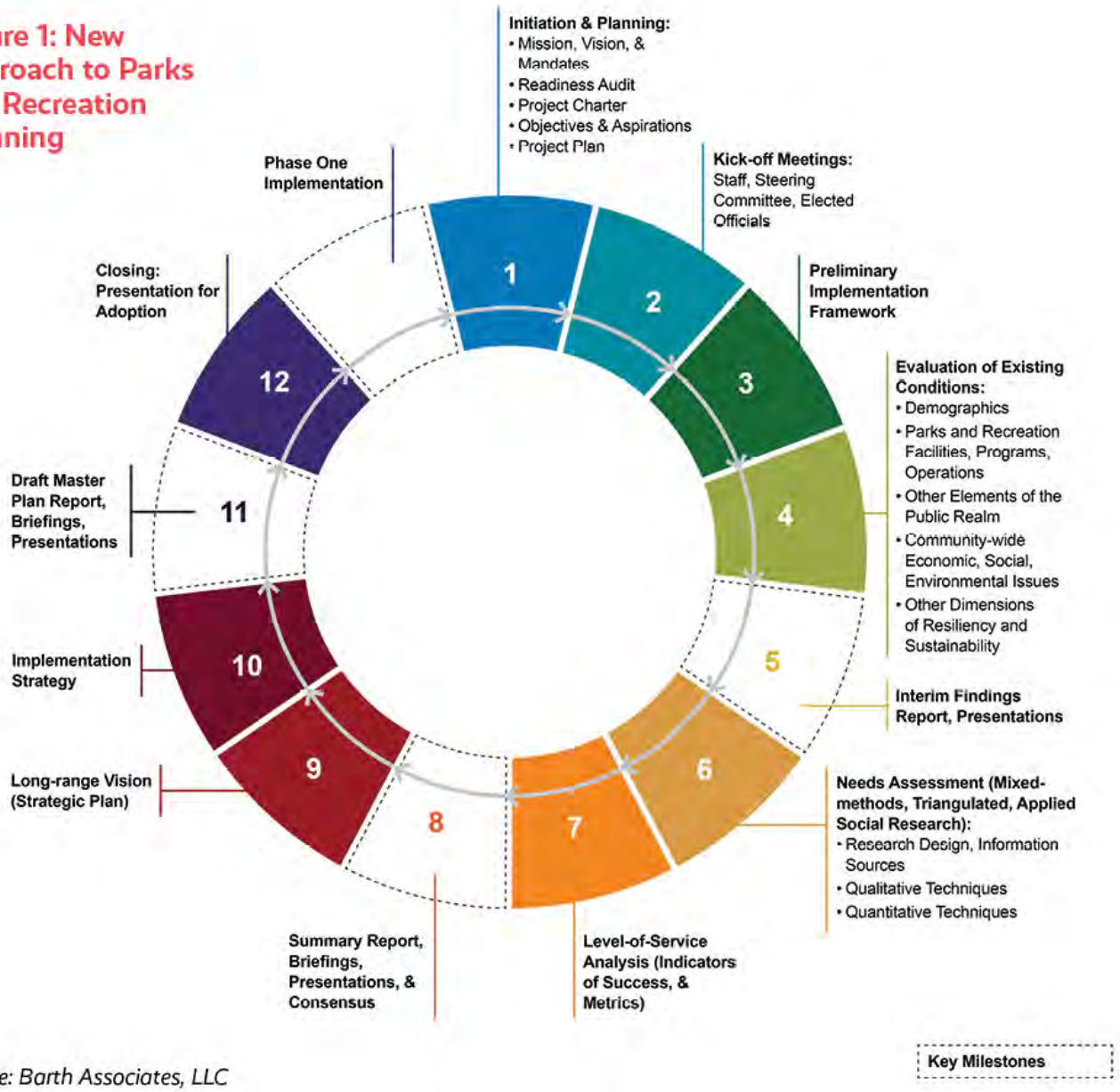
First, we need to broaden our perspective of parks and recreation systems, in order to respond to societal shifts and expectations in a meaningful way. Parks and recreation facilities should no longer be regarded as isolated, but rather as elements of a larger, interconnected public realm that also includes streets, museums, libraries, stormwater systems, utility corridors and other civic infrastructure. Alternative dimensions of parks and recreation systems, such as equity and climate change, should be considered from the onset of the planning process. And, each site or corridor within the system should be planned as high-performance public spaces (HPPSs) that generate multiple economic, social and environmental benefits. This broader perspective encourages park and recreation agencies to transcend their silos — and leverage their resources — to plan and collaborate with other public and private agencies to meet as many of the community's needs as possible. As a result, parks and recreation systems can be repositioned as essential frameworks for achieving community sustainability, resiliency and livability.

Second, we need to replace the traditional linear, narrowly defined parks and recreation system master planning (PRSMP) process with a cyclical, open-ended process that is constantly updated and integrated with other foundational public realm plans, such as long-range transportation plans, stormwater master plans, habitat conservation plans and future land-use plans. Such an ongoing, collaborative planning process can lead to the development of an integrated public realm that can generate far more benefits for a community than the traditional siloed parks and recreation system. This proposed new approach, illustrated in Figure 1, differs from the traditional approach in several ways.

Project Initiation, Planning and Dimensions

A noteworthy difference between the traditional PRSMP and the proposed new approach is the

Figure 1: New Approach to Parks and Recreation Planning



Source: Barth Associates, LLC

amount of time and thought given to the initiation and planning phase of the project, including the development of a project charter, project plan and a readiness audit. Careful and thoughtful planning is critical to identifying opportunities to generate greater resiliency and sustainability benefits for the community, as well as building the credibility and support needed to implement key recommendations. The eventual success or failure of many plans can be traced to the amount of time spent initiating and planning the process. Once a PRSMP process begins, it is very difficult to change its scope, budget and deliverables midstream.

A key component of the initiation phase is the identification of the desired, alternative "dimensions" of parks and recreation planning to be addressed during the process, as listed in Figure 2. Identification of these dimensions during the initiation phase has direct implications for the makeup of the project team, the scope of work, the areas of focus and the eventual success of the project.

Decision-Making Framework

Another feature of the new PRSMP approach is a more thoughtful and nuanced "decision-making framework" to replace absolute standards and classifications, providing parks and recreation agencies with the freedom and flexibility to respond to community issues and needs. Such a framework may include: the agency's mission and vision; agency and community values; guiding principles; residents'

Figure 2: Alternative Dimensions of Parks and Recreation System Planning

- Accreditation by the Commission for Accreditation of Parks and Recreation Agencies (CAPRA)
- Before- and after-school care
- Bicycle and pedestrian access
- Branding
- Capital improvement program
- Commercial recreation
- Compliance with Americans with Disabilities Act (ADA)
- Comprehensive plan goals
- Construction delivery methods
- Cost recovery
- Crime prevention through environmental design (CPTED)
- Design standards and details
- Economic development
- Educational opportunities
- Environment
- Esports
- Flood control
- Funding
- Gentrification
- Green infrastructure
- Health and wellness
- Homelessness
- Impact fees
- Income inequality
- Land development codes
- Land use
- Level-of-service standards
- Marketing
- Mental health
- Needs and priorities
- Neighborhood stabilization
- Operations and maintenance
- Opioid abuse
- Organizational mission and role
- Organizational structure
- Park classifications
- Partnerships
- Permitting
- Political priorities
- Programs — recreation, social, educational
- Quality of life
- Redevelopment
- Resource protection
- Safety
- Sea-level rise
- Service delivery models
- Social equity
- Staffing
- Stormwater treatment
- Technology
- Tourism
- Transportation
- Wildlife habitat
- Youth development

Source: Barth Associates, LLC

needs and priorities; community context; desired experiences; and service-delivery models. Collectively, these components encourage thoughtful, context-based solutions rather than pre-conceived standards.

Feedback and Consensus Building

The new approach provides numerous opportunities throughout the planning process to pause, present and discuss interim findings; determine if additional lines of inquiry are needed; and build consensus with key stakeholders and decision-

makers regarding the direction of the process. Typical formats (online or in-person) often include staff review meetings, stakeholder focus group meetings, advisory committee presentations, and one-on-one briefings and workshops with elected officials. Such feedback loops are critical for eventual approval, adoption and implementation of the master plan.

Evaluation of Existing Conditions

While the traditional approach to evaluating existing conditions focuses solely on parks and recreation facilities, the new approach also emphasizes the evaluation of the specific dimensions identified in the initiation phase. Each topic requires an in-depth analysis of existing conditions and issues, and their implications of the parks and recreation system. For example, research and discussions with the public works or engineering department may reveal new information, such as the need for additional stormwater treatment or floodwater storage in certain areas of the community or the opportunity to meet recreation needs and stormwater needs on the same site. Investigation into crime rates and safety issues could identify hot spots that might benefit from additional security, nighttime recreation programs, or design modifications in accordance with guidelines for crime prevention through environmental design (CPTED). Parking and transportation issues could be investigated to determine the potential role of parks in providing trail connections, bike-share stations, overflow parking, transit stops or other multimodal transportation solutions. What's more, discussions regarding housing and economic development could detect opportunities for parks and green spaces to stabilize neighborhoods, improve property values and catalyze redevelopment.

Preliminary Implementation Framework

The purpose of the preliminary implementation framework (PIF) is to initiate implementation discussions as early in the process as possible; traditional processes often leave implementation discussions for last, which can doom the project to failure. The PIF is particularly important for plans that address numerous dimensions, such as transportation, stormwater and social services, which will be implemented by agencies other than a parks and recreation or planning department. In addition to traditional forms of implementation — such as capital improvements, additional staffing, new programs and increased maintenance — the PIF may include updates to comprehensive plans or land development regulations; partnerships with other agencies, businesses or nonprofit organizations; changes to staffing or organizational structure; refocused delivery of programs and services in response to the agency's mission or residents' priorities; and changes to maintenance and operations procedures. Accreditation by the Commission for Accreditation of Parks and Recreation Agencies (CAPRA) is another form of implementation.

Needs Assessment Process

The new approach proposes a more rigorous, scientific methodology than that used by many communities. Needs assessments are often scrutinized by the public, stakeholders and elected officials; parks planners need to be able to defend their methodology, data collection process and findings. If done correctly, a needs assessment is a type of applied social research that involves developing a research design, gathering and analyzing the data collected from various sources, and using the results to inform policy and program development. In our practice, we use a mixed-methods, triangulated approach that compares the findings from quantitative, qualitative, and secondary research techniques and data to identify top priorities. As with the evaluation of existing conditions, the needs assessment process should solicit public input regarding the entire public realm, as well as community-wide resiliency and sustainability needs.

Level-of-Service Standards

The 1996 *Park, Recreation, Open Space and Greenway Guidelines* state that "we must realize an open space standard is not so much an exemplary measure to be used in some form of comparison or judgement of adequacy or accomplishment, but is an expression of a community consensus of what constitutes an acceptable level of service." Therefore, the new approach encourages public agencies to revisit their core values, principles and goals; and to develop LOS metrics that effectively reflect their aspirations. In addition to the traditional park metrics of acreage, access and facilities, for example,

some communities may also wish to establish new metrics related to resiliency and sustainability as outlined in Figure 3.

Figure 3: Potential LOS Metrics for Alternative Dimensions

Dimension	Potential Metrics
Bicycle and pedestrian access to parks, open spaces, natural areas, civic sites and other elements of the public realm	• Miles of paved multiuse trails • Percentage of the long-range bicycle and pedestrian network vision completed • Percentage of parks and open spaces with bicycle and pedestrian access • Percentage of complete streets
Green infrastructure and stormwater treatment	• Percentage of community tree canopy coverage • Improvement in water quality of key water bodies • Percentage of stormwater treatment projects incorporating green design practices
Health and wellness of community residents	• Percentage of residents considered obese • Participation in fitness and wellness programs • Reduction in chronic health conditions such as type 2 diabetes and heart disease
Social and educational programs	• High school graduation rate • Local unemployment rate • Percentage of households considered by the United Way to be Asset-Limited, Income-Constrained, Employed (ALICE)
Economic development	• Increase property values adjacent to new or improved parks and open spaces • Increase number of businesses opened in response to new or improved parks and open spaces • Increase in public and private sector jobs created through parks and open spaces

Source: Barth Associates, LLC

Collaborative Visioning

As mentioned above, a key attribute of the new approach is the collaborative planning of the park and recreation vision concurrently with planning of other public realm elements, such as streets, bikeways and trails, civic spaces, stormwater treatment facilities and utilities.

Collaborative planning is also required to address broader community-wide dimensions, such as health, equity and economic development. Strategies to increase collaboration includes concurrent scheduling of PRSMPs with other foundational public realm plans, such as comprehensive transportation plans (CTP) and stormwater master plans; concurrent, multidisciplinary needs assessment processes — including site visits, interviews, focus group meetings, public workshops and surveys; and multiagency and multi-departmental reviews of proposed capital improvements to identify opportunities for partnerships, collaboration or joint use. Collaborative brainstorming by people with different perspectives and backgrounds often can yield far more innovative and imaginative ideas than can visioning that involves only those of similar mindsets.

Implementation Strategy

The implementation phase of the PRSMP represents the culmination of all the analyzing, planning, ideating, discussing, meeting, surveying, thinking and visioning activities described above. Consistent with the previous phases of the planning process, the new approach to PRSMP emphasizes a

collaborative approach to implementation involving community leaders, elected officials, multiple departments and agencies, businesses and other key stakeholders. An effective implementation strategy requires that participants transcend the silos of their departments or agencies; identify opportunities for partnerships or joint use; leverage available resources, regardless of the source; and actively look for ways to generate multiple benefits for the community through implementation of projects, programs and initiatives.

Embracing a New Approach

Regardless of your aspirations — whether you wish to transform your entire community, reposition your department or parks and recreation system as being more essential, or simply increase the quality of the services and programs you provide — the new approach to parks and recreation system planning can help you meet your goals. Following this process will result in a PRSMP that is more relevant to the needs and issues of your community and elected officials, more collaborative, more credible and more likely to be successfully implemented and transformative. And, adoption of this new approach can yield numerous benefits for park and recreation agencies and their communities, including increased recognition, quality of life and resiliency.

To hear David Barth speak about PRSMPs, tune in to the November bonus episode of Open Space Radio at nrpa.org/NovemberBonusEpisode.

David Barth is the Principal of Barth Associates, a firm specializing in parks and recreation system planning (david@barthassoc.com). He is the author of the new book *Parks and Recreation System Planning: A New Approach for Creating Sustainable, Resilient Communities*

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Jon Kohl
2 years ago

The author is dead on when he says that implementation discussion is often left to the end and this is a problem. Consequently he proposes establishing an implementation framework earlier on in the planning process. While I agree with the spirit, implementation is best served going even further back in the process than Mr. Barth proposes. One of the main reasons plans are not implemented is that stakeholders do not support the plan because they do not see their interests, sweat, and blood adequately represented and feel little ownership for someone else's objectives and strategies. If we accept that premise, then the very process of planning itself is what builds that interest, that ownership, that empowerment, and that capacity of the stakeholder community. If these investments are crucial to implementation, one might reconceptualize implementation as inherent in the process itself not something you do once the plan is completed (as Mr. Barth noted), which is far too late. Implementation, in fact, can be seen as beginning the very moment the idea of doing a plan enters someone's head. In that moment, the person begins thinking about how to allocate power, configure relationships, and build alliances. From that point, the process may head down a path that leads to little participation, ownership, and commitment by stakeholders or it may go down a very different path. It is what systems theorists call path dependence. The key is trace the path back to its origin rather than waiting until the ball is already accelerating half-way down the mountain to start thinking about implementation. In conclusion, "how we plan determines what we implement." The application of a more holistic approach to planning is the thesis of the book

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Comment Letter I99

From: joyce nygaard <jmnygaard@hotmail.com>
Sent: Monday, February 27, 2023 10:00 PM
To: CEQA, CountyParks
Subject: [External] Alpine County Park Recirculated DEIR

Hello,

I99-1 I have been a resident of Alpine for 24 years. I am concerned about the scope of and plan for the proposed Alpine County Park. Following are my comments on specific sections of the Recirculated DEIR.

Section 6: Alternatives

The stated County objectives for a park in Alpine are to provide:

1. a place for all Alpine to gather
2. a variety of active and passive uses
3. preserve a portion of the property
4. incorporate natural features
5. recreation opportunities that improve health and wellness
6. protect health and safety
7. is consistent with DPRs mission
8. reflect Alpine's heritage

I99-2

The majority of residents of Alpine have repeatedly stated they wanted a passive park at this location. This would include an equestrian staging area, dog park, community garden, picnic and game tables, exercise stations, and trails. A multi-use field which could be used for informal games and gatherings could also be included. This would meet all the projects objectives while keeping in line with the wishes of the community.

I99-3 However, Alternative 5, the "Passive Park Alternative" in the recirculated DEIR is not a park at all. It is nothing more that a parking lot and not at all what residents supporting a passive park meant by that. Why wasn't an *actual* passive *park* alternative included?

I99-4 Alternative 4, the Reduced Project, which the DEIR deems the environmentally superior alternative, eliminates the bike and skate parks but maintains amenities not suitable for this location including a baseball field and basketball courts. The amenities will create noise that cannot be adequately mitigated and increase water usage over a more passive park.

I99-5 This assessment rightfully concludes that Alternative 2, a Sports Complex, would have detrimental effects to roadway levels of service, significantly alter the visual character of the site, require field lighting and extended park hours, and have significant impacts on biological resources that cannot be mitigated on site. This alternative should be rejected.

Appendix K

I99-6 This section analyzes the time to evacuate the park and the surrounding areas assuming a wind-driven fire. Their analysis shows that evacuation of the proposed park and surrounding land uses would be between 1 hr. 55 minutes and 2 hrs. 53 minutes. They further conclude that the park project adding 8 to 12 minutes to that evacuation time would not be significant. I submit to you that adding 8 to 12 minutes to an evacuation during

I99-6 cont. a wind-driven fire event can be the difference between life and death. I also question their "research showing there were no fire-caused deaths during an evacuation." Were they here during the Cedar Fire?

I99-7 The Recirculated DEIR still leaves unanswered questions about septic vs. sewer (which does not exist in the area), traffic related issues, and accessibility by bike or foot. The County repeatedly states that DPW will address those at a later time. This is irresponsible at best.

Thank you,
Joyce Magruder Nygaard
1434 Ramsey Rd.
Alpine, CA 91901

I100-1

From: onwingz
To: CEQA, CountyParks
Subject: [External] Please STOP this madness! No one in Alpine wants these new developments. We are so rich in wildlife and habitat. In an era where we are all about ecology and preservation it makes NO sense to continue to rob our natural habitats in the name ...
Date: Friday, December 16, 2022 7:04:45 PM

Sent from my Verizon, Samsung Galaxy smartphone

From: CEQA, CountyParks
Sent: Tuesday, February 21, 2023 4:46 PM
To: CEQA, CountyParks
Subject: FW: [External] Alpine Park Project

-----Original Message-----
From: Audrey Peck <audreypecknh@gmail.com>
Sent: Tuesday, February 21, 2023 4:42 PM
To: Prowant, Anna <Anna.Prowant@sdcounty.ca.gov>
Subject: [External] Alpine Park Project

Dear Ms. Prowant,

I101-1 Let me introduce myself! My name is Audrey Peck. My husband and I moved to Alpine in December 2021, from the great state of New Hampshire. We not only sold our home of 38 years, we sold our family lake home in VT, and our Florida Condo to purchase this property for 1.6 Million Dollars. We gave up our lives to be near our sons in San Diego. On top of 20,00 real estate taxes and high electric, water, insurance bills, food prices and a state that loves taxes on everything we feel we are barely hanging on!

Looking for a community that was rural, with great space, large house lots we were very impressed with the rural charm of this little town! Being New Englanders we love quiet walks in the fields and forests, sunset views, and quality of life that is in the natural world!

I101-2 I have come to learn about this Community Park that the County of SD wants to develop 'to enhance the quality of life here in Alpine!' Interesting, that NONE of the Board of Supervisors live here and apparently have not listened to the Will of the people who do live here!

I101-3 I have read the DIER for the Alpine Park Project and the portions revised and recirculated under the CEQA.
Summary of Project Alternatives with Alternative 6.5.1/ 1 - No Project Alternative This lists 21 things that would not change the existing 'field of dreams!' No changes in aesthetics & visual resources, agriculture & forestry, air quality, biological resources, ENERGY USE, greenhouse emissions, and hazardous materials to name a few. Haven't you just answered your own question? Isn't this the standard of 'Quality of Life for Alpine Residents?' What are we missing here in Alpine?
If you think we want no sunsets due to 'extended lighting of the fields, loud screams from obnoxious parents during baseball rivalries, horse manure to smell, OBSCENE waste of water use, a supervisor/ranger we have to pay and likely give a County Pension to, along with teenagers in the park smoking and setting the place on fire, stuffing the toilets with sand and paper so they overflow, leaving water running, then this Board of Supervisors know nothing about the Alpine Community!
There are already plenty of baseball fields at the Middle School. Just recently thousands of tax payer dollars were spent to improve these fields!

I101-4 In Obective 5: 'Enhance the quality of life in Alpine by providing exceptional park and recreation opportunities that improve health and wellness while preserving natural and cultural resources.' We have several parks in the cities throughout the SD County. If we want a large place to gather we can choose several places to go. We don't need a Regional Park in Alpine. We have a great park the way it is with trails for horseback riding, dirt bikes, walking paths for walks with dogs, and hiking as well.

I101-5 The only other alternative is Altrrnative 5 that offers a Passive Park. This is more damaging to flora and fauna, than is Alternative 1, however it is the Second Best alternative.

I101-6 Alternatives 2,3, and 4 are dismissive of the fact that we live in a high risk fire area! There are constant complaints on social media that another homeowner has lost their house insurance because of such high risk. There is blantant

I101-7 disregard for the people of Alpine for living in the sanctity of their own homes, able to catch the sunset from their porches, and taking a quiet stroll in the field listening to birds and watching butterflies swoon around the natural wildflowers.

I101-8 Regardless of which politician purports 'we have plenty of water' the answer is NO, WE DON'T! Padre Dam has offered incentives to use less water and our cost of water has stayed relatively low! Imagine the price Alpine Residents would have to pay for water if they put in a unneeded park with soccer and baseball fields(again, right behind Wright's Field is the JM Middle School with several fields!) This project is ill conceived, and just a way to spend money unnecessarily.

I101-9 I will never forget the story about the people in this town in Arizona who woke up one morning and there was NO WATER! They thought the pump? No, they called their neighbors, they too, HAD NO WATER! They called all over town and THERE WAS NO WATER! For now, they must carry jugs and go buy water. The man interviewed said these words that pierce my ears. 'You don't think about it until all the water is gone!' Towns all over America are losing their charm,

I101-10 their quality of life, their sanctity because someone sitting on a Board somewhere thinks they want to build something. Please, allow Alpiners to use our field as WE see fit! Not for a sports complex, not a staging area, not a ranger station, or anything of the like! Keep it a place where the symbiotic nature of man and environment coexist! I want an answer to this letter from ALL 5 Board Members sitting on the Board of Supervisors. How do you think teenagers and young people

I101-11 behave when they are unsupervised in a large park? Do you think they smoke responsibly? Do you think they won't cause damage to bathrooms when they see a fun challenge on Tik Tok? Do you know anything about the insurance if a

I101-12 child or adult is injured from a flying ball, or a skateboarder? Is this yet another thing Alpine taxpayers will be expected to pay for on top of a park we don't want to begin with? How will our water rates be affected by the pricing at Padre

I101-13 Dam when the expected usage of over a million gallons every year? What happens when we wake up in drought plagued Eastern SD County and WE HAVE NO WATER?

Audrey C. Peck
2913 Night Watch Way
Alpine, CA 91901
603- 819- 9513

Sent from my iPhone

Comment Letter I102

From: Audrey Peck
To: CEQA, CountyParks
Cc: Audrey Peck
Subject: [External] Alpine county Park
Date: Monday, February 27, 2023 12:34:44 PM
Attachments: Anna Prowant.docx

Dear Ms. Prowant,

Please see my letter in regards to the Alpine County Park DEIR. Please share with the Board of Supervisors.

Anna Prowant

Parks & Recreation Department

County Of San Diego

5500 Overland Ave. Suite 410

San Diego, CA 92123

CountyParksCEQA@sdcounty.ca.gov

Reference: Alpine County Park Project (DEIR)

Dear Ms. Prowant,

I102-1 I have written to you in hopes that the Board of Supervisors will understand the precarious position Alpine residents are already in with the almost constant drought conditions that plague us, and fire hazards that threaten us.

I102-2 In communication with other Alpine residents I have learned that fire insurance is not something that comes easily. Several people have been either dropped by their insurance companies and have had to find other companies, or their insurance company has raised their rates so high that it becomes unlivable to stay here.

I102-3 Now add, Wrights Field, where the Board of Supervisors feel that it is somehow their right and responsibility to shove something down our throats that it is clear the majority of Alpine Citizens do not want. The structures, the heat from hundreds of automobiles with gas and oil spewing and spilling from some, the careless disposal of cigarette butts, the danger from car fires on Route 8 East and with the right wind is in the firing line of Wrights Field.

I102-4 Excessive (no, OBSCENE) Water Consumption is another area that goes completely against the State of CA mitigation for the future of our State. Because Joel Anderson says we have plenty of water DOES NOT MAKE THAT STATEMENT TRUE! There is no other government official in the State of CA that I have heard that has EVER said those words in fact, Anderson's words are very irresponsible. The State has been in a drought for years, we all know it, and it's our job as conservationists who care about the future of our children and grandchildren, and the livability of this state for citizens for the next generations that follow.

I102-5 Politicians, government officials, and the like have a responsibility to listen to their constituents, and if they don't, they don't belong in those positions. There are consequences for planners whose plans backfire, and most often that is seen in the next voting cycle.

I102-6 Making CA safe and healthy, with clean air and water, food to table sustainability, and protecting natural resources for future generations is the best we can bring to our Golden State. We all know the danger of the water table of the Colorado River is dangerously low and has been. Most Western states rely on the Colorado River for water. It is a natural treasure. Padre Dam will be under undue hardship to use 16,000,000 gallons yearly and it will end up costing Alpine residents more in their bill. Most of of us try to use less water not MORE WATER.

In the survey about the park there were so few people that wanted the ball fields that that plan should have been taking of the table.

I102-7 In summary, the majority of residents don't want the park. It does not meet any of your goals about 'adding quality of life.' It does just the opposite. There is nothing that realistically mitigates the fire hazards, and there is nothing that can mitigate the potential for graffiti, setting fires, causing destruction to the property, possible injuries to those participating in bicycle or skate board activities. A Passive Park is the only idea that makes this park any better than what it is now. A shaded structure with a few picnic tables, and a children's playground swing set/slide/climbing apparatus (playscape) would be sufficient. The schools have all the grassy fields you need for baseball, and soccer. Where do the kids ride their skateboards when people build skate parks in other cities and towns? If you guessed in the road and on sidewalks you would be right.

I102-8 Thank you for the opportunity to write. I am hoping that members on the Board of Supervisors vote their conscience, not for a 'popular idea at the time' that comes with a very consequential risk to residents of Alpine.

Audrey Peck

2913 Night Watch Way

Alpine, CA 91901

audreypecknh@gmail.com

From: James Peck
To: CEQA, CountyParks
Subject: [External] Alpine Park Letter
Date: Sunday, February 26, 2023 10:40:15 AM
Attachments: JAMES PECK February 25 2023 LETTER to PRD on Alpine Park DEIR.docx

---

Ms. Prowant,

See attached my letter on the DEIR.

Thank you for the opportunity to comment.

James M. Peck

2913 Night Watch Way
Alpine, CA 91901

February 25, 2023

Anna Prowant
County of San Diego
Parks and Recreation Department
5500 Overland Avenue, Suite 410
San Diego, CA 92123
countyParksCEQA@sdcounty.ca.gov

Reference: Alpine County Park Project ("project") and Draft Environmental Impact Report ("DEIR")

Dear Ms. Prowant,

I moved to Alpine in December of 2021 and now have lived here for fourteen months. My wife Audrey and I chose Alpine due to its unspoiled terrain and natural beauty.

We own 2 acres of naturally landscaped land surrounding our house for which we recently were awarded a Certified Wildlife Habitat designation from the National Wildlife Federation due to our "conscientious planning, landscaping and sustainable gardening' which provides wildlife with a "quality habitat" with "food, cover and places to raise their young". I103-1

We drive frequently on South Grade Road on the way to the local Albertson's on Alpine Boulevard and pass the beautiful, unspoiled Alpine Park and we walk those trails often with our two dogs.

In my previous town of Plaistow, New Hampshire, I served in town government in many elected positions including the Planning Board for which I was Chair for a number of years. In Plaistow, in fact, in all of New England, residents and voters have a direct control of government and politicians listen to the will of the people before proceeding. None of them would ever think of imposing a project of the magnitude of the proposed Project against the wishes of the majority of residents.

ALPINE DOESN'T WANT ALTERNATIVES 2, 3 or 4:

I have read in detail about all the public outreach efforts you have conducted on this project which is summarized extremely well by the group Preserve Alpine's Heritage ("PAH) in the following link which I request that you incorporate into my submission and also request you read, and that all the Board of Supervisors read: _Summary DPR Public Outreach and Community Concern PAH 2021.pdf (preservealpinesheritage.org) I103-2

Every meeting, survey and poll on the Project did not support alternatives 2 through 4 in any shape or manner. To wit:

1. See page 4 on the link which summarizes the May 2019 Questionnaire and the August 2019 Survey. Only 2 respondents out of 141 (1.4%) wanted baseball & basketball. Only 6 (4%) wanted pickleball and 8 (6%) wanted a community garden, yet they are included in alternatives 2 through 4. Only 16 (11%) wanted a skatepark, yet there it is in those alternatives. Same with field and court lighting where the overwhelming majority did not want them. I103-3

I103-3 cont.

2. See page 8: January 14, 2021- 76 of 91 (84%) of unique commentators did not support the park. Only 25 of 395 comments (6%) were in support!
3. See page 9: At the Board of Supervisors Budge Meeting in June of 2021, 214 out of 341 (63%) did not support the park. Many of those that did support it were in fact from out of Alpine and bike enthusiasts looking for bike trails and facilities here.
4. See page 9: At the Board of Supervisors Land Use Meeting on October 20, 2021, 42 out of 52 (81%) of public comments were opposed to the park design.
5. As far as I can find, there has been no public outreach in the past two years, certainly not aimed the 15,000 Alpine residents. My wife and I have not received any outreach since we've been here.

ALL OR NOTHING:

I103-4

According to PAH, no one requested Alternative 5, Passive Park It is essentially the same as Alternative 1, No Project, so does nothing for our community. In fact, the Alpine Community wants a passive park with picnic areas, a natural amphitheater, play areas for children and maintained trails for hiking and riding. The non-consideration of this requested alternative certainly violates CEQA requirements The Board of Supervisors now are forced to choose all or nothing essentially.

I am strongly opposed to Alternatives 2 through 4 because they are NOT what our community wants.

I am also not strongly supportive of Alternatives 1 or 5, but 5 is closest to what the community wants.

I103-5

The majority do not want pickle ball!

The majority do not want baseball and basketball!

The majority do not want lighted courts and a skatepark!

EXCESSIVE WATER CONSUMPTION/NO ASSESSMENT DONE:

I'm also very opposed to the excessive usage of millions of gallons of water to irrigate the significant turf area and trees during a severe drought and when many Alpine residents have difficulty getting fire insurance.

I103-6

As a past planning professional, I would never vote on the 5 current alternatives without knowing whether there would be sufficient water to irrigate.

See page ES-35 & 36 of the Executive Summary, Impact4.19Utilities and Service Systems, Impact-Util-1: Operation of the Project has the potential to require new or expanded water facilities and Impact-UTIL-2: Insufficient Water Supplies available to serve the project during operations.

The BOS are being asked to vote on alternatives 2 through 4, BEFORE even knowing the extent of these critical impacts. The "mitigation measure" offered is only that before building permits are issued the DPR will coordinate with PDMWD to ensure the capacity exists.

I103-6 cont.

Back in NH, our Planning Board would have rejected any proposals, before this impact was known. I would strongly suggest that this assessment be done not just by PDMWD before voting, but also with a non-biased state agency to ensure the conflicting profit motive of Padre Dam does not bias that assessment. Also, alternate uses of the millions of gallons of water MUST be looked at. California has many competing needs of water and I would suggest that another sports park in a community that doesn't want it is seriously irresponsible.

WILDFIRE IMPACT:

I103-7

See page ES-36 of the Executive Summary: Impact 4.20 Wildfire. It states that "Implementation of the project would not result in any potentially significant impacts related to wildfire'. Clearly, that's an absurd statement given the significant number of trees added to the park in Alternatives 2 through 4. There are no trees there today, so any wildfire would not spread as quickly as it would with a sports park

TRAFFIC EMISSIONS & SAFETY:

I103-8

I see no study of the impact of increased traffic on the environment or public safety. Back in NH , the plan would be thrown out by the town Planning Board and the State until those studies are done. No Supervisor should vote for alternatives that increase greenhouse gases and endanger the citizens of Alpine without a traffic survey. South Grade Road has been the site of many accidents and the park would definitely increase the risk.

EXISTING BALL FIELDS:

I103-9

Finally, I would point out that there are ball fields within a mile of the proposed park at Joan MacQueen Middle School that the county has access to. These fields are underutilized as is. Why not use them? Who needs more fields?

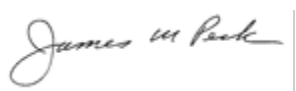
SUMMARY:

I103-10

The DEIR has significant flaws and is not in the best interest of the 15,000 Alpine residents. The Board of Supervisors, especially District 2 Supervisor, Joel Anderson, who lives in Alpine, have not listened thus far to the Alpine community.

Alternatives 2 through 4 should not be chosen. It's time to sit with the community and create a passive park that protects the environment, meets the needs and wants of Alpine residents, and meets the EIR objectives.

Sincerely,



James Peck
Alpine Resident

Comment Letter I104

From: J P Phelps <litning@cox.net>
Sent: Tuesday, January 10, 2023 5:21 PM
To: CEQA, CountyParks
Subject: [External] Proposed Park in Alpine

I104-1 Where can I find a detailed map of the new proposed park in Alpine along South Grade Rd? I want to see exactly what the boundaries are for the park itself within the stated parcel numbers; including the entrance/exit roads.
Thank You
JP Phelps
Alpine

Comment Letter I105

From: Judy Plis <jplis@cox.net>
Sent: Monday, January 30, 2023 3:10 PM
To: CEQA, CountyParks
Subject: [External] Alpine Park Project (SCH2021030196)

I105-1 As a resident of Alpine, I am totally against the proposed project that is currently proposed for Wright's Field. we do not need to have multi use Turf areas, baseball field, all-wheel area, bike, skills area, recreational courts fitness stations restroom facilities , play area etc.

I105-2 People who move to Alpine like the open space and do not want to see Wright's field become a haven for the homeless, drug addicts and the criminal element that will be drawn to this area when there are bathroom facilities etc. put in place.

I105-3 There will be a considerable amount of traffic that will take place on the 2 lane windy road.

I105-4 How does the county propose to pay for all of the above and pay the salaries of the rangers etc.? I feel that this just means that our taxes will be raised to support this endeavor.

I105-5 Since this is also in a high risk fire zone, what are the insurance fees going to be on the facilities etc.? That to will amount to a rise in the taxes for those of us that live in Alpine.

Regards,

Judith Plis
Current Alpine Resident

Virus-free.www.avast.com

From:	Denae Ranucci
To:	CEQA, CountyParks
Cc:	Anderson, Joel; Shute, Madeline; BOS, District1Community; Desmond, Jim; Fletcher, Nathan (BOS); Lawson-Remer, Terra
Subject:	[External] Comment Letter for Alpine Park Recirculated DEIR
Date:	Monday, February 27, 2023 5:42:23 PM
Attachments:	Ranucci - Letter for Alpine Park DEIR.pdf

Hello Ms. Prowant,

Please see my comment letter in regards to the Recirculated DEIR for the Alpine Park.

Please confirm you are able
to access, thank you.

-Denae Ranucci

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)
February 26, 2023

Dear Ms. Prowant,

I106-1 I am writing to comment on the DEIR regarding the Proposed Alpine Park Project. My name is Denae Ranucci and I have lived in the Alpine Community for most of my life. I went to local public schools, played local sports and have enjoyed being a part of the community so much my husband and I bought our home here. I am the mother to two young boys – and as such, find myself in one of the major demographics targeted in this park development.

I am opposed to this project as projected and have the following concerns with the DEIR as written:

TRANSPORTATION

I106-2 Would parking in the lot require payment?

Parking fees, even minimal ones such as the $3 fee for regional parks like Flinn Springs County Park will be difficult for many families to afford. Two of the goals will not be able to be met if a fee is imposed, they are as listed:

1. Create a place where all Alpine residents can gather and connect as a community.
2. Anticipate, accommodate, and manage a variety of active and passive recreational uses, as well as an open space preserve, that benefit all members of the Alpine community, both now and in the future.

I106-3 If fees are imposed, people will need to find free ways to get to the new park. This could mean parking along South Grade. The DEIR specifies that "no parking" signs will be placed there. Who would enforce these no parking signs on South Grade?

I106-4 If parking along South Grade is not an option, then community members will try to walk. The only safe way to walk to the park right now, and the shortest route from the center of town, is through the Wright's Field Preserve. What analysis was done to understand what kind of increase in amount of foot/bicycle traffic will be seen through the Wright's Field preserve? How many people coming to the park does the Department of Parks and Recreation (DPR) expect to come to the park from this route? What impacts will this increased traffic have on the preserve?

BIOLOGICAL EFFECTS

I106-5 The section regarding Impacts on Wright's Field is underdeveloped in my opinion. Wright's Field and surrounding areas were used multiple times throughout the DEIR to argue smaller impacts/percentages on habitat loss and sensitive species. Is the county allowed to use surrounding land as part of their argument or lower impact? Even if that land is privately owned? I do know that there are proposals for other local developments, and the continuation of the open space land as it stands is unlikely to remain. The County can only control its owned land. Since the surrounding land is not part of the project scope/county maintained land, why is it included in the overall assessment of habitat loss for sensitive species? *(Example: 4.4.4.3: "Impacts on 22.4 acres of native habitats (see Table 4.3-4, below, under*

I106-5 cont.

Threshold 2) are anticipated from construction of the proposed park. The impacts represent approximately 4.9 percent of the total available open space and conserved lands within the immediate vicinity of the County's parcel. These existing open space and conserved lands include 1) the Wright's Field Preserve; 2) contiguous privately held open space lands, including some with conservation easements; and 3) the proposed preserve lands within the remainder of the County's parcel.")

I106-6

Impact-BIO-2

Was analysis done to ensure that the leech lines would not result in impacts to the Engelmann Oaks? I understand they are outside the 50-foot root protection zone.

I106-7

Impact- BIO-3:

Impact-BIO-3 states "If QCB can no longer be found on either the County's preserve or within the adjacent Wright's Field in a normal flight-year at the end of the 5-year restoration period, the County will secure a specific off-site parcel that will contribute meaningfully to the species' long-term conservation.". Based on the above mitigation, the County is using the Back Country Land Trust's (BCLT) neighboring Wright's Field Preserve as part of the project scope. I believe this should be adjusted to reflect the presence of QCB on the county's owned property itself, especially since most mititagtion efforts are to be focused on that land.

I106-8

MM-BIO-9

How will this project support and conform to the implementation of the Habitat Conservation Plan for Regional Butterflies, including the Quinoa Checkerspotted Butterfly, currently in development?

The purpose of the Habitat Conservation Plans and Multiple Species Conservation Plans (MSCP) is to maintain large zones of protected space for species, rather than piecemealed lots of protected land. The County has a great opportunity with this Alpine parcel to contribute to the MSCP, but as part of the mitigation efforts, have reported they will be purchasing land and/or credits for the removal of native grassland:

MM-BIO-9: Provide Compensatory Habitat-Based Mitigation. To mitigate for potentially significant impacts on Tier I, Tier II, and Tier III habitats, the County will provide compensatory mitigation consistent with its BMO to reduce significant impacts on sensitive vegetation communities. Mitigation will be provided within open space preserve and/or within offsite location(s).

Table 4.4-5. Mitigation Requirements

Tier[a]	Total Impacts	Mitigation Ratio	Mitigation Requirement	On-site Mitigation[b]	Off-site Mitigation
Tier I	14.86	2:1	29.73	17.48 acres of preservation plus 4.84 acres of restoration (see MM-BIO-10)	7.41 acres of restoration in Wright's Field Preserve (see MM-BIO-10)
Tier II	3.97	1.5:1	5.95	5.95	None
Tier III	3.57	1:1	3.57	None	3.57[b]

[a] Tiers correspond to those described in the County's BMO and mitigation sites will meet the criteria for BRCA.
[b] Habitat-based mitigation for permanent direct impacts on non-native grassland will be satisfied through purchase of credits and/or land acquisition of a similar high-quality non-native grassland in an off-site location.

BCLT is supposed to be preserving Wright's Field in perpetuity and some of the land was already used as mitigation for other projects, is restoration of already preserved land considered a valid substitution for Mitigation as proposed in MM-BIO-9?

I106-9

It is my opinion that a passive, nature-based park could be used to meet the project goals. It may not include all the of the bells and whistles as listed in the current proposed plan but could create a welcoming and open space for all to gather, while maintaining more of the sensitive habitat and showcase the current natural beauty present. I believe that the current alternatives are not consistent

I106-9 cont. with feedback from the community, nor the best effort to meet project goals with the least environmental impact.

I106-10 Thank you for you time and consideration of my input and questions. I appreciate the review of this as the project continues.

Sincerely,
Denae Ranucci



denaeranucci@gmail.com
619-733-9359

Comment Letter I107

From: Ronald Ripperger <rripperger@cox.net>
Sent: Sunday, February 26, 2023 7:36 AM
To: CEQA, CountyParks
Subject: [External] Alpine Proposed Park

I107-1 Good Morning Anna, I previously commented on the proposed Alpine Park some time ago in an email to you. As I understand, the public comment period for this proposed Project ends February 28. So, here are some of my thoughts for you to consider:

I107-2 1) After all I have seen in the Draft EIR I really think the best Project is the No Project option. However, things do change and other ideas can be included as helpful "upgrades" to the land.

I107-3 2) Some improvements to Wright's Field would be a benefit to local folks who use that area for walking or walking their dogs. These improvements could include paths for walking and just like one of the options in the draft document a horse trail. In addition, a rail fence around the property would be nice for aesthetic reasons.

I107-4 3) Like I mentioned in my previous email restrooms will attract the homeless at some point and that won't be a good thing for our community.

I107-5 4) A skate park component, in my opinion, will be noisy and create a noise element that will disturb the local residents. In fact, any activity that will require lighting will then impact area residents along with the additional traffic volume.

I107-6 5) If a park does go forward, in my view it should just include what I mentioned above for paths and fencing along with minor parking and perhaps a picnic area. Once baseball fields go in then you would require night lighting, perhaps more parking, definitely restrooms (would be needed for just a picnic area anyway), etc.

I107-7 6) Final thought is perhaps some hybrid between Option 4 & 5 would be a compromise.

Thanks, Ron Ripperger

Comment Letter I108

From: Jody Root <jody.root@yahoo.com>
Sent: Friday, December 23, 2022 4:32 PM
To: CEQA, CountyParks
Subject: [External] Recirculated sections of DEIR

Attn. Anna Prowant

I108-1 Thank you for sending the modified sections of the DEIR. I ran an electronic comparison if the modified sections to the original and it is not consistent with what was distributed to the community. I am concerned how fair it is to the Alpine residents who are interested in this project to understand the changes without seeing all the strike-outs and additions. I will share the document with you if that would help. With other projects that I have worked on, when dealing with modified documents, the parties always share all the modifications with the other parties. Look forward to hearing from you. Have a wonderful Holiday. Jody Root Sent from my iPad

Comment Letter I109

From: Jody Root <jody.root@yahoo.com>
Sent: Tuesday, December 27, 2022 1:13 PM
To: CEQA, CountyParks
Subject: Re: [External] Recirculated sections of DEIR

I109-1 It is all the sections

Sent from my iPad

> On Dec 27, 2022, at 10:34 AM, CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov> wrote:
>
> Good morning Jody,
>
> Thank you for your comment - We wanted to clarify, could you please confirm if you are referring to the biological sections of the DEIR recirculated documents? If so, given the amount of changes that occurred to the biological sections, we are recirculating these documents as a completely new chapter of the DEIR and associated appendices for biology.
>
> If there is another component of the recirculated documents you are referring to, if you could please let me know so that we can verify, it would be greatly appreciated.
>
> Thanks so much,
>
> Anna Prowant (She-Her-Hers)
> Biologist and Land Use/Environmental Planner III Resource Management
> Division County of San Diego, Parks and Recreation
> 5500 Overland Avenue, Suite 410, San Diego, CA 92123
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>
>
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>
> -----Original Message-----
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> Sent: Friday, December 23, 2022 4:32 PM
> To: CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov>
> Subject: [External] Recirculated sections of DEIR
>
> Attn. Anna Prowant
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Comment Letter I110

Jody Root
6102 Japatul Vista Ln.
Alpine, CA. 91901

Anna Prowant
County of San Diego
Park and Recreation Department
5500 Overland Avenue, Suite 410
San Diego, CA 92123
countyParksCEQA@sdcounty.ca.gov

February 28, 2023

Reference: Alpine County Park Project ("Project") and Draft Environmental Impact Report ("DEIR")

Dear Ms. Powant,

I110-1 Thank you for extending the comment period on the Recirculated Portion of the DEIR ("RDEIR"). However, I am not sure anymore that our comments are being considered in this process.

I110-2 I love Alpine. In my over 40 years living here I have been fortunate to be involved many community organizations including AYSO, Bobby-Sox, Kiwanis, Alpine Union School Board, Little League and Alpine School Foundation, to name a few. I think I know Alpine, and its residents, fairly well. I expect more than most of the people working on this Project. The comments on the DEIR, and the other input the County has received from Alpine residents on the Project, is consistently negative and is in line with my assessment of the community's view. The County's Project is just that, the County's and not Alpine's.

I110-3 The failure to address many of the issues that were raised in the comments to the DEIR in the RDEIR, and the County's attempt to bolster its position by including an Alternative that was created just to reject the passive park concept is deceptive, at best. A number of Alpine residents have offered to sit down with the County to discuss true alternatives to the Project, but that has not occurred. If that happened an Alpine Park that is consistent with the natural environment of its location could be created that meet most, if not all, of the objectives outlined in the DEIR. Why, if the County is trying to build a park for Alpine, won't it sit down in a true working group format and create a proper Alpine Park. Alternative 5 is embarrassing!

I110-4 In addressing need for a park, the DEIR and RDEIR does not mention the various "County" initiatives that will decrease the population in unincorporated areas, including Alpine. The new Regional Plan shows a decrease population in Alpine in the future. In addition, there is an effort to limit development in unincorporated areas due to pollution and other environmental reasons, further reducing growth, not the 61% increase in population for central Alpine mentioned in the DEIR and RDEIR.

I110-5 I hope the County is aware its lack of attention to input from Alpine residents will lead to continued opposition. I just do not understand why the County does not act reasonably to achieve a winning scenario.

Jody Root

Comment Letter I111

From: Michael Scriber <mscriber77@gmail.com>
Sent: Friday, January 13, 2023 4:05 PM
To: CEQA, CountyParks
Subject: [External] Re: Alpine Park Project - Alternative Figures

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Anna,

Thank you for the maps. It is very difficult to know which is the best alternative without the details of how the areas will be mapped out.

I111-1 It is my understanding that Alternative 3 has the parking pulled away from the road, but I can't tell that in the maps. I think that is a good idea, from a safety point of view. I like Alternative 3 and 4, but I can't pick between them without the details.

Mike Scriber

On Fri, Jan 13, 2023 at 3:40 PM CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov> wrote:

> Hi Mike,
>
> Thank you for chatting with me today – Attached are the requested Alternatives 2, 3, 4, and 5 figures. If you have any further comments, I'd be happy to assist.
>
> Thanks so much,
>
> *Anna Prowant* (She-Her-Hers)
> Biologist and Land Use/Environmental Planner III
>
> Resource Management Division
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>
> Coronavirus Disease 2019 COVID-19

Comment Letter I111a

1/13/2023

Scriber, Michael (Voicemail)

I111a-1 I was reading through the Alpine Park Project and I just have one comment about the summary. If you could call me back that would be great.

From: Michael Scriber <mscriber77@gmail.com>
Sent: Thursday, February 2, 2023 8:10 AM
To: CEQA, CountyParks
Cc: Hubbard, Emily
Subject: Re: [External] Re: Alpine Park Project - Alternative Figures

It is nice to meet you, Emily..

I112-1 Do you have layouts for the alternatives for the Alpine park? These would be really helpful to understand these different alternatives.

Thank you for your help,

Mike

On Wed, Feb 1, 2023 at 4:14 PM CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov> wrote:

> Good afternoon Mike,
>
> I hope you're having a wonderful day! I wanted to provide the contact information for the Development lead for the project, Emily Hubbard (Cced), who is happy to assist with your design comments below. 😊
>
> Emily Hubbard, Development Lead for Alpine Park Project: emily.hubbard@sdcounty.ca.gov
>
> Thanks so much,
>
> *Anna Prowant* (She-Her-Hers)
> Biologist and Land Use/Environmental Planner III
>
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It is my understanding that Alternative 3 has the parking pulled away from the road, but I can't tell that in the maps. I think that is a good idea, from a safety point of view. I like Alternative 3 and 4, but I can't pick between them without the details.

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From: Michael Scriber <mscriber77@gmail.com>
Sent: Wednesday, February 8, 2023 9:07 AM
To: Hubbard, Emily
Cc: CEQA, CountyParks; Prowant, Anna; Madamba, Jessica
Subject: Re: [External] Re: Alpine Park Project - Alternative Figures

Hi Emily,

I113-1 I'm sure that it would take a lot of work to fully design each alternative. What I think would be useful for the public is a rough sketch of the options, so that they can better be understood. Are these alternatives going to be voted on? I think that some of them are really good ideas that may be to what the community is looking for.

Thanks for all of your effort,

Mike

On Tue, Feb 7, 2023 at 4:30 PM Hubbard, Emily <Emily.Hubbard@sdcounty.ca.gov> wrote:

> Hello Mike –
>
> Thank you for reaching out about Alpine Park. The project alternatives described in the DEIR are variations on the proposed project plan. As we move through project planning and concept development of a project, many options and iterations are explored. Each of the options discussed in the DEIR is developed at a conceptual level, but not into a fully developed plan.
>
> If it would help to have a call, I'm happy to walk you through the alternatives a bit more and answer any specific questions you may have on the proposed project plan. My phone number is below.
>
> Thanks so much!
>
> **Emily Hubbard**, RLA
>
> Sr Park Project Manager
>
> County of San Diego Parks and Recreation
>
> 858.790.1120
>
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Emily Hubbard, Development Lead for Alpine Park Project: emily.hubbard@sdcounty.ca.gov

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Anna Prowant (She-Her-Hers)
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Thanks so much,

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Biologist and Land Use/Environmental Planner III

Resource Management Division

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Comment Letter I114

From: Michael Scriber <mscriber77@gmail.com>
Sent: Monday, February 13, 2023 4:20 PM
To: Hubbard, Emily
Cc: CEQA, CountyParks; Prowant, Anna; Madamba, Jessica
Subject: Re: [External] Re: Alpine Park Project - Alternative Figures

I114-1 Thank you for clarifying my confusion, Emily. I thought that the alternatives were still on the table. That is unfortunate, because I get the impression that people would prefer one of the alternatives.

Mike

On Mon, Feb 13, 2023 at 3:59 PM Hubbard, Emily <Emily.Hubbard@sdcounty.ca.gov> wrote:

Hi Mike –

Thanks so much for your feedback. The many iterations of what the park could be were discussed during in the project planning phase which include public engagement and concept development. The final plan came out of those efforts, combined with how we could best meet the project objectives which are included in the DEIR. As you may know, there are currently no County managed public parks in the community of Alpine. This park will provide the County an opportunity to construct recreational facilities to meet the needs of a broad range of park users. The final park plan is a reflection of how we can start to meet those needs.

We welcome any additional comments you have on the DEIR and greatly appreciate your support of Alpine Park!

Thank you!

Emily Hubbard, RLA

Sr Park Project Manager

County of San Diego Parks and Recreation

858.790.1120

From: Michael Scriber <mscriber77@gmail.com>
Sent: Wednesday, February 8, 2023 9:07 AM
To: Hubbard, Emily <Emily.Hubbard@sdcounty.ca.gov>
Cc: CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov>; Prowant, Anna <Anna.Prowant@sdcounty.ca.gov>; Madamba, Jessica <Jessica.Madamba@sdcounty.ca.gov>
Subject: Re: [External] Re: Alpine Park Project - Alternative Figures

Hi Emily,

I'm sure that it would take a lot of work to fully design each alternative. What I think would be useful for the public is a rough sketch of the options, so that they can better be understood. Are these alternatives going to be voted on? I think that some of them are really good ideas that may be to what the community is looking for.

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If it would help to have a call, I'm happy to walk you through the alternatives a bit more and answer any specific questions you may have on the proposed project plan. My phone number is below.

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Sr Park Project Manager

County of San Diego Parks and Recreation

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Comment Letter I115

From: Julie Simper <juliesimper@yahoo.com>
Sent: Tuesday, February 7, 2023 12:23 PM
To: CEQA, CountyParks
Subject: [External] Alpine County Park DEIR Recirculation Public Comment
Attachments: 2023-02-07 DEIR Public Comment Simper.pdf

Dear Ms. Prowant,

I115-1 Attached, please find my public commentary regarding the Alpine County Park DEIR Recirculation.

Thank you for your time, consideration, and for keeping me informed of all communications and developments related to the proposed Alpine County Park project.

Kind regards,
Julie Simper
619.606.8692

Julianne Simper
Alpine Community Member
2011 Via Dieguenos
Alpine, CA 91901
juliesimper@yahoo.com

Tuesday, February 7, 2023

Anna Prowant
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410
San Diego, CA 92123
CountyParksCEQA@sdcounty.ca.gov
(619) 756-4548

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

I115-2 As a community member living in Alpine for over 12 years, I want to thank you for the opportunity to comment on the Alpine County Park Project's ("Project") Draft Environmental Impact Report (DEIR) Recirculation. I respectfully submit the following for consideration and response.

Project Alternative: A Nature-Based Park

The proposed 25-acre park plan goes far beyond the 12-15-acre community park concept originally presented to local residents. We expected a park more aligned with the natural and rural location. The County of San Diego Department of Parks and Recreation (DPR) acknowledges this discord when it states in its Frequently Asked Questions document: "Early conversations about the search for a park in Alpine may have referenced smaller acreage, however, the purchase of the 98-acre parcel made it possible to expand acreage opportunities for both active and passive uses." This unjustified increase has taken much of the community by surprise and is a fundamental source of dissatisfaction and distrust.

I115-3 The community was also led to believe by local leadership that the park would be smaller and more nature-based. To illustrate, Back Country Land Trust board member and Alpine Community Planning Group Member George Barnett stated in 2019: "My understanding is that the County will also plan on passive uses, that is – no active sports playing fields. Maybe there'll be picnic places, a pavilion, a kiddie playground, or things of that nature that town's people want."

The currently proposed 25-acre park design was released late summer 2020. The size and scope were a surprise and shock to most of the community who were expecting, and generally in support of, a significantly smaller park. As a result of the unexpected scope of the currently proposed Alpine County Park, as awareness of the design increases, so does the opposition.

Under Chapter 6, Alternatives, the DEIR now outlines how the DPR considered other alternatives to the proposed park: a no project alternative, an even larger sports complex option, two other slight variations on the current active 25-acre project, and now a passive park alternative. **Of these alternatives, the option that best aligns with the nature-based park as initially presented and generally supported by the community is the passive park alternative.**

I115-4 Furthermore, the results of the DPR public outreach reveal that a nature-based park is precisely what the community has requested: "… the top five activities the responders selected were walking/jogging, riding a mountain bike on a trail/in a park, nature, dog park, and picnicking. The 5 activities with the fewest votes were swimming pool, football, softball, bocce ball, and tennis/pickleball. The top five elements chosen from the questionnaire were natural areas, restrooms, sidewalks and trails, shade trees, and drinking fountains. The least preferred elements were court and field lighting. The top five elements selected from the image boards were multi-use trails, bike park, dog park, nature-based play, and picnic shelter. The least favored were horseshoe pits, table tennis, tennis, softball, and youth football." Clearly, the Alpine community strongly prefers nature-based activities over sports-facilities.

Additional support for building a passive, nature-based park instead of an extensive 25-acre sports park is that the abutting Joan MacQueen Middle School is planned for major renovation of its existing and extensive sports facilities. Once again,

I115-4 cont. Back Country Land Trust board member and Alpine Community Planning Group member George Barnett stated: "Plans to refurbish La Crosse, soccer and softball fields at abutting Joan MacQueen Middle School, plans that include a football field, render surplus such facilities at a community park." We agree.

Based on all of the above, we therefore ask:

I115-5
- Given this significant qualitative and quantitative data and input, including lack of population growth as proven by the recent census, how can DPR justify the design of the proposed 25-acre park with extensive sports facilities as meeting a local Alpine need?
- Isn't the passive park option the best in that it minimizes the impact on the environment and rural setting, provides appropriate recreational activities that respect and complement the Wright's Field Ecological Preserve, and protects the preserve from habitat destruction due to fragmentation, encroachment, and overflow use from a park?

Inadequate and Biased Public Outreach

I115-6 The proposed park design was released to the public late summer 2020. Since then, the County has extended many requests for public comment as part of the official planning process. In response, a significant proportion of Alpine community members have responded with thousands of commentaries; the majority of which express critical questions and concerns regarding the proposed park design. In fact, when analyzing the public records of these official meetings and calls for comment, approximately 65% have expressed concerns/questions and only 35% have voiced support. These concerns have been categorically dismissed by local and County public representatives and are not represented in the County of Parks and Recreation public outreach data.

Despite this strong and disproportionate showing of opposition, the DPR omits any mention of concern from its reporting on the meeting. Its public outreach summary states: "A conceptual park design was shared with the attendees after which a question-and-answer period took place. The meeting was scheduled from 7:00 PM to 8:30PM and several questions from the attendees were asked and answered before the meeting time had ended. The questions that were left unanswered during the meeting, were answered following the meeting and then posted online at the Department of Parks & Recreation, Alpine Park web page." This descriptions whitewashes and misrepresents the overwhelming public comment which did not support the proposed design. View details and analysis of the public outreach and community concerns here.

Given that the strong public comments of concern/opposition were categorically dismissed by the County, one must therefore ask:

I115-7
- Why are there public calls for comment during the planning process if the majority of commentary will simply be ignored?
- Why are the increasing community concerns not being taken into consideration?
- How can the Department of Parks and Recreation state it is designing a park for the Alpine community when it ignores the input provided by a significant/majority number of Alpine residents?

Inexistant and Unsafe Non-Automotive Access to the Park Site

I115-8 There are no continuous bike/pedestrian pathways or public transportation directly servicing the proposed park location. As stated on page 4.17-2 under "4.17.2.1 Existing Transportation Conditions" the closest bus stop is approximately 0.88 miles north of the project site". The DEIR goes on to state that "There are no bike facilities along South Grade Road adjacent to the project site." The DEIR also acknowledges that along South Grade Road there currently are no sidewalks or other pedestrian facilities. The sidewalk to be included along the park perimeter will not connect to any of the existing pathways or public transportation leading to other parts of Alpine; most importantly, to the inhabited town center.

Therefore, serious questions and concerns are as follows.

I115-9
- The DPR calls the project a "drive to" park and has repeated that the only recommended non-automotive access is via Wright's Field. Why does the DEIR not address this major gap in the park design and provide solutions to address the lack of safe and appropriate access for those on foot or other non-vehicular modes of transportation?
- If the park closes at dusk and the Alpine town center is 1-2 miles away on foot, how can the rugged trails with no lighting in Wright's Field be considered safe and appropriate access before the sun comes up and/or once the sun goes down?
- How will non-vehicular access via the dangerous South Grade Road be controlled and/or discouraged?
- If only accessible via automobile, dangerous roadways, or rocky/uneven/unlit trails, how does the park location promote equitable access for all?

Insufficient Analysis of Impact to Wright's Field Multiple Species Conservation Plan

I115-10 In 2003, the Back Country Land Trust (BCLT) and the County of San Diego County Department of Parks and Recreation (DPR) submitted an application to the Environmental Enhancement and Mitigation Program (EEMP) to obtain funds to purchase the remaining 142-acre land as Phase IV of the Wright's Field Multiple Species Conservation Plan (MSCP). These efforts were unsuccessful and the majority of this land is now owned by the County as the location being considered for the proposed Alpine County Park. View application, including map on page 39, here.

I115-11 In the application, the BCLT and DPR state:

- The acquisition of this land "is critical to the biological and physical integrity of this MSCP preserve. The Phase IV parcel is entirely comprised of native grassland, coastal sage scrub, Engelmann oak woodland, and vernal pool habitats." (Page 7 of the application)
- In addition, the application also addresses sensitive habitats on this land and on Wright's Field MSCP and how the "viability of species within them is increased when they are protected together in an integrated whole". It further outlines how critical this land is as a wildlife corridor.

This entire document describes how important this parcel of land is to the integrity of the adjacent Wright's Field MSCP and the surrounding natural environment/ecosystem.

I115-12 **Therefore, I submit for consideration and response, the following.**

- How is it reasonable/acceptable that both the BCLT and DPR now claim the opposite and state that the 25-acre park will not impact Wright's Field MSCP?
- How many people will access the park via these trails?
- Where are the thorough studies of the impacts to Wright's Field in the DEIR?
- What are the biological impacts on Wright's Field Ecological Preserve from fragmentation, encroachment, and overflow use from a large active park?
- How will this be appropriately mitigated considering that Wright's Field MSCP is recognized as a unique resource in San Diego County?

In Conclusion

I115-13 Based on the data and the information included in the DEIR, I am simply not convinced that the proposed 25-acre park is what is best for the community, the natural location, or what the majority of local residents want/need. Not only are existing recreational facilities in Alpine underutilized and not properly maintained, but available County survey data does not support inclusion of many of the facilities in the current plans. Therefore, Alternative 5 of a Passive Park is the option that best meets the larger community's expectations and expressed needs.

Thank you for your time, consideration, and for keeping me informed of all communications and developments related to the proposed Alpine County Park project.

Kind regards,



Julie Simper
Tel. (619) 606.8692
juliesimper@yahoo.com

Comment Letter I116

From: ipipe1@sbcglobal.net
Sent: Tuesday, February 14, 2023 3:43 PM
To: CEQA, CountyParks
Subject: [External] Alpine Park Project (SCH No.2021030196

Anna Prowant
Biologist and Land Use/ Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410
San Diego, CA 92123

RE: Alpine Park Project (SCH No.2021030196

Dear: Ms. Prowant,

Thank you for the opportunity to comment on the Alpine Park Project's ("Project") Draft Environmental Impact Report. (DEIR)

I116-1

I have been a resident of Alpine for 38 years and my husband since 1960. We have experienced all the changes of Alpine through 60+years. We have raised 3 children in Alpine, have been a part of the community through many sports, schools and attending an Alpine church. Even our children are choosing to live and raise their children in Alpine.

Living in Alpine provides a person, couple or family with a clear and clean environment. We are away from the local cities and combustion of crowds and traffic by choice. This is a major reason why people move to Alpine.

Wright's Field has been a topic of many discussions through the years on how to protect and preserve the natural land mass including the adjacent land areas. Due to the town's commitment the land area was deemed a preserve.

My preference for the use of this land; ALTERNATIVE 5 Passive Park Alternative.

Regional park description:
Is an area of land, preserved on account of its natural beauty, historic interest, recreational use, or other reason.
The ("other reason") would be to protect Wrights Field with this adjacent land.

I116-2

Under alternatives 2, 3 and 4 " Any Sport Complex" will destroy the use and beauty of Wrights Field; not to mention the wildlife and natural environment. Also, the need to address the noise pollution, air pollution of potentially 1000 people gathering in an already developed area?
The fire danger alone is frightening. How will we evacuate our homes with a 1000 visitors in a ("Sports Complex")?

South Grade is the interior roadway to and from Albertsons, schools and to town. The traffic congestion will be miserable, this is only a 2 lane road that can not be extended. (Alternative 2, 3 and 4 Parks) of this size needs to be easily accessible on and off the freeway, and on a main road. Has the Parks and Recreation Dept. approached Grossmont Unified School District to incorporate a ("Community Sport Complex") with the future Alpine High School on Alpine Blvd.? (A better suited location for a ("Community Sport Complex")

Parks and Recreation have a responsibility to the taxpayers of Alpine to protect their citizens. This park will not be safe for children to travel to and from by themselves on South Grade Rd. The complications are numerous and the costs are numerous!

We need to keep Alpine clean and not polluted by fumes and noise pollution.

My preference for the use of this land; ALTERNATIVE 5 Passive Park Alternative.
Alternative 5: will enhance the beauty of Wrights Field and will be more welcoming to the Community and its visitors.

Sincerely,
Mary Smith
2202 Rancho Summit
Alpine, CA 91901
(619) 445-0752
(619) 980-2831

Comment Letter I117

From: Mary Smith <ronmaryrj@aol.com>
Sent: Tuesday, February 14, 2023 3:38 PM
To: CEQA, CountyParks
Subject: [External] Alpine Park EIR Comments

Ana Prowant

I117-1 My name is Ron Smith. I am a Alpine resident and have been since 1960. I live at 2202 Rancho Summit Alpine Ca. I am also a licensed contractor.

I have reviewed the EIR for the proposed Alpine park. I have the following questions, concerns and comments.

I117-2 Greenhouse gases, emissions and climate change. Parking lot to have 250 to 275 parking spaces. That means potentially 275 vehicles driving long distance to a remote park if alternate #2,#3 or #4 are built. Why is such a large regional park being considered in a remote town? Won't that many vehicles driving a long distance, add to greenhouse gases?

I117-3 Utilities and service systems. Project description, overview states for utilities, the project proposes to connect to existing sewer system, or including a septic system to serve restrooms. I did not find in the report a section that addresses the add strain this would put on the existing sewer system. Would a septic system have any effect on the groundwater? Is the EIR incomplete if it did not properly address, sewage, disposal?

I117-4 In closing please consider going with the most environmentally sensitive alternates, #1 or #5. A passive park would fit best in a rural small town like Alpine. Thanks for listening.

Ron Smith

Sent from the all new AOL app for iOS

Comment Letter I118

From: Lori Smith-Ward <lksward13@gmail.com>
Sent: Thursday, February 2, 2023 12:09 PM
To: CEQA, CountyParks
Subject: [External] Alpine Park Project

To Whom It May Concern,

I118-1 Alpine does NOT need this park. Leave the open space land alone. Just another way to destroy our beautiful Alpine. This is a total waste of tax payer money. Alpine does NOT need the extra traffic and influx of people who don't respect our area and lifestyle. Thanks. Lori

Comment Letter I119

From: Allen Stanko <alman327@cox.net>
Sent: Saturday, February 11, 2023 12:08 PM
To: CEQA, CountyParks
Subject: [External] Alpine

I119-1

I am opposed to the plan for the new county park in Alpine. I'm sure my opinion doesn't really matter, but here goes anyway. A new park in Alpine will just attract homeless people. And I think that's why you're just going ahead with your plans to build the park. Once the park is built and the homeless start taking it over, that will alleviate some of homelessness in other parts of San Diego. You are trying to ruin the character of Alpine. You are trying to make Alpine's park just like Well's Park in El Commode. Alpine is a beautiful place to live... for now at least anyway !

We don't need your stinking park idea !

Allen Stanko

Alpine

From: Yolaine Stout
To: CEQA, CountyParks
Subject: [External] Stout Comments on RC DEIR_Alpine Park Project
Date: Tuesday, February 28, 2023 12:40:52 PM
Attachments: Stout_Comments_Recirculated DEIR_Alpine_Park_Project.pdf
Stout_DEIR Comments.pdf

Please see attached for my comments on the Recirculated Draft EIR for the Alpine Park Project. Attached - again- are my previous comments to the first draft EIR for this project.

Thank you,

Yolaine M. Stout

To: Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov

From: Yolaine M. Stout Ystout11@gmail.com

Date: February 26, 2023

Re: RECIRCULATED SECTIONS DRAFT ENVIRONMENTAL IMPACT REPORT for the Alpine Park Project: dated January 2023: State Clearinghouse (SCH) #2021030196

PROJECT TITLE: ALPINE PARK PROJECT

APPLICANT: County of San Diego Department of Parks and Recreation

I120-1 Thank you for the opportunity to respond to the recirculated draft EIR for the Alpine County Park Project. In addition to the comments I sent to the original draft EIR on November 13, 2021, (attached)

I have the following concerns and questions.

Section 4.4 Biological Resources:

Page 4.4-47 MM-BIO-10: Native Grassland Mitigation

I120-2 In Table 4.4-5. Mitigation Requirements Table, Tier I habitats (Engelmann oak woodland and Valley needle grassland) appear to be combined in the amount of 14.86 acres, yet in the paragraph below **"**MM-BIO-10: Native Grassland Mitigation," 6.88 acres of open Engelmann Oak woodland is to be used as part of the 2:1 mitigation ratio for the native grassland. We have estimated that the total amount of grassland alone to be impacted by the park portion of the project is conservatively 18 acres – meaning a minimum of 36 acres needs to be mitigated. In addition, 6.88 acres of open Engelmann Oak woodland would require their own mitigation. Even if one uses the RC DEIR 14.86 acres figure, insufficient grassland exists onsite to mitigate at a 2.1 ratio. The RC DEIR is then using offsite restoration of native grasslands to make up the difference.

I120-3 It is glaringly clear that not only is Valley Needle Grassland a Tier 1 highly endangered habitat, it is rare enough that no equal or better quality grassland exists that is adequate for mitigation. With this form of "mitigation," the Valley Needle Grassland is dying a death of a thousand cuts. This is not mitigation, it is manipulating numbers to enable destruction. The soils that support this grassland, once removed is permanent. No amount of "restoration" can replace the soils necessary to support a grassland and all of its great variety of accompanying species. Why are the "no project" or "passive park project" alternatives not being utilized instead?

I120-4

Offsite mitigation is proposed in the form of native grassland restoration on the Wright's Field Preserve owned by the Back Country Land Trust. According to CEQA "15070(a)(1) of the CEQA Guidelines:

Mitigation measures must be enforceable through permit conditions, agreements, or other legally-binding instruments. Mitigation measures must be designed to achieve the greatest extent feasible of the objectives of the environmental resource that is being impacted."

What assurances does the public have that there is an existing, enforceable, measurable and ongoing contract between the Back Country Land Trust and the County of San Diego? Who will oversee and be legally responsible for the restoration? BCLT or the County? Is there an existing signed and written agreement? Why isn't this included in the draft EIR? What happens if BCLT fails to uphold its end of the agreement? Who determines exactly where on Wright's Field and how the restoration will occur? It has been determined (see article below) that the needle grasses on Wright's Field are genetically UNIQUE with a variety of differentiating alleles. Who will gather seeds from Wright's Field to be used for propagation, assuming this will be done? Exactly what type of restoration will be used? Will the public be able to monitor the process and the progress?

The following is an article showing the unique nature of Wright's Field purple needlegrass – (indicated as "J" on these tables.

I120-5

Knapp, E.E. and Rice, K.J. (1998), Comparison of Isozymes and Quantitative Traits for Evaluating Patterns of Genetic Variation in Purple Needlegrass (*Nassella pulchra*). Conservation Biology, 12: 1031-1041. https://doi.org/10.1046/j.1523-1739.1998.97123.x

Table 1. Location, location code, county, and elevation of the sites from which *N. pulchra* populations were sampled in California.

Location of population (code)	*County*	*Elevation (m)*	*Weather station location*[a]
Dye Creek Preserve (A)	Tehama	160	Red Bluff (7292)
Parrott Ranch (B)	Butte	33	Chico (1715)
Cosumnes Preserve (C)	Sacramento	6	Lodi (5032)
Jepson Prairie Preserve (D)	Solano	6	Fairfield (2934)
Ring Mountain Preserve (E)	Marin	170	Kentfield (4500)
Pecho Coast Trail (F)	San Luis Obispo	75	Pismo Beach (6943)
Vandenberg Air Force Base (G)	Santa Barbara	50	Lompoc (5064)
Santa Rosa Plateau Preserve (H)	Riverside	550	Vista (9378), Elsinore (2805)[b]
Camp Pendelton Marine Base (I)	San Diego	25	Vista (9378)
Alpine (Wright's field) (J)	San Diego	595	Alpine (136)

[a] *Location of the nearest National Oceanic and Atmospheric Administration weather station from which climatic variables at each site were estimated. Station number is in parentheses.*
[b] *Average of Vista and Elsinore values was used, except that 10 cm was added to the annual precipitation estimate (R. Wills, personal communication).*

Table 3. Summary of banding phenotype frequencies for eight polymorphic stains in the 10 *N. pulchra* populations evaluated.*

Stain	Banding phenotype	Population A	B	C	D	E	F	G	H	I	J
AAT	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.69	0.88
	2	—	—	—	—	—	—	—	—	0.31	—
	3	—	—	—	—	—	—	—	—	—	0.12
ACP	1	1.00	0.16	1.00	1.00	1.00	1.00	0.93	0.98	1.00	1.00
	2	—	—	—	—	—	—	0.07	0.02	—	—
	3-10	—	0.84	—	—	—	—	—	—	—	—
ADH	1	—	—	—	—	—	0.45	0.81	0.89	1.00	0.89
	2	—	—	—	—	0.87	—	—	—	—	—
	3	1.00	0.74	0.15	0.53	0.13	0.10	—	—	—	—
	4	—	0.26	0.53	0.47	—	0.45	0.19	—	—	—
	5	—	—	—	—	—	—	—	0.11	—	0.11
	6-7	—	—	0.32	—	—	—	—	—	—	—
MNR	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
	2	—	—	—	—	—	—	—	0.09	—	—
PGD	1	1.00	1.00	1.00	0.97	1.00	1.00	0.97	0.94	1.00	0.85
	2	—	—	—	0.03	—	—	0.03	0.06	—	0.15
PGI	1	0.75	0.56	0.63	0.10	0.42	0.55	—	1.00	0.49	0.96
	2	0.25	0.44	0.35	0.82	0.58	0.35	—	—	—	—
	3	—	—	0.02	0.08	—	0.10	—	—	—	—
	4-5	—	—	—	—	—	—	0.06	—	—	—
	6-8	—	—	—	—	—	—	0.94	—	—	—
	9-10	—	—	—	—	—	—	—	—	0.51	—
	11	—	—	—	—	—	—	—	—	—	0.04
PGM	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00
	2	—	—	—	—	—	—	—	—	0.06	—
TPI	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00
	2	—	—	—	—	—	—	—	—	0.06	—
Plants scored (mean)		57.0	52.9	52.9	39.6	53.0	28.9	36.0	47.9	32.4	25.5
Polymorphic stains (%)		9.1	27.3	18.2	27.3	18.2	18.2	36.4	36.4	36.4	36.4
Phenotypes/stain (mean)		1.09	1.91	1.45	1.36	1.18	1.36	1.64	1.45	1.45	1.36

Mean number of individuals scored, percentage of enzyme systems that were polymorphic, and mean number of banding phenotypes per enzyme system are given in the last three rows.

I120-5 cont.

I120-6 In Section 7(a)(1) of the Endangered Species Act (ESA) of 1973, federal agencies are required to "utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act." The section further requires that these programs include specific provisions for the development and implementation of conservation plans.

I120-7 In addition, the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) have jointly issued guidelines for the development of conservation plans under the ESA. These guidelines emphasize *the importance of establishing clear and measurable goals and objectives for the conservation plan.* The guidelines state that "the purpose of the conservation plan is to provide a clear and concise statement of the proposed conservation measures that will minimize the impacts of the proposed action and ensure the survival and recovery of the species."

No such goals and objectives are provided for the restoration of offsite native grasslands in this RC DEIR, therefore the public and interested agencies cannot evaluate its effectiveness, which is the purpose of an EIR. Therefore, the DEIR is inadequate.

Chapter 6: Alternatives

6.4.2.5 Alternative 5 – Passive Park Alternative

While I appreciate the inclusion of a Passive Park Alternative in this new draft portion of the EIR, it is wholly inadequate in that it does not consider the most common and desired amenities of a passive park.

I120-8 The RC DEIR states, "No restrooms or similar facilities that would require a higher level of on-site maintenance and ranger presence would be developed, but there would be a kiosk and a bench in a disturbed area at the trail head."

Seriously? The chosen active park concept requires a much higher level of maintenance and ranger presence. So, on the one hand, the passive park is rejected because restrooms would require onsite maintenance, but the preferred alternative has both restrooms and onsite maintenance?

The Passive Park Alternative is described in the most minimal terms – trails (existing), *a kiosk and a single bench* – as if a kiosk and a bench are the only passive park possibilities. This is egregiously inadequate.

I120-9 Why is the County Parks and Recreation ignoring the wishes of the greater Alpine community in regards to what THEY wish to see? Why is it listening to handful of self-interested individuals who serve special interest groups? The greater Alpine community wants something far simpler, cheaper and less environmentally destructive than the current "preferred" boondoggle.

From September 2017 to April 2018, A Park 4 Alpine conducted a survey of 494 Alpine residents as to their wishes for park amenities *without regard to location.*

By far, the most desired amenities were PASSIVE in nature – which was actually a surprise to all of the organizers.

The following table is a summary of the results.

Combined positive responses: Would very much like to see/ One of my top choices/ My absolute top choice

I120-10

1	Lots of shaded areas	91.22%
2	Park benches	83.42%
3	Picnic areas	80.93%
4	Dog park	72.41%
5	Bike path and stands	68.45%

I120-10 cont.

6	Trailhead for hiking, biking or horseback riding	67.92%
7	Parcourse (a guided trail with stops for outdoor exercising).	64.96%
8	Larger playground	63.54%
9	Pavilion, gazebo	62.53%
10	Barbecue areas	59.40%
11	Amphitheater	44.62%
12	Bocci ball, horse shoes, shuffle board	41.32%
13	Swimming pool	39.90%
14	Soccer fields	37.91%
15	Softball/baseball fields	37.02%
16	Frisbee area	35.17%
17	Skateboard park	34.89%
18	Basketball fields	34.87%
19	Gymnasium	31.20%
20	Tennis courts	31.12%
21	Volleyball courts	29.17%
22	Football fields	28.72%
23	Batting Cages	23.30%
24	Racquet ball court	20.10%

The results of this survey were submitted to County Park officials, presented at the APG on several occasions, and handed to County officials during their proposed park presentations in Alpine. A Park 4 Alpine also made a formal presentation of the results in a meeting with Dianne Jacob and her staff.

As can be seen, the active amenities were in the minority. Does the County really want to destroy endangered habitats, spend millions of taxpayer dollars and create a park that the fewest people in Alpine want to utilize?

I120-11

A passive park can be so much more than a kiosk and a bench. This description is almost insulting. The County itself has built many passive amenities throughout. They know better. The RC DEIR equates a "passive park" with a nature preserve. They are not the same.

Why did the Passive Park Alternative get such short shrift with no consideration for other passive amenities?

A Passive Park Alternative would meet **all** of the objectives laid out by the County.

I120-12

Objective 1: Create a place where *all* Alpine residents can gather and connect as a community.

Emphasis is on the word "all." In an active park, people with disabilities, the elderly and the very young are excluded. In a passive park, all people of all abilities can enjoy the open space and passive amenities.

I120-13

Objective 2: Anticipate, accommodate, and manage a variety of active and passive recreational uses and open space preserve that benefit all members of the Alpine community, both now and in the future.

Again, with the emphasis, on the word ALL, Alpine does have plenty of active sports fields that have met the needs of sports groups. These fields are already underutilized. Why does the County want to build more? The needs of the remainder of Alpiners have gone unnoticed. NO passive parks have been funded by the County in Alpine. If the County is bent on spending money on sports fields, let them be built elsewhere - not on Tier 1 habitats.

I120-14

Objective 3: Provide for long-term natural and cultural resource management consistent with the goals and objectives of the MSCP for the preserve portion of the property.

Hello. A passive or NO park alternative meets this objective hands down. Wright's Field – as it is historically known - is a biological, cultural and geological wonder that clearly meets the MSCP requirements above and beyond.

I120-15

Objective 4: Design a community park that integrates and, where feasible, preserves natural features into the park design.

Where feasible? Wright's Field contains more than "natural features." It contains five of California's most endangered habitats. Why are we even considering destroying even a portion of it for sports fields that can be enjoyed elsewhere in Alpine? And for additional sport fields that the majority does not want?

I120-16

Objective 5: Enhance the quality of life in Alpine by providing exceptional park and recreational opportunities that improve health and wellness while preserving significant natural and cultural resources.

Health and wellness while preserving significant natural and cultural resources. Please explain how a sports field preserves natural or cultural resources?

I120-16 cont.

Exceptional: Wright's Field is exceptional all by itself. It is a precious and rare native grassland that has never been plowed – and is the product produced by clay brought down from an ancient mountain ridge to the east that no longer exists. It is an ancient riverbed with the remnants from those ancient mountains. The birds, the insects and the butterflies that use the grassland are all unique and tied to the historical context of its creation. And destroy it for what??? Wright's Field is unique not only to San Diego County, but to the world. It is a treasure that cannot be valued or compared to a ball field. Children get this.

Health and wellness studies have repeatedly shown that just being in nature is a biological, spiritual and cultural NEED. Recreational opportunities do not equate with sports. Walkers, joggers and exercisers are seen regularly simply enjoying the existing trails. Why aren't trails considered as "active" recreation? Must all "active" recreation be competitive?

I120-17

Objective 6: Protect public health and safety by incorporating Crime Prevention Through Environmental Design and other safety measures into the park design.

Crime Prevention through Environmental Design? What? Who wrote this objective? Studies have repeatedly shown that nature has a profound and peaceful effect on a person's mental and physical health. All by itself, nature is crime preventative.

I120-18

Objective 7: Manage Alpine County Park consistent with County DPR's missions, policies, directives, and applicable laws and regulations.

Again, a passive park alternative more easily and less expensively meets these standards.

I120-19

Objective 8: Reflect Alpine community's heritage through inclusion of architectural elements that reflect the rural nature of Alpine.

Architectural elements that reflect the rural nature of Alpine? The "rural nature" of Alpine first began with the Kuumeyaay who used Wright's Field as its main source of food – as evidenced by the abundant archaeological artifacts described in various EIRs that have attempted to destroy this precious land.

The grassland of Wright's Field itself was called by the early Spanish settlers "Mesa del Arroz" – or "tableland of rice." The native grass seeds were collected by the Kuumeyaay and cooked as one would rice. The grasslands once attracted deer to be used as meat and hide. The grassland nesting birds provided meat and eggs. The native bulb plants were cooked as potatoes or carrots. Essentially, everything the Kuumeyaay needed to survive was provided by Wright's Field. Not only was it seen as their heritage, the first Spanish colonizers saw Wright's Field as a valuable place to grow other grass varieties such as barley. Additionally, they could allow cattle to graze upon the nutritionally rich native grasses. Their rural lifestyle is witnessed by the numerous historic rock walls, dams and rock/clay foundations on the preserve. Wright's Field was also the location of the white settlers' famous "Jackass Mail Trail" whose trail is supposed to have led directly through the location of your active park leach fields – from grassland to grassland. "Architectural design" need be nothing more than interpretative signage. Guided walks and a website devoted to it. Less is FAR more.

Why do we not want to preserve Alpine's rich, unique and irreplaceable rural, historical, geological, biological heritage and why are we forcing a project of common park amenities that only a minority want or could be built elsewhere? Why destroy a heritage that cannot be replaced?

I120-20 | Please do keep me notified of all future meetings, publications and reviews of this project.

Thank you,

Yolaine M. Stout

Ystout11@gmail.com

To: CountyParksCEQA@sdcounty.ca.gov

From: Yolaine M. Stout _ Ystout11@gmail.com

Date: Nov. 13, 2021

Re: My Comments on the DRAFT ENVIRONMENTAL IMPACT REPORT dated September 30, 2021

PROJECT TITLE: ALPINE COUNTY PARK PROJECT

APPLICANT: County of San Diego Department of Parks and Recreation

Thank you for the opportunity to respond to the draft EIR for the Alpine Park Project, draft Environmental Impact Report dated September 2021.

My concerns over the inadequacies in the EIR are many, however I am limiting my comments to those areas that most concern me.

1. **Inadequate description and mitigation measures for the destruction of Tier I plant communities: Specifically, Valley Needle Grassland.**

   a. **APM-1: Establishment of the Open Space Preserve**
   This paragraph is inadequate as it does not provide the size of the preserve. What is the actual size of the proposed preserve?

   b. **Table 4.4-4 and Figure 4.4-1**
   Both Engelmann Oak Woodlands and Valley Needlegrass Grassland are Tier I sensitive natural communities which require a 2:1 mitigation ratio. In Table 4.4-4 it was determined that only 13.86 acres of "Tier I" communities existed. This is simply untrue and therefore inadequate.

   The areas marked brown in the legend on Figure 4.41 indicate large swaths of "non-native grassland." These areas appear to be grossly exaggerated in size presumably for the purpose of underestimating the total acreage of the native grassland area. Non-native grasses occur in all native grasslands. In the proposed park area, "non-native grasses" do not occur in such large swaths. What measurements or methods were used to determine non-native grass communities vs native grasses? Were these measurements or methods applied to all the brown indicated areas in Figure 4.41?

   In excluding "non-native grasslands" from native grasslands, the truer estimate of the size of the native grassland is 18.55 acres. This satellite view with mapped overlay shows area of native grassland to be impacted: tinyurl.com/area-of-native-grassland . Therefore Table 4.4-4 should indicate that 37.1 acres would be needed to mitigate for the loss of native grasslands rather than 27.73 indicated. Regardless of size, the bigger problem is that there

are no equivalent or higher quality native grasslands in San Diego County. This has been determined by multiple agencies and biologists including the Department of Planning and Land Use for the County of San Diego who, in a letter dated 2/20/2009 in regard to a proposed high school for this site which is in the Wright's Field Pre-Approved Mitigation Area (PAMA) and adjacent to Wright's Field Preserve, stated "Due to the significant and *not mitigable impacts to biological resources* for Alternative B (Wright's Field) and the direct implications to the County's Multiple Species Conservation Plan, the County cannot recommend that this site be chosen for such an intensive land use." How was the determination made that this rare resource is now -10 years later - mitigable? Where is the supposed equal or better quality offsite native grassland located?

2. No offsite Project Alternatives provided:

ES-4 Summary of Project Alternatives

All alternatives described in the draft EIR are either onsite or no project. No offsite alternative was provided despite County Parks saying at several public meetings during 2018 in Alpine that there were 10 possible sites for a public park in Alpine – not including the currently proposed site.

One alternative is actually an enlarged proposal with added sports complex that would have even greater environmental impacts. How is this consistent with CEQA § 21002 "that requires feasible alternatives which would substantially lessen the significant environmental effects of such projects?"

The "Reduced Project Alternative" is inadequate as it only reduces the project area by 20%.

3. No impacts provided for possible sewer extensions.

Page 3-3 states: "For utilities, the project would either connect to the existing sewer system or include a septic system to serve the restroom facilities, administration facility/ranger station, and volunteer pad. If the onsite connection to an existing sewer line is the option chosen, it will connect to the existing sewer line within Tavern Road, west of the project site, or the existing sewer line within the northern portion of South Grade Road near the intersection with Alpine Boulevard."

In other words, there appear to be three alternatives provided, but impacts are only given for one of them – the onsite septic and leach field treatment system. What are the impacts of the sewer extension? What is the length of the sewer connection to the proposed park from Alpine Blvd? What are the noise and traffic impacts? What are the growth inducing impacts of such a proposal? What are the CO2 emission impacts?

Exactly where would the proposed sewer line go from Tavern Road? (I had requested this in my NOP comments). Will it go along private roads, through Joan MacQueen Middle School and the Wright's Field Preserve which would be the shortest route from Tavern Road? What is the length of that sewer connection to the proposed park? What are the noise and traffic impacts? What are the growth inducing impacts of such a proposal? What are the CO2 emission impacts? How will the destruction of Tier I habitats along that route be mitigated?

The draft EIR is grossly inadequate in this regard.

4. Conflicting and therefore inadequate impacts provided for septic and leach field options.

Page 4.7-19 states that "The second option [other than connecting to existing sewer lines far from the project location] would be a septic system with a filter treatment system and treatment leach field.

The location of the proposed leach field on Figure 4.4-4, is in the dry creek headwaters for a tributary through Wright's Field Preserve to Alpine Creek which drains into El Capitan Reservoir, one of San Diego County's largest drinking water reservoirs. Has Padre Dam commented on this? If so, the comments are not included in the EIR. How is this location consistent with the San Diego County Department of Health requirement that leach lines be located "50 feet from the top of the drainage bank" ? See page 9 of Onsite Wastewater Treatment Systems (Septic Systems) Permitting Process and Design Criteria.

"The initial issuance of a hazardous waste facilities permit pursuant to Section 25200 of the Health and Safety Code to an offsite large treatment facility, as defined pursuant to subdivision (d) of Section 25205.1 of the Health and Safety Code." Has such a facilities permit been obtained?

Figure 4.4-1 and other maps show only the leach fields and a short sewer line. It does not show the treatment facility or source of the sewage. **Concept Plan Figure 3.2** Shows one bathroom (marked 3) as at the far south of the proposed park while the leach fields from figure 4.4-1 are in the northernmost part of the proposed park. Where will the sewage from this bathroom go? What is the true length of the sewer line and what are the all the associated impacts from the construction of such a long sewer line onsite? What is the actual length of the sewer line from the leach field area to restroom 2?

6. Inadequate Water Supply Assurances. No comments from responsible agencies.

CEQA states in § 21104. STATE LEAD AGENCY; CONSULTATIONS PRIOR TO COMPLETION OF IMPACT that (a) *Prior to completing an environmental impact report*, the state lead agency shall consult with, and obtain comments from, each responsible agency, trustee agency, any public agency that has jurisdiction by law with respect to the project.

3.4 The draft EIR states, “Water supplies would be provided by Padre Dam Municipal Water District” and ”Water demand is anticipated to be approximately 16,471,273 gallons per year.” Where are the comment letters from Padre Dam, the San Diego County Water Authority and other responsible agencies assuring the public that 16,471,273 gallons of water per year are available for a new park?

7. Inadequate estimate of maximum daily construction emissions

Table 4.3-5 Estimated Maximum Daily Construction Emissions shows maximum daily emissions for “sewer line installation” for 2022 and 2023 yet nowhere in the EIR is the length of sewer lines for any of the three stated options provided. How can construction emissions be estimated if the length of those lines are not known? How does the public or responsible agencies know if those construction emission thresholds have been exceeded or not?

8. Inadequate mitigation measures provided for significant impacts from construction on inappropriate soils.

According to CEQA Appendix G, a project will have significant impacts if the project would result in any of the following:

2.) Result in substantial soil erosion or the loss of topsoil.

4.) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

5.) Have soils that would be incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?

6.) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Below I examine each of these significant impacts:

2.) Result in substantial soil erosion or the loss of topsoil.

4.7-13 The draft EIR states that the project would not result in substantial soil erosion or the *loss of topsoil* and that no mitigation would be required, yet the recommendations provided by the geologic consultant on pages 4.7-15 and 4.7-16 state that a minimum of 1-2 feet of topsoil below structural buildings, retaining walls and exterior pedestrian concrete flatwork be removed in order to potentially reach suitable, stable soils. In addition, in order to create level areas for ball fields, ball courts, parking areas and many other features, much topsoil must be removed.

The park concept plan also shows numerous trees will be planted. Trees do not grow in clay (which is why it is naturally a native grassland and not a forest.) A substantial amount of clay (topsoil) must be removed and replaced with soil that will support trees and their root systems. *The draft EIR is woefully inadequate because it will result in the loss of massive amounts of topsoil loss due to grading, excavation, digging and removal involving the vast area of the concept park plan. The draft EIR does not describe the estimated amount of topsoil that will be lost due to these activities.* How much topsoil will be removed? What are the traffic, noise and emission impacts of such removal? Additionally, the clay contains massive amounts of stones and boulders. What are the traffic, noise and emission impacts of stone crushing and removal?

4.) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

Bosanko Stony Clay which underlays almost the entirety of the proposed park area *is highly expansive*. Expansion rates at sample test sites performed by Ninyo & Moore indicate expansion indices in 3 of 5 sites as high (94-105). The 2 tests with medium expansion indices (TP 15 and TP 11) are on the outer edges of the proposed site. **4.7.2.3** In section 4.7. on Geology and Soils of the draft EIR, it is stated, "Shrinking or swelling of foundation soils can lead to *damage to foundations and engineered structures*, including tilting and cracking," due to the expansive soils (Bosanko Stony Clay) that underlie the entirety of the project area. The evaluation of the soils by Ninyo & Moore who tested the topsoil agreed that the soil "possesses a medium to high potential for expansion." In addition, the USDA describes Bosanko Stony Clay of all slopes as having "**severe"** limitations for septic tank effluent disposal and "**severe"** shrink swell and runoff for a public sewerage system. Also, according to this same report, Bosanko Stony clay has "severe" limitations for play areas, picnic areas and even paths and trails.

Despite the testing for expansive soils by the County's own consultants, Ninyo & Moore, as reported in their Geotechnical Evaluation and despite the USDA's own findings for Bosanko Stony Clay and despite the draft EIR stating on page 4.7 that "the project is located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), and does not conform with the Uniform Building Code, the draft EIR boldly declares on page 4.7-18 Threshold 4: "*The project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property."* And that ***"No mitigation is required."*** This is misleading and false.

The draft EIR indicates that it will follow the recommendations set forth by Ninyo & Moore in order to "diminish potential risks" and to ensure the project would not exacerbate existing onsite conditions or *the existing expansive soils onsite.* Is "not exacerbating existing conditions" and "following recommendations" considered mitigation? Ninyo & Moore recommend that only 2 feet of topsoil be removed under structures, yet their own test pits do not perc even at 3 feet due to the high clay content. Joan MacQueen Middle School, which was built on the same Bosanko Stony Clay not far from the proposed park site, levelled the entire area down to approx. 15' on their eastern edge. They STILL did not reach below the clay. To this day, the school must put up with boggy lawns and playing fields, poorly growing trees and other clay related issues. I can't imagine a worse location in Alpine for an active park. Does the County realize the cost alone of removing vast amounts of clay, rocks and boulders on the site? Will taxpayers be willing to cough up even more millions for this incompetent boondoggle? What are the financial impacts of this project?

5.) Have soils that would be incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater.

As stated the project is underlain by Bosanko stony clay, which is rated as "severe" for septic tank effluent disposal due to permeability rate (USDA 1973). On page 4.7-20, the draft EIR declares that the project would *not* involve soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems yet one of the stated options for sewage disposal is an onsite wastewater treatment area involving pipes and leach fields. The location of the leach field and connecting sewer line is shown on **Figures 4.4-2 and 4.4-3.**

In the Geotechnical Evaluation in Appendix F, Volume 2 of the draft EIR, consultants Ninyo & Moore conducted multiple percolation and infiltration tests (7) throughout the site. See Appendix C pages 1-7 of their report. The location of the leach field appears is at Test hole IT-2. Even at a depth of 3.8 feet, water did NOT percolate or infiltrate at 14 of 18 counted 10 min intervals. The remaining 4 intervals showed very minimal infiltration or percolation. Clearly this site is wholly inadequate for a leach field! Similar results were obtained by ALL of the remaining tests throughout the proposed park area. These results are consistent with multiple percolation tests conducted on this site since the 1970s.

Again, the draft EIR defers mitigation to complying with "existing regulations" and would not result in a significant impact related to onsite soils, while at the same time declaring that no mitigation is required! Existing regulations already state that septic systems cannot be built in soils that do not percolate. Doing so would obviously result in raw sewage build up that would dangerously affect health, property and wildlife.

Why is the septic option even being considered for this site? Is the true purpose of this "park" location to expand growth inducing sewer lines?

6.) Directly or indirectly destroy a unique paleontological resource or site or *unique geologic feature.*

The Conservation Element of the County of San Diego General Plan also provides policies for the preservation of unique geological features. This is such a site.

According the 1980 Geologic map of the Alpine Quadrangle, San Diego County, California, USGS. Wright's Field including the site of the proposed park is marked. KTf. KTf is described as "Older [= Pleistocene or Pliocene] Alluvium (poorly sorted, boulder alluvium with distinctive granite 'Kcm' [=Corte Madera Granite] and gabbro clasts, possibly debris flow deposit; dissected remnants of once more extensive deposit).

"Alluvium" is a deposit of clay, silt, sand, and gravel left *by flowing streams in a river valley* or delta. Distinctive granite is different from the common granite seen throughout Alpine and in the hills surrounding Wright's Field.

Dr. Patrick L. Williams, geologist, who commented on this EIR notes in Volume 2 Appendix B under Notice of Preparation also notes.

" The uniqueness of the site had captured my attention. Not only is the park area a striking native grassland, nearly devoid of woody "chaparral" species, but the entirety of the property's grassland is decorated with exotic boulders of a very large and very ancient riverbed, which, per SDSU faculty cannot be associated with a provenance because the mountains of their origin have long since disappeared. The field itself was an active riverbed until about eighty-million years ago, at which time the river's flow was captured into Sweetwater Canyon. Such a site is not only unique in southern California, it is extremely rare in the world. The County property and Wright's Field is a geological heritage site and deserves to be formally recognized as such."

Any reasonable person can observe that the rocks in Wright's Field are not rough field rocks, but tumbled, smooth river rock. They can also observe that there are many different kinds of rocks that are distinctive from the predominant exposed magma granite boulders and rocks in

neighboring hills. The presence of vast quantities of clay is consistent with Wright's Field and the proposed park site being that of an ancient riverbed. Additionally, the shape of this area that consists of these kinds of rocks and clay shown on government maps take the form of a river. The draft EIR focuses on potential impacts to paleontological resources, but neglects to examine the area as a unique geologic feature. Why was this legal consideration completely ignored? The draft EIR is wholly inadequate in examining the site as unique geologic feature.

Bottomline:

Rather than DESTROY this incredibly unique biological, geological, archaeological and historical resource, the County of San Diego has an obligation to research, protect and celebrate it. The County of San Diego Parks and Recreation has in its mission statement to also "preserve significant natural resources." Why is it attempting to destroy one for the sake of the other? At what cost? No financial feasibility study was included. The EIR is wholly inadequate and - to be frank – egregious. Due to constraints, I do not have time to point out the numerous other inadequacies. It is my hope and the hope of thousands who have come to cherish Wright's Field over the years that the Board of Supervisors does the (W)right thing and denies this project.

Please keep me notified of all future meetings, publications and reviews of this project.

Thank you,

Yolaine M. Stout
Ystout11@gmail.com

Comment Letter I121

From: Home <tthompsonca@cox.net>
Sent: Friday, December 16, 2022 7:35 PM
To: CEQA, CountyParks
Subject: [External] Re: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report Recirculated Portion (December 16, 2022 - February 14, 2023)

I121-1 Her/hers
Please remove me from this email list, I have moved away from Alpine.

Terri
Sent from my iPhone

On Dec 16, 2022, at 6:51 PM, CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov> wrote:

Good afternoon,

The County of San Diego, Parks and Recreation Department is recirculating for public review an updated portion of the Draft Environmental Impact Report (EIR) for Alpine Park Project pursuant to the California Environmental Quality Act. Please see attached for the Notice of Availability and information on providing comments or visit the website at: www.sdparks.org/publicreview.

Written comments regarding the Draft EIR must be received no later than **February 14, 2023 at 5:00 p.m.** (a 60-day public review period). Comments should be emailed to CountyParksCEQA@sdcounty.ca.gov. For additional questions contact Anna Prowant at (619) 756-4548 or by email at CountyParksCEQA@sdcounty.ca.gov.

Thank you,

Anna Prowant (She-Her-Hers)
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
(619) 756-4548 (cell)
www.sdparks.org

For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com**. To receive updates via text, send **COSD COVID19** to **468-311**.

<Alpine County Park_Draft EIR Recirculated Portion Notice of Availability and Contact Information.pdf>

From: Debbie Van Hyfte <debbie.vanhyfte@gmail.com>
Sent: Saturday, December 17, 2022 7:29 AM
To: CEQA, CountyParks
Subject: [External] Re: Alpine Park Project - CEQA Public Review of Draft Environmental Impact Report Recirculated Portion (December 16, 2022 - February 14, 2023)

I122-1 Please remove my name from your email list; I no longer live in California.

debbie.vanhyfte@gmail.com

Debbie

On Fri, Dec 16, 2022 at 7:52 PM CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov> wrote:

> Good afternoon,
>
> The County of San Diego, Parks and Recreation Department is recirculating for public review an updated portion of the Draft Environmental Impact Report (EIR) for Alpine Park Project pursuant to the California Environmental Quality Act. Please see attached for the Notice of Availability and information on providing comments or visit the website at: www.sdparks.org/publicreview.
>
> Written comments regarding the Draft EIR must be received no later than **February 14, 2023 at 5:00 p.m.** (a 60-day public review period). Comments should be emailed to CountyParksCEQA@sdcounty.ca.gov. For additional questions contact Anna Prowant at (619) 756-4548 or by email at CountyParksCEQA@sdcounty.ca.gov.
>
> Thank you,
>
> *Anna Prowant* (She-Her-Hers)
> Biologist and Land Use/Environmental Planner III
>
> Resource Management Division
>
> County of San Diego, Parks and Recreation
>
> 5500 Overland Avenue, Suite 410, San Diego, CA 92123
> (619) 756-4548 (cell)
>
> www.sdparks.org
>
> For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com.** To receive updates via text, send **COSD COVID19** to **468-311.**
>
> Coronavirus Disease 2019 COVID-19

From: VIRGINIA WALKER <vswalker@cox.net>
Sent: Thursday, February 9, 2023 9:07 AM
To: CEQA, CountyParks
Subject: [External] Alpine Park

I am not sure where to start. I have several points to make.

I123-1 1) From your report, all the oaks ,where you placed the horse parking , will die. Maybe not right away, but they will die because you will be stirring up the ground in their area, as well as putting the bathroom and septic system there. No matter the care you give them, which will cost money, they will die because you will have disturbed the soil in their area too much.

I123-2 2). With the growth of people and our drought, how are you going to justify the water use at this park. Most people here in Alpine don't want taxes raised to pay for the water.

I123-3 3). Goal LU-6 Development- Environmental Balance. This states that a built environment should be in balance with the natural environment. Well this park is not in balance with the environment around it. The homes around this area and Wrights Field next door do not match with this park. This park does not follow LUY-10.2. and I could name. so many more parts and pieces of your Recirculated Sections of Draft EIR.

My feeling of what you should do with this park area which would avoid so many of the points in the Recirculated EIR is:

1) Up at the entrance where there is just dirt, should be graded and a small black top parking area. I would have to walk it with someone that could measure and tell me. The rest of it could be graveled or decomposed granite for horse parking only.

I123-4 2) Here in this area you could place 2 port-a-potties,.

3). In this area, somewhere along the road edge put your Pickle Ball courts. No matter where you put them they will need to be fenced. The horse parking area would be away from this area. Blacktop to Pickle ball courts could be ADA appropriate with a paved path, and ADA approved with the Port-a-potties in the same area.

4) you could put picnic tables under the oaks, that would not make them die and several other places in this area.

5). You would not need any one living here either.

6) With the money you have, go somewhere else in Alpine and make a skate park. It should be somewhere the kids could get too. If is big enough add some basketball courts. I have seen several small pieces of land that would work for this sort of thing.

I123-5 My feeling is you supervisors, especially Mr. Anderson, wants this huge park so that he/they can be known for getting this in here. I feel if you met just Alpine residents that you would have a different outlook as to what we want as a park. Maybe, Mr. Anderson, you could hold a town hall meeting here in Alpine. Not a meeting from the whole county like you did at the start of this. People outside of Alpine would ask for everything, just like they did, but the people of Alpine wouldn't.

Thank you for listening and reading this. There are a lot more points in that revised RIE that you are violating also.

Virginia Walker

Alpine resident for over 20 years

From: Patrick Williams <geoplw3@gmail.com>
Sent: Thursday, January 5, 2023 1:05 PM
To: CEQA, CountyParks
Cc: Preserve Alpine's Hertitage
Subject: Re: [External] missing link for Alpine Park RDEIR

I124-2 Thank you Anna, I was continuing to work on it and found that it opened smoothly in another browser (chrome). It was freezing in safari. Other attachments opened smoothly in Safari.
Thank you for getting back to me.
Pat

On Thu, Jan 5, 2023 at 1:02 PM CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov> wrote:

> Good afternoon,
>
> Thank you for your email – I'm sorry you're having issues accessing this, but it appears to be working on our end. In case it continues to not work for you, I have attached a copy of the document.
>
> Thanks so much,

Anna Prowant (She-Her-Hers)
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
(619) 756-4548 (cell)
www.sdparks.org

For local information and daily updates on COVID-19, please visit **www.coronavirus-sd.com**. To receive updates via text, send **COSD COVID19** to **468-311.**

Coronavirus Disease 2019 COVID-19

From: Patrick Williams <geoplw3@gmail.com>
Sent: Thursday, January 5, 2023 12:42 PM
To: CEQA, CountyParks <CountyParksCEQA@sdcounty.ca.gov>; Preserve Alpine's Hertitage <info@preservealpinesheritage.org>
Subject: [External] missing link for Alpine Park RDEIR

I124-1 Hello DPR CEQA folks. I tried to open the link below and it is not working. Could you check the path and let me know if it can be repaired? If not, can you please send the defensible space requirements letter to me by email?

Thanks much

Pat Williams

- **14_2022 Appendix L, Defensible Space Requirements Letter**

From:	Patrick Williams
To:	CEQA, CountyParks; Anderson, Joel; Shute, Madeline; BOS, District1Community; Desmond, Jim; Fletcher, Nathan (BOS); Lawson-Remer, Terra
Subject:	[External] PL Williams Alpine County Park comment letter
Date:	Tuesday, February 28, 2023 4:48:32 PM
Attachments:	Patrick L Williams.pdf

Ms. Anna Prowant and Supervisors:

I125-1 Please find attached my comment letter for the Alpine County Park RDEIR. My comment is focused on examination of Project site fire and site fire egress evaluations.

Kind thanks for your service to the County.

Respectfully,

Pat Williams

--
Patrick Williams
Earthquake Geology, Conservation Land Management
508-274-9618
PO Box 1437
Alpine CA 91903

Patrick L Williams
2360 Palo Danzante
Alpine, CA 91901

February 28, 2023

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov
RE: Alpine Park Project, State Clearinghouse No. 2021030196 Chapters and Associated Technical Appendices

Dear Ms. Prowant:

I125-2

I am pleased to provide my comments on the CR Associates (2022) Alpine County Regional Park Fire Evacuation Analysis and the Rhode Associates (2020) Alpine County Regional Park Fire & Emergency Operational Assessment. I feel that extremely important direct fire hazards and fire egress hazards presented in these reports have been sidestepped in Project Planning and that these comments will help focus attention on grave site hazards from toxic gases due to the Project's hill-top location and also to refute the unsupported conclusion that the project has manageable large group egress potential. These two issues alone should disallow this site as a permanent location for mass gathering activities.

To facilitate review CRA'22 and RA'20 directly quoted text is produce in Black - and PLW comments are in produced in Blue.

I125-3

PLW summary of CRA page one

- The evacuation analysis assumes that up to 240 vehicles would evacuate from the proposed Project site. (Project site map (Figure 2) shows 260 parking stalls plus as many as 12 horse truck and trailer rigs so as presented this study undercounts equivalent site parking by at least 32 and as many as 50 – or as much as 20%.

- CRA analysis indicates it would take up to 2 hours and 31 minutes to evacuate the existing land uses (per the egress study Figures 3, 4) via South Grade Road and Alpine Boulevard (Scenario 1).

- The analysis also assumes up to 4,029 vehicles and 4,432 vehicles [sic] would evacuate from the surrounding land uses, under the Existing and Cumulative scenarios, respectively. (my estimate is at least 5300 for the Project area per the egress study and in the Project-adjacent areas immediately to the E and ESE not included in the egress study per CRA Figure 3).

summary of study bullets:

- It would take up to 2 hours and 31 minutes to evacuate the existing land uses via South Grade Road and Alpine Boulevard (Scenario 1). If the TWLTL (two way left turn lane) along Alpine Boulevard is utilized as an evacuation lane, then the evacuation time reduces to 1 hours and 33 minutes (Scenario 2).

- Evacuating the Project Traffic only (Scenario 3) would take up to 31 minutes.

I125-3 cont.

- Evacuating all existing land uses and the Project would take up to 2 hours and 40 minutes to evacuate the existing land uses via South Grade Road and Alpine Boulevard (Scenario 4). If the TWLTL (two way travel lane) along Alpine Boulevard is utilized as an evacuation lane, then the evacuation time reduces to 1 hours and 41 minutes (Scenario 5). Thus, the Project increases the total evacuation time by 9 Minutes and 8 Minutes, respectively.

- Evacuating all cumulative land uses and the Project would take up to 2 hours and 53 minutes to evacuate the cumulative land uses via South Grade Road and Alpine Boulevard (Scenario 4). If the TWLTL along Alpine Boulevard is utilized as an evacuation lane, then the evacuation time reduces to 1 hours and 50 minutes (Scenario 5). Thus, the Project's increase the total evacuation time by 12 minutes and 8 minutes, respectively.

I125-4

I assert that given the issues discussed below, including of that of ignoring up to 1000 vehicles egressing from Palo Verde Ranch and Rancho Palo Verde onto South Grade Road that these estimates are substantially in error and that South Grade Road is very likely to be in gridlock during fire passage, even without the Project's addition of up to 280 equivalent vehicles. I leave it to staff to explain why ≥200 adjacent estate homes were not included in this study that are in addition to the 4029 study vehicles and the up to 280 Project vehicles merging onto South Grade Road and Alpine Boulevard. Will the maximum number of vehicles traveling from the study area be corrected to more than 5300 vehicles to better represent maximum vehicles?. How is it defensible to insert a mass gathering Project for "up to thousands of daily users" (quote: Rhodes, 2020) into this existing extreme hazard site?

CRA page two

I125-5

- managers may halt evacuations of the Project at any point during an evacuation event to move traffic that is of higher priority. The Project may also serve as a temporary evacuation point for evacuees from other areas due to its design as a fire-resistant zone. Evacuations throughout San Diego County operate on a priority basis, with those populations that are of greatest risk or highest exposure considered the highest priority. Downstream traffic flow is managed to move these populations first and the Project provides an opportunity to protect the park uses and nearby residents (if they evacuate to the Project's site)

while prioritizing movement of populations that are at greater risk, reducing the evacuation times for those populations, possibly substantially.

- Neither CEQA, nor the County has adopted numerical time standards for determining whether an evacuation timeframe is appropriate. Public safety, not time, is generally the guiding consideration for evaluating impacts related to emergency evacuation. The County considers a project's impact on evacuation significant if the project will significantly impair or physically interfere with implementation of an adopted emergency response or evacuation plan; or if the project will expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Should we conclude that the absence of County or CEQA standards permits the building of a mass gathering park in a zone with a very high fire hazard and a multi hour evacuation model? Doesn't this present a very high probability to "expose people or structures to a significant risk of loss, injury, or death involving wildland fires"?

I125-5 cont.

Based on the evacuation simulations above, evacuation traffic generated by Project would not significantly increase the average evacuation travel time or result in unsafe evacuation timeframes. Evacuation flow would be able to be effectively managed.

This "worst-case" evaluation is not required by CEQA; requirements of the Annex Q for the determination of evacuation times. The roadway network and vehicle input assumptions have been selected to simulate a "worst-case" evacuation scenario that would occur when park usage if the highest.

This "worst-case" evaluation is not required by CEQA; indeed, CEQA requires the application of reasonable standards and criteria only. Nonetheless, this preparer imposed a "worst-case" evaluation out of an abundance of caution. In an actual wildfire event, it is likely that fewer park users would be presented on-site and fewer residents/customers would be presented in the evacuation area. While other evacuation scenarios are also possible, such as evacuation during morning or evening peak hours, however, during those hours, residents are likely to be away from their respective homes, and park users are not likely to arrive at the Project, thus they are already in a safe area. Under an evacuation order, first responder and law enforcements would not allow residents to return an endangered area. Therefore, the worst case is when everyone is already at home and attempt to leave all at once with all their vehicles.

I125-6

Assumptions (CRA page three)
Scenario 1 (e.g. Figures 3, 4) neighborhood evacuation without park. 2h31m

Scenario 2 same as scenario 1 except that central TWLTL on Alpine Blvd is utilized for egress. 1h31m

Scenario 3 project only is evacuated as illustrated on Figure 6 [*Figure 6 not in report*]. 31m

Scenario 4 is combination of Scenario 1 and Scenario 3. 2h40m

Scenario 5 is combination of Scenario 2 and Scenario 3. 2h41m

Scenario 6 is same as Scenario 1 but with 10% anticipated residential growth. 1h43m

Scenario 7 is same as Scenario 6 but with use of central TWLTL on Alpine Blvd for egress. 2h50m

I125-6 cont.

Scenario 8 is same as Scenario 6 with addition of project traffic. 1h53m

Scenario 9 is same as Scenario 7 with addition of project traffic. 2h55m

All of the Scenarios appear to assume that most of Palo Verde Ranch and most of Rancho Palo Verde will NOT BE EVACUATED (see CRA Figure 3) --> up to 300 estate homes averaging 4 to 6 net bedrooms will also be competing to evacuate to Alpine Boulevard, possibly by as much as doubling model estimates of evacuation times for South Grade Road.

Evacuation assumptions:

I125-7

Residences were assumed to have 2.1 vehicles per address and states this is conservative as a significant number of addresses were assumed to be vacant. The CRA study also does not evaluate that a high percentage of Project-adjacent homes have ADU's. I also assert that the vacancy rate in Project adjacent homes is well below 5% based on Alpine's very-low home sale and home rental offerings.

Assumes 3142 residential vehicles, 811 "commercial site" vehicles and 61 church vehicles for a total of 4029 without park and 4269 with 240 park vehicles - (Park actually has ca. 280 equivalent vehicles with ca. 12 truck-and-horse-trailer spaces and ca. 20 "reserved" spaces.

Assumes just 2% of vehicles would be trucks with trailers from "national averages". This seems incredibly low in this high livestock-ownership and RV-user area (estimate of trucks and trailers therefore probably underestimated by at least 2x to 4x).

Conclusions of this study are unrealistic and in error in the following instances:

Total vehicle space at the park is understated (discussed above).

I125-8

Study evacuation subareas (Figure 3) does not include some 200-300 estate homes in Rancho Palo Verde and Palo Verde Ranch subdivisions. This omission is not presented, discussed or explained. Those residences commonly contain ADU's in addition to primary dwellings and net vehicles for these properties is likely 3 to 5 equivalent vehicles, and up to 1000 additional vehicles merging onto South Grade Road in addition to the 4029 vehicles evaluated as "existing" and up to 280 Project vehicles.

I125-9

Past successes in San Diego County evacuation are taken as comfort in the CRA study conclusions. Please see Rhode Associates (2020) *Alpine County Regional Park Fire & Emergency Operational Assessment* which asserts the Park site and Alpine as a whole

"...are situated to arguably pose one of the worst Wildland-Urban Interface conditions in the County of San Diego and is in a known location of repetitious major wildfire occurrence. Such locations of repeat occurrence are known as "historical wildfire corridors""

Past luck and serendipity is a very weak argument to overlay additional burdens to Alpine wildfire planning, however small, and adding of at least 10% to egress traffic on two lane South Grade Road is very hard to justify in the face of the Rhode 2020 evaluation and very likely violates the San Diego County codes and ordinances regulating expansion (and building of permanent mass gathering facilities in areas of *very high wildfire danger*?)

I125-10

Additional Fire Risk from Project: (Rhodes Associates 2020, Page 9-12)

Risk 3 "It is likely that human use will increase on the site with this development with an associated increase in the intensity of wildfire ignition risks. A University of Colorado, Boulder study (National Academy of Sciences, 2017) identified that 84% of all wildfires nationally were human caused during the period 1992-2012, and this risk should be addressed." In other words overflow of Project site foot and bike traffic onto high fuel and dry fuel areas immediately adjacent is a grave fire risk on its own and the likelihood of human caused fire ignited directly on Park and BCLT property must be considered nearly impossible to fully (or even fractionally) "mitigate".

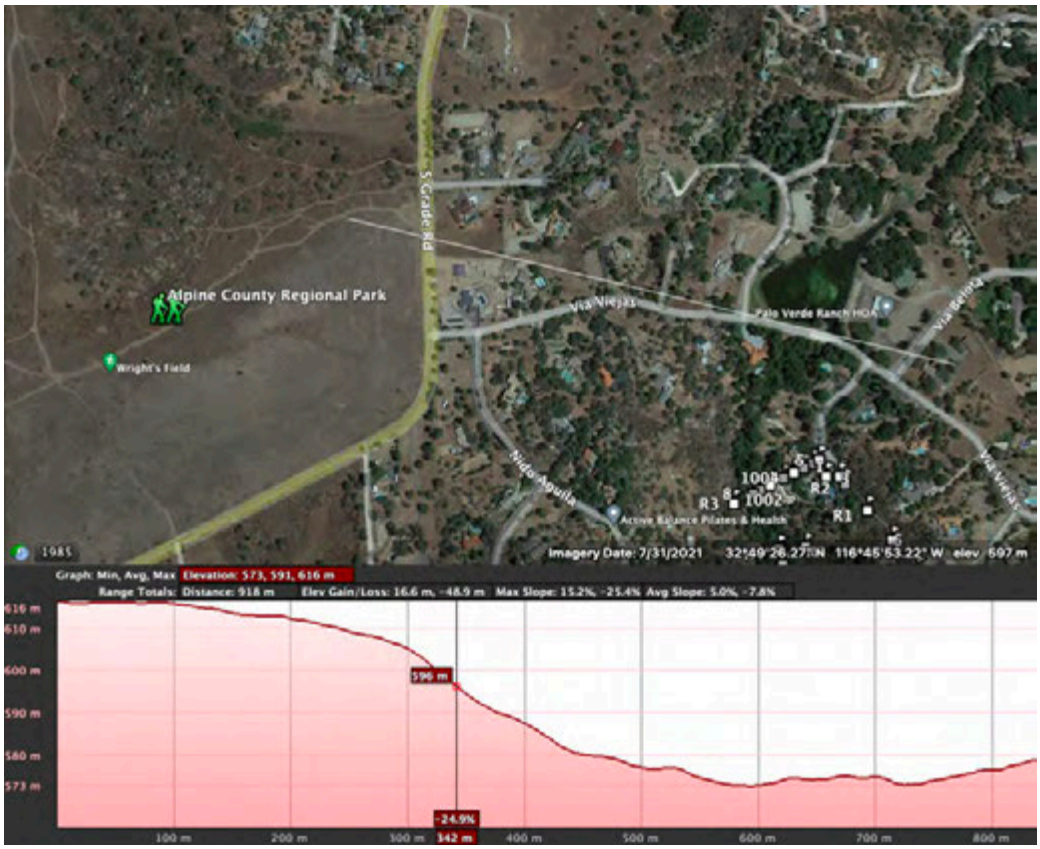
I125-11

Rhode 2020: Facility Fire-Safe Design (Rhodes Associates 2020,Page 12-13)

"The installation of manicured, irrigated landscaping such as lawns and other fire resistive plantings will offer a fire safe area where the two dog parks, three soccer fields and a baseball diamond are proposed. Additionally, the paved parking lot, basketball and pickleball courts, equestrian area and other cleared assets will serve as not only a buffer to protect the park from wildfire spread, but also provide a Temporary Safe Refuge Area (TSRA) for humans and animals for safe haven during wildfire."

The project is on a HILLTOP LOCATION relative to fire propagating from the east through thousands of acres of mature vegetation and 300 estate homes, attends the possibility of producing a literally **toxic smoke environment** at ground level across the Project site. A *Project area cross section* from Viejas Creek just east of the park illustrating this geography is below. The cross sections shows that the hilltop location is not insignificant with gradients as step as 25% just east of the Project. Why have the fire egress and planning studies ignored this rather obvious hazard to the park site that very plausibly could result in an inhospitable scenario for a Project-site TSRA?

Figure Caption: air photo and topographic cross-section from Viejas Creek in Palo Verde Ranch to the entrance of the proposed Project. Note that maximum gradient down-to-the-east is 25% and that more than 200 estate homes and a vast area of old growth chaparral are located adjacent and E of the project and another 100 estate homes are located ESE and S of the proposed Project:



I125-12

"It is likely that park facilities such as its parking lot(s) and equestrian staging will serve as the nearest emergency safe refuge for park users recreating in its open space, and may also serve the emergency needs of nearby park neighbors during a regional wildfire. For this reason, parking and equestrian areas should provide broad expanses of non-combustible surfaces that are absent of combustible ground cover (including in planters) *with at least two hundred feet of clearance from native vegetation* whenever possible. Trees within these facilities should be maintained in a trimmed state, free of dead plant material and lower limbs removed. Fuel modification of adjacent native fuels may be used in coordination with development of these developed areas when necessary to achieve minimum recommended fuel clearance widths."

Providing two hundred feet of clearance from native vegetation as advised above to develop the site ass a TSRA would double the area cleared for the active use park and certainly would violate the biological mitigation proposed in the Project EIR.

I125-13

Rohde Associates 2020: Summary of Findings (Page 26-27)

The first of these should give great concern to reviewers of this EIR:

" 1. The two-adjoining park/reserve facilities, while managed separately by County Parks and BCLT, have many relationships and ties both geophysically and ecologically. They also share a similar wildfire risk, and fire prevention outcomes will be shared for better or worse by both facilities. A rich history of wildfire affects these lands, as does an annual experience of dangerous wildfire conditions."

" 2 ...They also plan to implement restrictions on overnight use, smoking, use of open flame, and vehicle access as part of its overall fire prevention program. These are appropriate and effective mitigations for the park given its fire history and onsite fire hazards."

I125-13 cont.

Given the above that the adjoining BCLT ownership and acquired Park property has NEVER BEEN PATROLLED BY LAW ENFORCEMENT OR BY BCLT STAFF is suddenly going to have a supervision for hundreds of new users and transiting youth is fantastically unrealistic!

3. A long-term fuel modification program is needed to protect the County park/BCLT Reserve from wildfire impacts due to offsite ignition, and to protect neighboring development from wildfire moving through or from park/reserve lands. Alternatives for completion of this effort are detailed in this study. The fuel modification program should be designed to achieve fire prevention needs while minimizing environmental impacts and maintaining habitat.

I125-14

4. Funding resources for fuel modification maintenance has been inconsistent for BCLT reserve lands. County Parks and BCLT need to collaborate with various stakeholders and government entities to acquire long-term funding and resources to support fuel modification.

Is this permanent fuel modification expense explicitly accounted for in the Project planning?

6. Development of the Alpine Regional Park in accordance with the County of San Diego proposed park design and local fire and building codes will develop fire safe facilities that will be resilient to wildfire. The park will also be positioned to provide temporary safe refuge in its sports fields, parking, and equestrian facilities to the greater community in case of wildfire.

I125-15

As above the project is on a HILLTOP LOCATION relative to fire propagating from the east through more than 1000 acres of mature vegetation and 250 estate homes attends the possibility of literal TOXIC SMOKE passing at ground level through the Project site. A cross section from Viejas Creek immediately east of the park illustrating this geography is attached. The cross sections shows that the hilltop location is not insignificant with gradients as step as 25% just east of the Project. Why have the fire egress and planning studies ignored this rather obvious hazard to the park site that could plausibly result in a mass casualty scenario if the Project is designated as a TSRA?

I125-16

8. Park development will not present unmitigable impacts or a significant increase in call volume for local emergency services and may be developed without addition to existing regional fire resources or establishment of new or unreasonable wildfire risks.

The Rhode and CR Associates studies provides useful discussion of mitigation of wildfire risk in Alpine but in particular the CRA evaluation is wholly deficient in supporting this statement on the basis of the Project egress and fire hazard issues evaluated in this comment letter.

I125-17

I am pleased to provide these comments on the CR Associates fire evacuation analysis of 31 October 2022 and the Rhode Associates fire and emergency operational assessment of 17 August 2020. I feel that fire issues have been sidestepped in Project planning and that these comments will help focus attention on grave site hazards from the Project's hill-top location, and the implausible and unsupported conclusion that the project has manageable egress potential. These two issues alone should disallow this site as a permanent location for mass gathering activities.

Kind thanks for your attention to this comment letter.

Respectfully submitted,

Patrick Williams

Alpine

12/20/2022

Smith, Sheri (Voicemail)

I126-1 Hi Anna, my name is Sheri Smith and I'm calling regarding the Notice of Availability for the draft Environmental Impact Report for the Alpine Project and it says documents are available for review. What I'm wondering is if these documents actually show the detail of the plans. We live in Alpine Heights East which we have turn to into Via Viejas and concerned about where parking and the entrance to the County park is going to be. It sounds like a wonderful project, but it looks like it's pretty ambitious with all the different activities that are going to be available and I'm more concerned about parking and people parking on the streets kind of impeding the entrance to Via Viejas and the amount of traffic getting into there. I just wanted to know what kind of traffic control there will be there on South Grade and if this plan, the documents that are available for review, are going to give that kind of detail for us.

Fostering the protection and appreciation of birds, other wildlife, and their habitats...

November 9, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
CountyParksCEQA@sdcounty.ca.gov

Re: **Alpine Park Project DEIR (SCH No. 2021030196)**

Dear Anna Prowant,

O1-1 Thank you for the opportunity to comment on the Alpine County Park Project DEIR. The San Diego Audubon Society (SDAS) is a 3,000+ member non-profit organization with a mission to foster the protection and appreciation of birds, other wildlife, and their habitats, through education and study, and to advocate for a cleaner, healthier environment. We have been involved in conserving, restoring, managing, and advocating for wildlife and their habitat in the San Diego region since 1948. Our work has included invasive removal and revegetation events, training community scientists, advocating for developments and park management, educating school children about the importance of natural habitats, and many other projects. Over the years we have engaged with thousands of volunteers in carrying out these goals. We provide the following comments for consideration to the DEIR.

O1-2 The main issues in the DEIR this letter will address are the impacts on biological resources within the Alpine County Park Project (Project) and by extension into Wright's Field Preserve (WFP). This includes the trail system design and addition of 250+ park visitors parking spaces. Section 2.4 Existing Conditions states that the project site is adjacent to Wright's Field Preserve, which is managed by BCLT as part of the Multiple Species Conservation Program (MSCP) of the County of San Diego.

O1-3 In Section 4.4.2.1 Physical Conditions described visitors use of trails, "Several dirt trails traverse the BSA, most notably in the northern portion. Trails connect the eastern portion of the property where many hikers begin their journey, to the west, south, and north of the site and into Wright's Field." With a project design including parking for 250 vehicles, it can be assumed that a dramatic increase in visitors entering WFP with significant impacts. In fact, this is acknowledged on page 4.4-19 of the DEIR, that impacts would increase the amount of anthropogenic influence in the areas along the existing trails.

O1-4 The trail design shown in Figure 4.4-3 Special Status Wildlife shows all three planned trails in the Project traverse through Quino checkerspot butterfly (*Euphydryas editha quino*) (QCB) host plants (northern trail on the project site and the 2 southern trails lead to QCB host plants adjacent to the project boundary). More specifically, The DEIR describes these impacts, "QCB may be restricted from accessing these host plants, reducing the potential reproductive success of those individuals. These indirect impacts from increased human presence along trails may cumulatively result in QCB's reduced use of habitat immediately surrounding the trails." These trails are apparently chosen for the Project because they conveniently currently exist. This is to highlight the point that existing trails creating QCB habitat impacts are not necessarily the trail design to implement for the project. Mitigation should include dealing with the cause of the impacts instead of creating mitigation habitat elsewhere. Can the Project trail design be changed to remove or lessen QCB habitat impacts?

O1-5 In Figure 4.4-2 Special-Status Plants highlight the planned trail system traverses through Engelmann Oak stand. Impact BIO-5 lists impacts to 7 bat species found on the Project which are listed as California Species of Special Concern. These species were observed foraging over most of the native habitat, especially within the open Engelmann oak woodland in the Project. It is stated that there no long-term impacts for species Townsend's Big-Eared bat (*Corynorhinus townsendii*). This species is listed with the CDFW as a Species of Special Concern (SSP) in California. Impact BIO-3 also details construction on the project site within the proposed trail system causing root damage to 25 Engelmann oaks that are likely to lead to the oaks mortality. This is another example of the Project planned trail system causing current and future impacts to Special Status Species. Can the Project trail design be changed to remove or lessen impacts to Townsend's Big-Eared bat and the other 6 bat species?

O1-6 The planned trail system has three trails that leave the project site to the west. The northern trail connects to **a nowhere section** in the WFP, and the 2 southern trails connect to existing trails in WFP. Visitors to the Project from 250+ new vehicle parking spaces that will use the currently planned trail system end up somewhat abandoned at the intersection of the Project and WFP. There is no cohesive trail design in WFP so the new large influx of visitors can create a large influx of impacts to MSCP protected habitat in Wrights Field Preserve. The word "trails" is used 258 times in this DEIR, but there is no cohesive plan for a trail system designed to prevent current and future habitat impacts to vulnerable species. Creating a looped trail system connecting the 3 trails leaving the project site and designed to direct park visitors in a way to enjoy the amenities of the park without directing them into WFP. Can the Project trail design be changed to lessen or prevent a large influx of Project visitors to enter unabated into WFP and incur anthropogenic damage to MSCP protected habitat?

O1-7 CDFW submitted a letter to the Project NOP that included, "CDFW recommends that a site Resource Management Plan (RMP) for the 73-acre open space should be completed before any trails are opened to the public." We encourage and support this approach for there is often only one opportunity to design an effective trial system at the beginning of a large project. California Native Plant Society also submitted a letter to the Project NOP suggesting the CDFW *California Fish and Wildlife Journal* which is recognized in this DEIR on page 4.4.-19 and by using the term, "recreation ecology". The information in this journal recognizes and describes impacts observable and unobservable to wildlife due to human trail use. This quote from an article in the *Journal* puts it simply, "Accordingly, trails, access points, and associated infrastructure need to be planned and managed appropriately to complement, rather than diminish, conservation values of lands dedicated to the protection of species and their habitats." (Balancing conservation and recreation 2020, Mitrovich).

O1-8 Thank you for the opportunity to comment on the Alpine County Park Project DEIR. Please keep us informed of any changes, updates, hearings, decisions, or other milestones related to this project.

Sincerely,

James A. Peugh

James A. Peugh
Chair, Conservation Committee
San Diego Audubon Society







November 15, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III
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By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

O2-1 Thank you for the opportunity to comment on the Alpine Park Project's ("Project") Draft Environmental Impact Report ("DEIR"). The San Diego Chapter of California Native Plant Society ("CNPS"), Sierra Club San Diego Chapter, and Environmental Center of San Diego are united in this commentary on the Alpine Park DEIR. Collectively we have over 15,000 members in San Diego County. We find the DEIR to be a sorely inadequate project description, leaving both the public and the County Board of Supervisors guessing the near-and long-term outcomes of numerous project impacts.

O2-2 While some type of park on this site might be good, the material in the DEIR does not yet rise to the level of a finished design. It fails to meet its own (arbitrary) objectives, and the No Park Alternative better fulfills those same objectives. It is missing necessary analysis, and the DEIR fails to meet County goals to decarbonize, end extinction, and keep people safe from fire. Most importantly, it fails to include potential compromises that would garner broad-based community support while simultaneously meeting the objectives set for it. This is a work in process, not a finished product. It needs a massive rewrite, quite possibly with recirculation, before it goes forward in the CEQA process.

The Questionable Need for the Park

O2-3 Per the DEIR, page 4.16-2 "According the County of San Diego Parks Master Plan (PMP), the County's minimum level of service standard for local parks is 3 acres per 1,000 residents, and 10 acres per 1,000 residents for regional parks (County of San Diego 2016). However, the goal identified in the 2011 San Diego County General Plan is 10 acres per 1,000 residents for local parks and 15 acres per 1,000 residents for regional parks (County of San Diego 2011a). The PMP minimum standard is an analytical tool for County DPR to determine where parks and recreational resources are needed, whereas the 2011 general plan establishes a goal for long-term park and recreational development. As of 2019, the Alpine Community Plan Area (CPA) has approximately 1.44 acres of local parkland per 1,000 residents, and no regional parkland. These totals do not include parks that are not owned by the County or for which there is no JEPA because, although they may meet some of the recreational needs of particular communities, access and use may be restricted."

Per worldview.com, Alpine's 2020 population is 14,878, so it needs 148 acres of local parkland and 222 acres of regional parkland. Per the DEIR, table 4.16-1 (p. 4.16-1, below), Alpine residents have access to 202 acres of unencumbered local parkland at Wright's Field and 28, 020 acres of regional parkland in the adjacent Cleveland National Forest (CNF). **Why was County ownership assumed as a precondition? Where in the PMP does it specify that what entity owns the parks matters?** Wright's Field Preserve operates under agreement with County DPR through the MSCP, and US National Forests are open to the public. **Why does the DEIR fail to analyze the contribution the Cleveland National Forest makes to Alpine.**

Figure 1 Table 4.16-1. Parks and Recreational Facilities within the Project Area

Park/Facility Name	Park Type	Existing Acreage
Boulder Oaks Neighborhood Park	Local	2
Joan MacQueen Middle School	JEPA[1]	12
Shadow Hill Elementary School	JEPA[1]	12
Wright's Field		202
Cleveland National Forest Regional Park 28,020	Regional Park	28,020
Total		28,248

[1]Indicates that the park is in a Joint Exercise of Powers Agreement (JEPA), which means that the owner of the facility agrees to allow limited use of the facility by another entity, in this case the County of San Diego and its residents.

O2-4

Based on the numbers, Alpine is not park-poor but a park-rich. This is borne out by evidence from Wright's Field. If Alpine is truly underserved for parkland, then anyone would expect that existing facilities would be heavily visited and seriously overused. Certainly anyone used to, say, the heavily visited Los Peñasquitos Canyon Preserve in the City of San Diego, would expect dozens to hundreds of the approximately 14,800 people in Alpine to be using Wright's Field, in line with the project proposing to accommodate 500 visitors per day.

O2-5

I (Landis) went to Wright's Field on Sunday, November 7, 2021 at 1100-1315. The day was clear, partially overcast, in the low 70s, and perfect hiking weather. We saw a total of seven cars parked along South Grade Road (not all at once), and fewer than 20 people, a third of whom were a single family with children. For most of our visit, no other humans were in sight. This is not an overused park. Figure 1 (next page) shows the empty parking lot and three cars across the street at 1:15 pm, when we left. Figures 2 and 3 (next page) show the kind of damage expected in an overused park, these from Los Peñasquitos, where I volunteer weekly.

O2-6

The logic that parkland only counts if it is owned by the County is specious. By that logic I, a resident of Rancho Peñasquitos, live in a park-poor area, because the only county park nearby is a small part of Los Peñasquitos Canyon Preserve. The square miles of city parkland, Torrey Pines State Preserve, the beaches, and the land trust lands do not count. **Why should it matter whether a public park is controlled by federal, county, municipal authorities, or for that matter a land trust with an open access policy?**



Figure 1. Alpine County park parking lot area, empty, with 3 cars (including mine) parked on South Grade Road. This is not excessive use.

O2-7

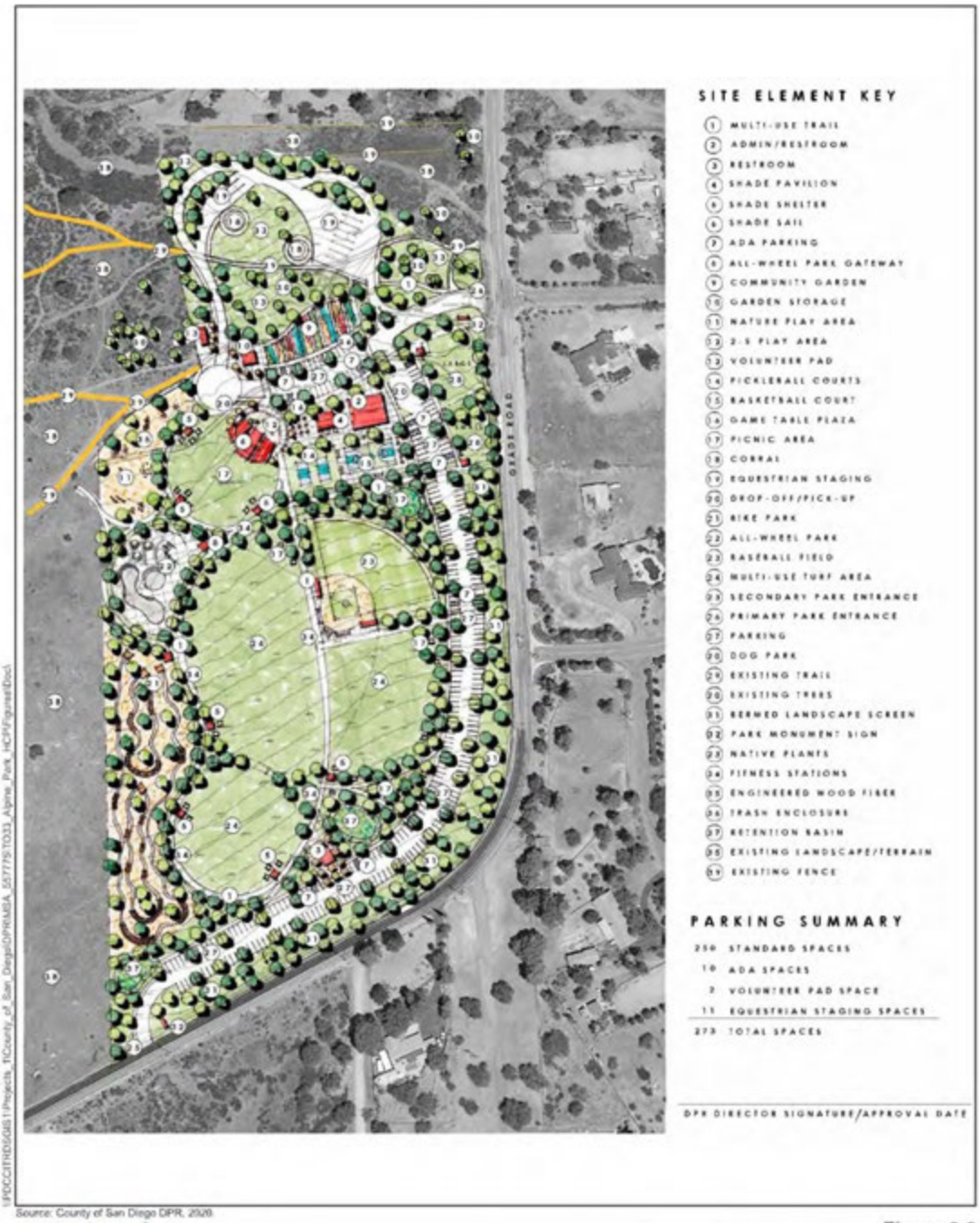


Figure 2. Concrete fence vandalized by two teenage boys at Del Mar Mesa. This is excessive use.



Figure 3. Wood fence vandalized at Del Mar Mesa, using a sawzall on the posts and beams, and a razor to deface the keep-out sign (white). This is also excessive use.

O2-8



Source: County of San Diego DPR, 2020

Figure 3.2
Proposed Active Park Concept Plan
Alpine Park Project

Second, why include the general plan goal COS-21.4 Regional Parks (p. 4.4-6), which requires " new regional parks to allow for a broad range of recreational activities and preserve special or unique natural or cultural features when present." **Why is this regional park goal given as a justification for a local park?** Alpine has almost 100 times more regional parkland than it needs per the PMP. **Does this section even belong in the DEIR?**

O2-9

The need for recreation at this site needs to be rethought. Two possible alternatives are given at the end. As for the project objectives, they are covered at the end as well.

Issues with the Proposed Design

The project design (DEIR Figure 3.2, previous page) conflicts with the geometry of the site and at least two parts of the DEIR, in that the project cannot not be built as shown if the Project is to implement its mitigation measures to deal with the site. Therefore, the Project Description (Chapter 3, especially Figure 3.2) needs to be revised to reflect the reality of the project.

O2-10

First, the project site slopes, with approximately 50 feet of elevation between top in the north and bottom in the south. The highest point is very approximately at the community garden in Figure 3.2, and the site slopes at around a 3% grade both north and south from that ridge. The topographic lines in Figure 3.2 appear to show the slope in 1' increments. **Why are these not more obvious?**

O2-11

The existing slope is proposed to be flattened out in several places, which is good, because a baseball diamond (#23) that slopes 6' across the field will be suboptimal for play, while the horse trailers being forced to load on a 3% slope (#19) will be awkward at best and lead to trouble if the horses are not trained for it.[1]

O2-12

However, the massive excavations necessary to flatten out the site are not shown in Figure 3.2, and that is a worse problem. **The site is proposed to be laced with cut and fill slopes, but where are they on Figure 3.2?** While ADA access is not a CNPS issue, one wonders how any wheeled seat, be it a wheelchair or a stroller, will handle the slopes. **Where will the access ramps be?**

CNPS is concerned about native plants, and the massive amount of grading is incompatible with the health and continued existence of the Engelmann oaks (*Quercus engelmannii*) and other existing trees on site. While the fill may avoid their trunks, damaging root systems will simply substitute a slow death for a quick one. Furthermore, the DEIR itself (p. 4.7-14) proposes, as mitigation for soil conditions: "[s]ite preparation should begin with the removal of existing improvements, vegetation, utility lines, asphalt, concrete, and other deleterious debris from areas to be graded. Tree stumps and roots should be removed to such a depth that organic material is generally not present. Clearing and grubbing should extend to the outside of the proposed excavation and fill areas. The debris and unsuitable material generated during clearing and grubbing should be removed from areas to be graded and disposed of at a legal dumpsite away from the project area, unless noted otherwise in [the report]." Since existing improvements, utility lines, asphalt, and concrete are largely absent from the site, this is obviously boilerplate, and its lack of customization shows a complete lack of care by whoever assembled the document. **How would the (p. 3-5) "21.75 acres of grading…with approximately 47,200 cubic yards of soil excavated, and approximately 5,750 cubic yards of**

O2-13

O2-14

O2-15

[1] As an aside, a ranch-owning friend commented that most equestrians prefer to tie their horses to one side of the trailer while handling them, which requires an additional 6-8' of clearance. This is not shown in Figure 3-2, and halve the usable number of spaces in the equestrian staging area.

O2-16 **soil imported to the project" be reconfigured to retain existing trees, as required elsewhere in the DEIR?** X-16

Second, as discussed in the fire section below, the County fails to follow its own regulations concerning landscaping in a very high fire hazard zone. Therefore, along with the
O2-17 lack of cut and fill noted on the map, the placement of trees throughout the project certainly appears to be too dense and a fire hazard in an extreme wind driven wildfire. **What would a fire-resistant tree planting and landscape plan look like, in place of Figure 3.2?**

Third, the project site sits on what soil scientists call a vertisol, the unusual (for San Diego) Lusardi Formation with contains "unweathered granitic rock corestones … and boulders" capped with at least three feet of heavy clay. (p. 4.7-2). "Vertisols are clayey soils [described as "expandable" in the DEIR], which have deep, wide cracks on some occasions during the year ... They shrink when dry and swell when moistened… Irrigation also presents special problems due
O2-18 to their low saturated hydraulic conductivity. Bypass flow in open cracks is the common situation. Because of their low permeability, irrigation of these soils may result in waterlogging and a buildup of salinity unless adequate artificial drainage is provided."[2] In laymen's terms, these soils crack when dry and pull off shoes when wet. If irrigated improperly they pond, ruining lawns and killing trees. If inadequately drained they build up salts, and if improperly engineered, they crack, cracking pavement and foundations, and creating water outflow channels that manifest as perched water tables in cut and fill slopes and berms.

O2-19 The vertisol extends across Wright's Field, which is why vernal pools and clay specialists like San Diego Thornmint (*Acanthomintha ilicifolia*) occur there. In design terms, dealing with the impermeable clay requires a massive system of drains that need to be visible in the plans. Compressing this clay for building purposes will make it impermeable, so water will flow laterally, effectively making perched water tables that will leak out of cut slopes and berms if not properly channeled. **Does this affect the park design? If so, what changes need to be made?**
O2-20 **Will water flowing along impermeable clay surfaces or subterranean cracks cause issues on Wright's Field, on South Grade Road, or to neighbors north of the project? What will be done to prevent salt buildup? How will drainage issues be fixed? Will the soils significantly impact the County by creating an unending maintenance burden and continuous, if minor, property damage on-site? How much will this impact cost annually?**

O2-21 In a related issue, the plan shows septic systems in this impermeable soil**. Where will the sewage go? How will it affect nearby plants and nearby people?**

Finally, the trails plan for the rest of the parcel ignores existing unauthorized trails, which can be seen under the map. While the DEIR states that one mile of trail will be retained and
O2-22 approximately 3,300 feet of unauthorized trail will be closed, even a two hour stroll made it obvious that there is more than 3,300 feet of unauthorized trail onsite already. Some of it is visible in Figure 3-2 above. **How much unauthorized trail is actually present onsite?**

All the mitigations and impacts need to be summarized in Figure 3-2, not hidden. What would the proposal actually look like with all required mitigation measures in place?

Procedural Issues with the CEQA process

Unfortunately, the DEIR presents serious procedural flaws. The area impacted by the
O2-23 proposed project is far bigger than area analyzed. It defers mitigation by failing to include a Resource Management Plan for the preserved part of the park, even though this is a basic objective of the Project. It also fails to analyze multiple other projects that either it proposes or

[2] https://www.sciencedirect.com/topics/earth-and-planetary-sciences/vertisol

O2-23 cont. are being proposed to meet the needs of the proposed project. Whether this is piecemealing of a bigger project or failure to analyze cumulative impacts is unclear. Finally, the County posted a video presentation of the project and claimed this action constituted a scoping meeting.

The first issue is that the Project is obviously designed to feed more people into the adjacent Wright's Field Preserve, but the direct, indirect, and cumulative impacts to Wright's Field are not analyzed or mitigated. The very design of the project is absurd without access to O2-24 Wright's Field. Are dozens of equestrians and mountain bikers expected to show up to use a mile of already-existing trail? Of course not. Furthermore, the site is already an informal, and small, parking lot for Wright's Field. And the project assumes that neighbors will use trails in Wright's Field to access the project. Therefore, the Project's direct, indirect, and cumulative impacts on Wright's Field Preserve have to be analyzed and mitigated. **What are they?**

Second, the project fails to include a Resource Management Plan (RMP). Per P. 4.4-25, "Long-term management of the open space/preserve will also occur as part of the County's commitment to species conservation as a signatory to the Multiple Species Conservation Program (MSCP) and as outlined in a resource management plan that will be prepared for the project." To quote CEQA[3]:

> "Where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. **Formulation of mitigation** O2-25 **measures shall not be deferred until some future time** [emphasis added]. The specific details of a mitigation measure, however, may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will considered, analyzed, and potentially incorporated in the mitigation measure."

Where are the specific performance standards for the RMP, and what potential actions can feasibly achieve those performance standards? The lack of an RMP is deferred mitigation. The RMP needs to be written, and it needs to also mitigate impacts from the Project to Wright's Field.

Although these provision of water and sewer services are CNPS issues only for the greenhouse gas emissions they emit, these also might be considered as deferred mitigation. O2-26 Alternatively, the provision of water and sewer services are separate projects with separate CEQA analysis, in which case they were improperly excluded from the cumulative impacts analysis. **Are these part of the Project or not? Where and in what form will their impacts be analyzed? Is also deferred mitigation?**

At least two other projects were apparently omitted from the analysis of cumulative impacts. It is not clear whether these projects constitute piecemealing or unanalyzed cumulative impacts. Regardless, they only exist because of the current proposed project, so their cumulative impacts must be analyzed and mitigated. The first is that Back Country Land Trust ("BCLT") is reportedly working with SANDAG to come up with a plan to widen the trails on Wright's Field O2-27 that feed into the Project site. The other project has been proposed by the Alpine Community Planning Group, to create a sidewalk along the north/west side of South Grade Road from Tavern Road, so that people can use it to walk to the project. Considering that the Project proposes to install tall berms along the edge of Tavern Road, the cumulative impacts of creating tall berms immediately beside a sidewalk along such a known dangerous stretch of road must be

[3] CEQA 15126.4(a)(1)(B)

O2-27 cont. considered. **With berms, can pedestrians avoid out-of-control cars? Are other projects known to be in process in the area?**

Finally, the County chose to not hold a scoping meeting on this project. Instead, a video O2-28 was posted on a website, and comments were solicited. **Is a posted video a meeting? If not, what can be done to remedy this clumsy kickoff for the Project?**

Issues with Plants

As mentioned in the previous section, the DEIR fails to include a Resource Management Plan. **Without an analysis of the trails onsite in an RMP, how can any trails plan be even proposed. This has a number of bases:**

O2-29

- **What native plants are adjacent to which trails? How will trail closure affect the plants? Will they be cut down to brush trails closed? Will they be trampled by people going around closures?**
- **Which trails have invasive non-native plant species next to them? Will trail closure stop weeding from occurring, or will it prevent their further spread?**
- Mule deer, which are covered by the MSCP, use trails. **Are any trails used by mule deer?** If so, they cannot be closed, for humans (including mountain bikers) can readily follow deer trails, and efforts to close trails necessarily exclude deer.

O2-30

- **What other wildlife uses with trails? Which will be affected by trail closure?**
- **Which trails are regularly used by people, and which are less used? Have trail users been interviewed about their views on which trails to close?**
- **Are any trails incorporated into first response plans by law enforcement or fire?** If so, they cannot be closed for public safety reasons.

O2-31

The above questions all should have been asked, but weren't, in the messy failed trail closures on Del Mar Mesa, in which I (Landis) was intimately involved for a decade, as a trail volunteer who worked largely on attempting to close trails and protect rare plants and wildlife. Up until 2020, efforts to close trails caused far more damage to the plants and wildlife than the trails themselves did. In 2020, widespread illegal clearing along trails caused even more damage, but staff and volunteers were unavailable to stop it. There are six lessons from this ongoing mess:

- Illegal trails have a community, and trail closure is therefore more a process in influencing the community than one of building barriers.
- There is a fundamental asymmetry: Signs, fences and barriers are expensive, require contracts and budgets, and take time to install. Wire cutters cost around $30, portable powered saws are less than $100, and knives and razor blades for vandalizing signs are cheap. Some people (figure 2) use freely available rocks. It is cheaper to vandalize than to rebuild, and this asymmetry always favors the vandals.

O2-32

- Vandalism and trespassing are not capital offenses. Most of the structures that would completely exclude people (especially mountain bikers wearing protective gear) could injure or kill them, as well as injuring or killing wildlife. This asymmetry always favors the trespassers, since they cannot legally be excluded by harmless barricades or other devices.
- Attempts by park departments to stop vandalism generally cause more harm than good, and often cause more resource damage than the illegal activity they seek to prevent.
- Prolonged law enforcement action (chasing down and fining trespassers) does decrease traffic, but it is expensive.

O2-32 cont.
- Informal agreements among unauthorized users to limit activity so as to limit the damage caused by official backlash can work, so long as those agreements are honored. Sporadic enforcement normally leads to people lashing out and causing more vandalism elsewhere in the park as a protest.

O2-33 **Therefore: what data will the project proponents collect on the trail locations and conditions in the project area? How will trails be evaluated for closure or retention? What are the impacts of closure techniques? Who will maintain structures and closures? Will there be any law enforcement activity? Will there be informal social activity to rein in vandals? Will the onsite park volunteer be expected to carry out enforcement duties? If not, who? Are unauthorized trails proliferating in the area? Stable? Decreasing? How will adding 500 people/day change the rate of trail proliferation?**

O2-34 This is what need needs to feed into a Resource Management Plan, one that contains applied recreation ecology**. Why weren't these studies completed, and a RMP written for the DEIR? Until the RMP is written, biological impacts remain unknown and unmitigated.**

O2-35 Second, the invasive plant management is problematic. On page 4.4-19, it states "Invasive plant management along the edges of the trails will be a management focus for the County during the long-term resource management associated with the open space preserve. As a result, these activities would not present a significant impact on the regional long-term survival of special-status plants present on site." The goal can only be accomplished if action items and performance standards are specified and measured. A "management focus" will just be ignored unless there are specific requirements. **What are those requirements? What cover of non-natives can be maintained? Will Cal-IPC listed plants be targeted for elimination? How will additional weeds be added to the target list? Without actionable details, this impact cannot be mitigated.**

O2-36 Third, table 4.4-4 notes 11.73 acres of offsite mitigation through the purchase of credits or land acquisition. **Where and how will this offsite mitigation occur? Is this also deferred mitigation?** Offsite mitigation options need to be presented to demonstrate this mitigation is feasible and sufficient. Language needs to be added stating that offsite credit purchase or land acquisition must be finalized prior to project approval.

O2-37 Among other commenters, CDFW commented on the NOP that they want to see "[a] discussion regarding indirect project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with an NCCP)." Table 1-2 (summary of NOP comments) suggests that this item is addressed in Section 4.4. **Where is it discussed?** We could not find a discussion of the indirect impacts from increased access through Wright's Field as a result of the project.

O2-38 Finally, CNPS has been concerned for years about the spread of water-molds (*Phytophthora* species, pronounced *Fi-toff-thor-a*) through infected nursery stock being planted out in restoration and revegetation projects. This has been a particular problem for oaks, as Sudden oak Death is caused by *Phytophthora ramorum*. The problem is not limited to oaks, as there are upwards of 100 pathogenic water molds known from nurseries and outplantings, and virtually any plant can be infected by some water mold. **We strongly recommend, as part of mitigation MM-BIO-3, that all plants, especially all native species used for restoration plantings in native vegetation, be tested and certified to be Phytophthora free**. CNPS has put together a web-page (https://sites.google.com/site/cnpsphytophthoraresources/) on the issue in conjunction with native plant nurseries throughout the state. Local nurseries should be aware of

O2-38 cont.

the issue and be willing to cooperate in this request. Planting clean plants will keep costs down, as replanting gets expensive and controlling a spreading water mold infestation is extremely expensive.

Wildfire Issues

O2-39

The analysis of fire risk under hazards is problematic in two unfortunately common ways. First, it asserts without substantial evidence that following fire codes mitigate the risk below level of significance, and second, it fails to follow the County's own regulations for fire-safe landscaping. Finally, proposes to vastly increase the number of people on the parcel and using South Grade Road, while asserting without evidence that this will not be a problem. Substantial evidence is needed to back up these assertions. **Where is that evidence?**

O2-40

First, the question of concern is asked in DEIR section 4.9 CEQA Appendix G, Question IX (e): "IX. Hazards and hazardous materials. Would the project… g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?" Since structures are proposed on the site, the project is proposed to bring in 500 people/day to the site, and the site is in the CalFire Very High Fire Hazard Zone, the answer is that yes, there is a serious potential impact. The question then becomes whether it can be mitigated. The DEIR asserted that preventing campfires and constructing buildings to "fire resistive" code was sufficient to mitigate the impacts below significance. If only this were sufficient. Too many extreme, wind-driven wildfires have shown the problems clearly.

O2-41

First, it is worth pointing out that building anything to code is "fire resistive" not "fireproof." Any number of homes built to code burned in the Thomas, Woolsey, and Paradise fires. Part of the reason for that is inherent in the building code, which reads as follows: "2019 California Fire Code, Title 24, Part 9, Section 4901.2 Purpose: 'The purpose of this code is to provide minimum standards to increase the ability of a building to resist the intrusion of a flame or burning embers being projected by a vegetation fire and contributes to a systematic reduction in conflagration losses through the use of performance and prescriptive requirements.' Note these are **minimum standards**. While necessary, they are not sufficient to mitigate risk to life and structures, as we find in every extreme, wind-driven fire. **Will buildings on site be built to code, or exceeding code? If built to code, what is the remaining risk that needs to be mitigated? Or is the County expected to periodically rebuild? If built exceeding code, what additional features will be added, and how will they reduce risk below significance? What will be done to guarantee that the onsite volunteer living onsite (in a personal trailer?) will be safe from fire?**

O2-42

Second, the County on October 20, 2021 passed an update to County regulations section 68.404. Among other things, these prohibit plants taller than 6" within 5' of buildings, prohibit groundcover taller than 6 to 18 inches within 50 feet buildings, require at least 10' between tree crowns within 50' of buildings, and require vegetation density to be "sparse" 0-5' from buildings "moderate" 5-50' out from buildings, and "No more than 50% of square footage" 50-100' from buildings. To put it very bluntly, this is not what is shown in Figure 3.2. There, trees overlap buildings and there is grass (not sparse plantings) right up to the proposed shade sail, baseball field buildings, and volunteer pad.

Worse, the project proposes to clear fuel modification zones into the land preserved under the MSCP, rather than accommodating fuel management onsite (p. 4.9-22). This is less than every single developer is required to do, especially adjacent to MSCP land. As noted in the previous paragraph, the park does not follow fire safe landscaping rules inside its boundary

either. **How can the park be redesigned to have both fire safe landscaping within its footprint and to accommodate Brush Management Zones within its footprint, as the County routinely requires developers to do in Very High Fire Hazard Zones and when building adjacent to preserved lands?**

O2-42 cont.

Also, (p. 4.9-22) "Facility Fire-Safe Design. County DPR shall design elements of the project to reduce risk to users and to the area, including fire-resistive approved landscaping, areas that can serve as Temporary Safe Refuge Areas, safe ingress and egress, and a fire-resistive equestrian facility." **How are temporary refuge areas and safe ingress and egress associated with a parking lot that is entirely lined with trees on all sides? How are people expected to get in or out if the trees catch fire?**

O2-43

Third, can the evacuation plan for South Grade Road handle cars containing hundreds more people and horse trailers rapidly trying to leave the project site? **Given that fire evacuation routes are normally bumper-to-bumper, how can cars and especially horse trailers squeeze onto South Grade Road? If the trees on the park berms catch fire, will they affect South Grade Road as an evacuation route? What can be done to mitigate these risks?**

O2-44

Unfortunately, these are not trivial issues. CNPS is or has been involved in three lawsuits against the County where fire was an issue, and other groups have won others. Even the California Attorney General is intervening on fire issues. To quote California Attorney General Bonta, on the win over the County on Adara, ""The land use decisions we make now will have consequences for years and decades to come. Today's ruling by the Superior Court affirms a critical fact: Local governments have a responsibility to address wildfire risks associated with development projects at the front end. Doing so will save dollars – and lives – down the line."[4]

O2-45

This is not a threat to litigate, but rather a critical point: with respect to wildfires, especially the extreme, wind-driven fires that cause over 90% of all property and life loss, business as usual is radically insufficient. The park design, as shown in Figure 3.2, does not match the measures discussed in section 4.9 to minimize fire. Worse, the mitigation measures in sections 4.9 and 4.20 are insufficient to mitigate the impacts from fire. Worst of all, the County is not demanding of itself the same measures it routinely requires from developers to mitigate fire impacts, including in neighborhood parks. And the mitigations put forward by developers are failing in court. **What can be done to bring the Park design into compliance with current fire threats, the County's own regulations, and AG Bonta's hope that the County will save lives and dollars through completely addressing fire risks in the CEQA process?**

O2-46

Issues with Greenhouse Gases

It is grimly amusing that the DEIR cites Executive Order B-55-18 (carbon neutral by 2045 or earlier and net negative emissions thereafter (p. 4.8-10) and then blithely talks about amortizing carbon emissions until 2052 seven pages later to make emissions less than significant. **This was meant ironically? If emissions from 2022 are to be carried on the books until 2052, does this not mean that the Project fails to comply with all programs directed at reducing societal emissions to zero before 2045? Is this not a significant, unmitigated impact?**

O2-47

If it hopes to meet its goals and save itself, San Diego County will be working under a decreasing emissions cap and prioritizing emissions going forward, forcing as many groups as

O2-48

[4] https://oag.ca.gov/news/press-releases/attorney-general-bonta-secures-victory-lawsuit-challenging-approval-san-diego

possible to decarbonize, and allowing emissions only from critical projects, like public transit, affordable housing, and supplying water, food, power, and sewer service. Therefore, one of the key steps in claiming any special privilege to emit GHGs requires that a project specify, in detail, why it needs to be allowed to emit GHGs while others are not. **What is the reason that the proposed park should be allowed to emit greenhouse gases while most of Alpine will decarbonize? If the Park is to benefit Alpine residents now and into the future, should it not be constructed and maintained with minimal or no GHG emissions? Is there a configuration in which it could sequester enough GHGs to have net negative emissions?**

O2-48 cont.

Second, not all GHG emissions from the Project were counted. Per P. 4.7-14 "Tree stumps and roots should be removed to such a depth that organic material is generally not present… and disposed of at a legal dumpsite away from the project area." Normally, greenwaste rots and produces greenhouse gases. **How much carbon is stored in the project soil as organic matter? What type and amount of GHGs will be produced by its destruction?**

O2-49

Third, per CEQA section 15064.4(b): 'A lead agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment: (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting."

As noted in the draft San Diego Regional Decarbonization Framework[5], Chapter 4 (citing other sources), grasslands only sequester up to half the carbon as forests. However, adding trees to non-forested landscapes is problematic as the trees may require care that makes them carbon emitters, and they offer fewer cobenefits to wildlife. The report further notes (again citing multiple sources) that converting grasslands to settlements generally turns carbon sequestering lands into carbon emitting lands. That is certainly the case here. **Isn't this a significant impact?**

O2-50

Can climate change impacts be properly determined without knowing how water and sewer will be supplied to the Project? How were the emissions numbers for water and sewer in the chapter determined, given that elsewhere in the DEIR these structures remain to be determined?

O2-51

What is the carbon budget of the built park? Are lawns net GHG emitters or a net sequestration, given their shallow roots? Are trees, with the necessity for pruning, watering, fertilizing, net GHG emitters or net sequestration? Given that the trees will be growing in shallow imported soil, how long are they expected to survive, and what are the emissions costs of replacement?

O2-52

Finally, why didn't the DEIR use the current SANDAG Series 14 growth forecast, instead of Series 13? What happens when Series 14 is used instead?

O2-53

Issues with the Alternatives Analysis

How does the preferred project alternative meet its objectives?

The alternatives (DEIR Chapter 6) are analyzed against the purpose of the project. Unfortunately, the preferred design is not analyzed against these objectives. Here is our take on how the preferred design meets the project objectives (P. 3-1):

O2-54

- "Create a place where all Alpine residents can gather and connect as a community." **Only one small shade sail shelter appears designed for communal activity, although the baseball field should lead to increased factionalism among the families of the teams**

[5] https://www.sandiegocounty.gov/content/sdc/sustainability/regional-decarbonization.html

O2-55 **competing. Everything else is designed for individual activity, which does not connect people in community.**

O2-56
- "Anticipate, accommodate, and manage a variety of active and passive recreational uses and open space preserve that benefit all members of the Alpine community both now and in the future." **The proposed design fails to incorporate lessons learned from the construction of Joan MacQueen Middle School, which went over time and budget due to dealing with the same clay and boulder soils under the project. The park fails to justify GHG emissions both during construction and operation, despite the County's increasing commitment to decarbonize by 2035. The project fails to incorporate lessons learned on fire safety, despite the fact that the County has lost multiple lawsuits on this issue and the California Attorney General is now intervening to try to make hazardous projects more safe. Where is the substantial evidence that there is anything forward-looking in the current design, or that it can accommodate a hotter, drier, all-electric, less-lawn future?**

O2-57
- "Provide for long-term natural and cultural resource management consistent with the goals and objectives of the Multiple Species Conservation Program (MSCP) for the preserve portion of the property." **How is this goal met, when creation of a resource management plan for the preserve is deferred?**

O2-58
- "Design a community park that integrates and, where feasible, preserves natural features into the park design." **What is natural about lawns, a skate park, a baseball field, and 275 parking spaces? Why were commenters' attempts to request feasible alternatives that preserved more natural features summarily rebuffed and not analyzed in the DEIR?**

O2-59
- Enhance the quality of life in Alpine by providing exceptional park and recreation opportunities that improve health and wellness, while preserving significant natural and cultural resources. **What is exceptional about ripping up a rare native grassland and planting turf and trees? Nothing could be more 20th Century. What is exceptional about designating one official mile of trail on a site where more than half the existing trails will be closed? What is useful about adding a mountain bike course when bikers can ride miles of trails in the adjacent National Forest? How can a site be preserved if the goal is to increase human usage by an order of magnitude and to radically reengineer it down to the bedrock?**

O2-60
- Protect public health and safety by incorporating Crime Prevention Through Environmental Design and other safety measures into park design. **Where is Crime Prevention Through Environmental Design mentioned in the EIR, except in lists of objectives? Surely if this is a goal, it wouldn't it be described an analyzed in its own section?**

O2-61
- Manage Alpine County Park consistent with County DPR's missions, policies, directives, and applicable laws and regulations. **How does this help the County meet its goals for reducing carbon emissions, reducing fire risk, preserving Tier I vegetation communities, and managing recreational impacts to sensitive species?**

O2-62
- Reflect Alpine community's heritage through inclusion of architectural elements that reflect the rural nature of Alpine. **When over 60% of local respondents asked for more natural space and were told that was impossible, they were getting an active use park whether they wanted it or not, how does this park reflect the character of the community? The community told DPR quite clearly what they wanted. Why aren't their concerns being met?**

O2-63 In summary, the proposed project fails to meet most of its stated objectives. Some (Crime Prevention Through Environmental Design, a Resource Management Plan for the preserved portion) are not even part of the DEIR.

Other Alternatives

O2-64 A No Project Alternative performs at least as well as the proposed project. It is forward looking, in that it preserves a landscape that is sequestering carbon (a critical County need for the foreseeable future), and preserves Tier I perennial grassland (habitat preservation is a critical need for the foreseeable future, and potentially a mitigation bank). It is already traversed by a fairly small number of people, in groups and families, so it arguably provides active recreation to the local community. It meets the majority of the community's desire for a rural area with nature (not a naturalistic playground), and it saves the County from unending maintenance costs and carbon emissions to keep acres of lawn green. **Why does the No Project Alternative not score higher than the preferred project?**

O2-65 CNPS requested, in our comment letter to the NOP: "Please include a project alternative with a smaller, nature-focused, minimally developed park that has no impacts to the biological, cultural, and other resources of the project site, Wright's Field Ecological Preserve, and neighboring properties. Given voiced community concerns about the lack of maintenance on existing Alpine parks, please focus on making park upkeep and maintenance financially sustainable for the community and County. Also make its construction, maintenance, and rebuilding carbon neutral and environmentally sustainable, to meet federal, state, and county goals. Please also analyze each and every project alternative equally, as unequal analysis has been contentious on past county projects." None of this was done. **Why not?**

O2-66 **The proposed equestrian staging area without even a Resource Management Plan utterly fails to meet what the community and CNPS requested.** We recognized that a parking site on the east side of Wright's Field would be very useful and increase safety. A Resource Management Plan for the site is necessary, and the existing perennial grassland may be more valuable to the County than more lawns. With minimal development, there is less to vandalize, and a dirt parking lot would at least have the advantage of automatically excluding vehicles during rains, when people would cause the most damage to the park and Wright's Field. This arguably meets the project objectives better than the proposed project does. **Why not consider it?**

O2-67 Alpine has no need for more park area, as it is abundantly supplied by the adjacent Cleveland National Forest and by existing local parks. **When there is a boulder-covered hill with trails on it next to the park, why should any child be confined to a "naturalistic play area?" With 13 mountain biking trails within the adjacent Cleveland National Forest and Wright's Field open to mountain biking for years, why is closing the existing unauthorized trail system down to a single mile of trail worth adding hundreds of parking spots?**

O2-68 Furthermore, Alpine is getting upgrades to its existing parks. The County Supervisors this week (11/17/2021) considering another amendment to the JEPA with Joan MacQueen Middle School. Its purpose is "**to rehabilitate an existing underutilized decomposed granite (DG) multi-use sports field [emphasis added]** at Joan MacQueen Middle School. Once completed, improvements will be open to the public during non-school hours and include an artificial turf multi-use sports field and Americans with Disabilities Act (ADA) improvements to increase field access." Within a mile of the proposed project, there is an underused active recreation field, and the County is ready to spend money to upgrade it. Meanwhile, the proposed

O2-69 Project probably needs to comply with the ADA, as explained above. **What does this JEPA amendment say about the need for this Project within a mile of it?**

What to do to fix all this?

Write a resource management plan for the part that's part of the MSCP Preserve.

Re-engineer the curb on the site where the existing parking lot is, to make it more accessible to regular cars. Possibly clear the existing dirt parking lot and move boulders to keep unauthorized expansions from growing the parking lot or people driving onto the grassland. This provides stable access for Wright's Field, which is needed. It can remain dirt, which will appropriately keep people out of the park when the soil is wet.

Leave the grassland in its current state. Wait 15 years. If Alpine has grown to the point that it needs more local park space, reconsider developing it using technology that is genuinely carbon neutral. Regardless, in 15 years, create a park that meets the needs of Alpine and the

O2-70 County. Consider that the site as it exists may be more useful to the County as a Tier I mitigation bank and/or a carbon sequestration area, and leave these options open.

In a time of rapid change and reorganization, we do not need another heavily engineered, big lawn park to maintain. If the proposed park is built, either it will become a regional destination, in which case Alpine residents will be crowded out, or it will not be used more than the site already is, in which case it will be a white elephant needing continual upkeep and rebuilding due to the expansive soils and climate change. Or both sequentially. By the time Alpine grows enough to generate 500 trips per day as a local park, it will be dilapidated and need massive rebuilding to meet new, carbon-neutral land use codes. **Why not skip the white elephant stage and wait to see what the actual, long-term need is?**

And if the County has millions to spend on parks, why not prioritize those funds to support environmental justice needs in less advantaged communities? Residents of Alpine seem to agree with this idea. **Why not let them be generous?**

Thank you for taking these comments. Please keep us informed about the project at

O2-71 conservation@cnpssd.org, franklandis03@yahoo.com, gcourser@hotmail.com, and pjheatherington@gmail.com. Feel free to contact us with any questions or comments, or to set up a meeting.

Stay safe,



Frank Landis, PhD
Conservation Chair, California Native Plant Society, San Diego Chapter

/S/
George Courser
Conservation Committee Chair
Sierra Club San Diego



Pamela Heatherington
Board of Directors, Environmental Center of San Diego

Save Our Heritage Organisation
Protecting San Diego's architectural and cultural heritage since 1969

Wednesday, November 10, 2021

Anna Prowant, Land Use Planner
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Re: Alpine County Park project draft EIR comments (SCH #2021030196)

Ms. Prowant,

O3-1 Save Our Heritage Organisation (SOHO) has reviewed the draft Environmental Impact Report for the Alpine County Park project (SCH #2021030196). SOHO supports Alternative One, the No Action Alternative due to scale and location, environmental impacts especially those on Wright's Field Preserve, and appropriate alternatives that should be evaluated. SOHO urges the Board of Supervisors to analyze the sustainability and need for this project as well as recognize Alternative One is the most environmentally superior alternative.

O3-2 Developing a sports facility consisting of 20 to 50 acres (dependent upon the alternative chosen), where most patrons would drive, does not support the County's Climate Action Plan and would overshadow this rural and natural location. Of similar concern, the scale and activity of this park is not a small nature-based park, which is what the community requested and would be more appropriate next to Wright's Field Preserve. The various

O3-3 environmental impacts are also of large concern, specifically the degraded views and new source of light, impacting the adjacent preserve. Additional issues are the biological, wildfire, and cultural resource impacts of construction and maintenance among others. While Alternative Four reduces these impacts, they are still present.

O3-4 Last, the County should explore other sustainable alternatives to develop parkland for the Alpine community, including the assessment of existing or new sites closer to the community center and accessible through various modes of transportation. Active park amenities could be included within other existing or new parks and provide funds to help maintain parkland.

O3-5 An inappropriate location for a sizable active-oriented park, this project will create various environmental impacts and more sustainable alternatives have not been evaluated. Therefore, SOHO supports the No Action Alternative.

Thank you for the opportunity to comment,

Amie Hayes
Senior Historic Resources Specialist

BCLT comments and review of County of SD's draft EIR for Alpine County Park Project SCH 2021030196

10/28/21

Anna Prowant

Biologist and Land Use/Environmental Planner

County of San Diego Department of Parks and Recreation

Dear Ms. Prowant,

O4-1 I'm writing to you and your team to thank you for the thorough study of the proposed park for Alpine and the greater East County area. You may recall three of us on the Board of BCLT, Ann Pierce, George Barnett and I, spoke with you and several colleagues on the afternoon of Jan. 7, 2021. During that Zoom call, we provided input on the tentative County plans for the park and our desire to work with you to fulfill our common goals.

O4-2 At that time, we expressed our concerns for the park's potential "spillover" impact on Wright's Field's biology and cultural resources we are charged with protecting in perpetuity. We also emphasized that we had kept WF open to the public during the pandemic, when most public parks were closed, on our own dime. We are proud we were able to offer a safe outdoor space for folks during that trying time.

O4-3 I read the draft EIR front to back, and I'm heartened by its attention to the issues that most concern us: the plants and animals we'll jointly provide refuge for, as well as continuing to offer natural recreation for our fellow humans. I'm impressed with the mitigation efforts proposed for various species on the 20-25 acres that will be disturbed by building the active park's many amenities, which Alpine sorely needs. I'm not a biologist, but we might offer off-site mitigation on WF, for instance, for needle grass and QCB host plants, were that deemed workable and appropriate.

O4-4 As neighbors, we look forward to collaborating with you on environmental education for East County's students, one of the pillars of BCLT's ongoing community work. Lastly, I am thrilled that the County will have Kumeyaay monitors on call to protect their cultural heritage on the combined preserved lands.

O4-5 I will close by coming back to the "spillover" impact on WF. I didn't see that potential issue addressed explicitly in the various biology/cultural resources sections of the EIR. As a lay reader, perhaps I over-looked it. BCLT's Board appreciates that it's difficult to predict how popular the park will be at this time, but we need to recognize the possibility of "loving Wright's Field to death", and jointly develop a plan to minimize damage to an irreplaceable treasure.

O4-6 We look forward to working together as the park takes shape over the next few years.

Respectfully,

Tim Todaro

President

Back Country land Trust

From: Dan Silver
To: CEQA, CountyParks
Cc: Michael Beck
Subject: [External] DRAFT ENVIRONMENTAL IMPACT REPORT for the Alpine County Park Project State Clearinghouse
Date: Tuesday, November 2, 2021 2:22:08 PM
Attachments: Ballmer Obsorne V13 Final Letter.pdf

Gentlepersons:

Endangered Habitats League (EHL) appreciates the opportunity to comment on the DEIR.

1) General comments

O5-1 The need for the active park facilities envisioned by the project should be reassessed in view of lowered population projections for Alpine. SANDAG has slashed the County's Regional Housing Needs Allocation and assigned the unincorporated area a fraction of the growth previously projected by 2050. The Alpine Community Plan Update studied a proposal for major upzoning and found it to be financially infeasible. There will not even be enough

O5-2 population growth for a new high school. Vehicle miles traveled mitigation and the transportation imperatives of the updated Climate Action Plan will further reduce the amount of new growth in Alpine. Reductions in housing capacity compared to prior planning alternatives are inevitable. For these reasons, prior projections of future active park needs are

O5-3 likely to be overestimates. We urge consultation with DPDS, particularly the group working on the Alpine Community Plan Update (Robert.Efird@sdcounty.ca.gov). In view of reduced future growth, the size of the facility should be reduced.

2) Biological resources

The site is rich in biota, with native grasslands, rare plants and Engelmann oak. It is also occupied by the endangered Quino checkerspot butterfly. It is unclear where the best Quino habitat (typically bare ground with few invasive grasses) is located on-site, but the entire site should be considered occupied due to Quino flight and mobility. Host plants alone are *not* a reliable surrogate. In any case, reduction of the project footprint to encompass as much suitable habitat as possible in a configuration that reduces edge effects is the prime objective. We suggest a site visit by a biologist with Quino experience.*

O5-4 The mitigation proposed is problematic and reflects lack of understanding of Quino biology and population structure. No net loss of host plants is *not* adequate mitigation; by itself, it is a superficial approach. The soil substrate is a critical factor, as is freedom from invasives over a much longer period than 5 years. The enchancement and restoration proposed are thoroughly experimental; no such efforts have to-date resulted in new colonization over the long term. Furthermore, Quino populations depend upon a variety of micro-environments to survive under various environmental conditions. *Removing* some unique micro-environments and enhancing or making *others* a little larger still results in a *net loss* of the diverse conditions needed to support a metapopulation. For this reason, reduction in project footprint and control of edge effects (invasive plants, Argentine ants, human and vehicular trampling, off-trail activities, etc.) are the most important steps. The latter steps are not proposed as project mitigation.

A comment letter for another project is enclosed with more information on the Quino issues described above.

O5-5 Thank you for considering our comments.

Regards
Dan Silver

* Suggest:

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Gregory R. Ballmer
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July 13, 2020

Mr. Dan Silver

Executive Director
Endangered Habitats League
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RE: ***Response to Final Environmental Impact Report (FEIR), Otay Ranch Village 13 "Response to Comments" in regard to the Quino Checkerspot Butterfly (Quino)***

Dear Mr. Silver:

We have reviewed the responses to comments for the Otay Ranch Village 13 project as well as additional materials related to the now-proposed Alternative H. These materials include a Quino Checkerspot Butterfly Management/Enhancement Plan. Our assessment as experienced Quino biologists is below.

I The FEIR fails to respond to our prior critique on the importance and role of this site for the Otay quino metapopulation

O5-6

The County's responses to comments on the RDEIR do not address the dynamics of Quino metapopulations explained in prior letters and fail to recognize the severe and unmitigable population destabilization that will occur if Alternative H is built. The Alternative H proposal also continues to disregard the implications of the Preston study[1], which documents that development proximate (within 1 km) to Quino populations is strongly correlated with extirpation of those colonies (Preston, et al, 2012). Thus, based on the best empirical evidence, the project as proposed is incompatible with long term persistence of the affected populations.

Instead of addressing these facts, the FEIR substitutes a "bean-counting" exercise of host plant and butterfly numerical counts *not* based in Quino population biology. The metapopulation structure of Quino populations (described in our prior comment letters submitted in response to the 2015 DEIR) requires a landscape-level habitat mosaic of diverse microclimates, ecotones, and topographic features. This allows for overall population persistence even when particular locations fluctuate over time in their ability to support Quino. Some specific locations will, for example, persist during periods of drought and

[1] A copy of this study was submitted with Endangered Habitat League's comments on the 2015 DEIR for the project.

are essential to population survival. The known persistence of Quino north of Otay Lake on the Village 13 project site shows that the proposed development site is just such an essential "source" in times of regional population stress. The FEIR also ignores population impacts caused by the elimination of topographic diversity in the form of ridgelines and small peaks, which are so important in Quino mating behavior (Shields 1967).

The project proponents assert that preservation of some land on-site plus proposed enhancements will retain population viability. There is no evidence to support this, and much to contradict it.

The project's vast development footprint would remove 692 acres of Quino habitat, *all* of which is Critical Habitat for the species as determined by the US Fish and Wildlife Service. The simple numerical quantities of occurrences of adult Quino or host plants provided by the EIR are "red herrings" that mislead, as they do not disclose whether the critical resilient locations are preserved or destroyed. Alternative H will eliminate substantial site diversity – in slope, aspect, soil, vegetation, etc. – and, contrary to unsupported claims in the FEIR, will have *devastating* effects on a known and reliable Quino source population.

O5-6 cont.

It is notable that the DEIR reports adult QCB and larval host plants scattered over essentially the entire Project site (even during years of suboptimal precipitation); therefore, based on metapopulation dynamics, the entire site must be considered occupied. According to the FEIR, the development footprint of Alternative H directly displaces about 40% of reported QCB larval host plant sites within the overall project site. The documents point out that some of the densest occurrences of QCB larval host plants would be conserved within proposed open space. **But this is *irrelevant* to an assessment of impacts to the species' survival because QCB metapopulation biology depends less on concentrated patches of host plants than on dispersed larval resources in a diversity of geographic locations and ecological settings for long term metapopulation stability.** In contrast to the EIR's assumptions, it is precisely dispersed (*not* densely concentrated) larval resources in a diversity of microclimate settings that support the resilience of QCB populations through climate fluctuations and other stochastic events.

All QCB resources within the proposed Alternative H development footprint would be eliminated. Additionally, based on the 1 km rule (Preston, et al 2012), essentially all observed QCB adult and larval host plant sites within the proposed preserved open space, and extending into adjacent lands managed by other entities, would be at risk of extirpation. Insofar as the QCB population within the Project site and adjacent properties is integral to the larger Proctor Valley QCB metapopulation complex, Alternative H constitutes an existential threat to the Proctor Valley QCB metapopulation complex (see discussion of biology in earlier comment letters by Ballmer, Pratt, and Osborne dated April 28, 2015 and May 22, 2015).

II Proper alternatives are not offered.

The EIR has not seriously considered project alternatives that might entail a different location, or a design that would substantially avoid or lessen adverse environmental impacts. As stated in the FEIR global response introductory remark section:

> Section 15126.6(b) of the CEQA Guidelines states that "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially

lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

Insofar as the proposed project would significantly and adversely affect a range of biological resources, it must be noted that those resources are largely site specific. It must also be noted that the Proctor Valley QCB metapopulation complex, for which the QCB population within the Project site is an integral part, is apparently the last remaining extant coastal QCB population. The EIR thus must offer alternatives which comply with Preston's 1 km rule; they have not done so. Nor are the proposed mitigations likely to succeed, as explained below.

III Proposed mitigation is woefully inadequate.

As mitigation for Alternative H, the County proposes to set aside occupied Quino habitat on-site in proximity to the development area and to undertake a very limited program of host plant restoration/enhancement in currently weedy patches in the conservation area. The proposed measures would fail to mitigate for the project's impacts to the Quino for two reasons. **First, the proposed mitigation would *not* compensate for the diverse microenvironmental range lost in the broad area impacted by the project, the diversity of which is essential for a viable metapopulation.** At best it would produce marginally more host plants in the exact same fewer microenvironmental locations that already exist within the proposed covered space, and therefore perpetrate a great loss of the original diversity of microenvironments. As we explained above, diverse microenvironments are essential to the Quino's survival under different conditions year-to-year. The proposed mitigation would not prevent what would be a huge net loss of metapopulation resilience that will be fatal to this known and vital "source" population of Quino.

O5-6 cont.

The second reason for failure of the mitigation plan is that the restoration/enhancement *itself* has a low likelihood of efficacy, and indeed, there is no evidentiary support of it providing actual benefit to the Quino. Even if successful, rehabilitating a *very small* amount of degraded QCB habitat on site cannot mitigate for the loss of *many times* that amount of mature, diverse, occupied habitat within the project impact area. If the proposed mitigation were to be approved, it should at the very least be accompanied by assurances that it would be accomplished *and its efficacy verified, long-term*, prior to proposed take of currently occupied habitat. And the success of such mitigation would have to be verified for a far longer period than the several years proposed, specifically by monitoring to show that it is occupied by QCB covering a few cycles of annual fluctuations in precipitation typical for Proctor Valley (perhaps 25 years).

Regarding the mitigation proposal to create and/or enhance QCB habitat within preserved open space, it is notable that there are no documented instances wherein habitat for QCB was created or "improved" within one kilometer of an urban border, and that creation or restoration was followed by successful recolonization by a breeding colony of QCB. We have also reviewed all available monitoring reports of Quino enhancement/restoration projects to date (Sunrise, SR 125, Lonestar, Otay Ranch Preserve, Otay Crossing, San Diego National Wildlife Refuge). These involve weeding, host plant seeding, and an instance of Quino (larval) augmentation (which is not required for the Village 13 project). These reports document *no sustained increase of carrying capacity beyond baseline levels or the establishment of new, self-sustaining Quino populations where none existed before*. The Management/Enhancement Plan's proposed measures therefore have no track record of success.

A major component of the proposed management scheme is *weeding*, including removal of thick thatch physically or with herbicides (see p 47ff, High-Intensity Restoration/Enhancement Program, Appendix C). One of us (Osborne) has personally observed the progress of several of the existing enhancement/restoration locations and has never observed any landscape-scale restoration effort and weed control effort that succeeded in establishing the high-quality soil substrate and *Plantago erecta* host quality necessary for Quino. Thus, Quino populations have not been seen to exploit these restored areas. In years of experience watching and participating in these attempted restoration projects, including the San Diego Gas and Electric Sunrise Powerlink Habitat Restoration Project for the previous several years and the State Highway Route 125 mitigation efforts on Otay Mesa for the previous decade, Osborne observed that either parent soil conditions allowed the weeds in the first place, or restored soil surfaces never (at least over the several years observed) fully recovered from "disturbed" status with overly porous surface conditions that don't retain moisture to the extent that mature substrates with cryptobiotic crusts do.

The background reasons on why restoration through weed removal is so problematic has its roots not only in the competitive interaction of exotic weeds and *Plantago erecta* (with competitive exclusion of *Plantago erecta* under most circumstances) but also in the relatively rare convergence of geological and special environmental conditions which allow the competitive escape of *Plantago erecta* in very specific settings where the exotic weeds are unable to gain traction in the first place. In southern California within the domain of Quino, Gabbros, Andesites, and Basalts are among the particular geological underpinnings which under the right conditions, give rise to clay components in the soil surface. Where these clays occur on thin soils, along with cryptogamic crusts, gentle slope aspects and exposed ridgelines, associated soils are relatively less permeable, allowing them to retain springtime moisture and delay host plant deterioration (i.e. senescence). In many other areas of southern California, such as in western Riverside County, soils derived from Schists also support *Plantago erecta*, but these soils are silty and do not retain springtime moisture in the way that clays do.

O5-6 cont.

These differences in soil moisture retention are associated with physical characteristics that are expressed differently in the *Plantago erecta*. Specifically, *Plantago* in well-drained soils are densely covered in small hairs which are not abundant on the smooth-surfaced (glabrous) plants that grow in clay soils. The *Plantago* in silty or otherwise well-drained soil will senesce more quickly. Both the presence of hairs and the early senescence dramatically reduce the suitability of *Plantago* to Quino as a hostplant. This appears to explain the lack of persistent Quino population complexes in areas with well-drained soils, even when *Plantago* is present and abundant over extensive areas. More generally, areas with granitic geology create sandy, silty, well-drained soils that are typically incapable of supporting extensive stands of *Plantago erecta* (rarely, very limited stands of *Plantago* may occur in very localized situations with impaired drainage, such as a granite slab with a thin veneer of soil). Granitic geology supports Quino populations only at higher elevations, where the butterflies rely on hostplants other than *Plantago erecta* (not applicable to the Village 13 site). As a result of these complex relationships between geology and soils, it is only special circumstances (clays and decades of crust development) which allow the expression of *Plantago erecta* with the suitable characteristics to support Quino. Habitat restoration in the absence of proper underlying soil conditions is both ham-handed and hopeless. Weeding alone cannot recreate the complex necessary conditions for Quino occupancy.

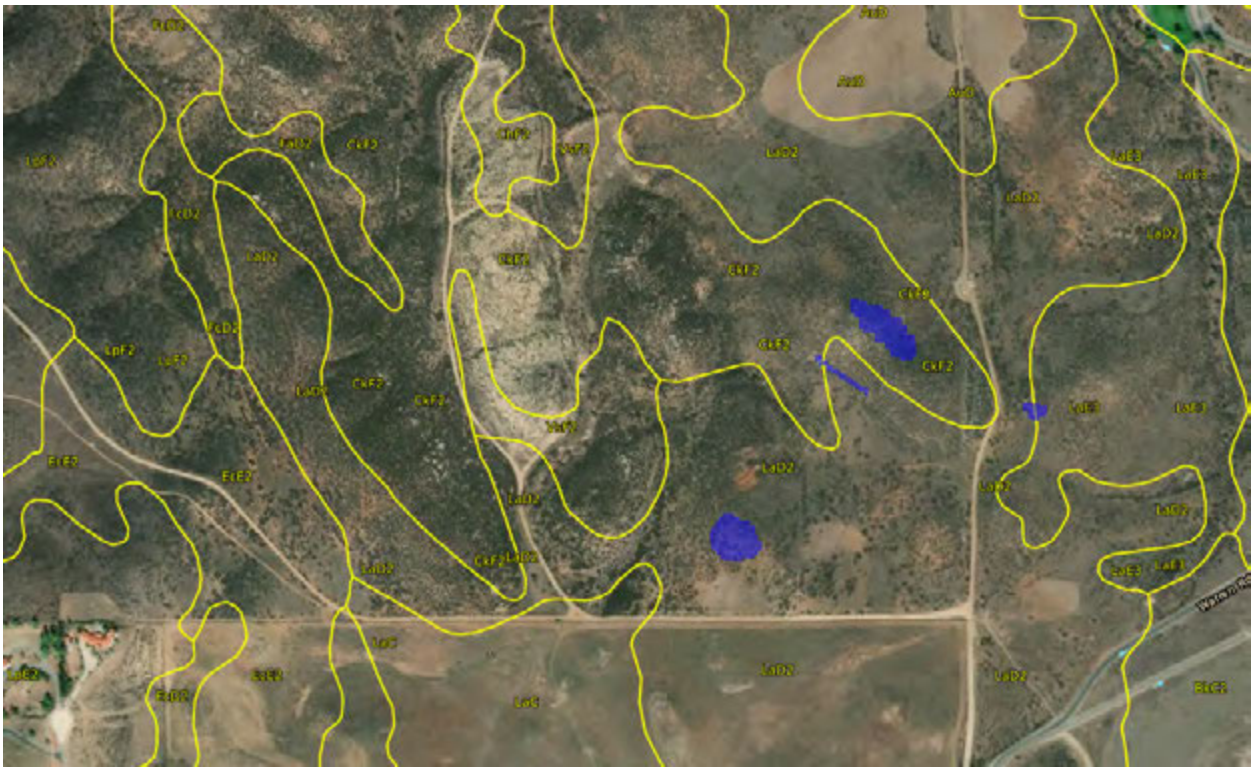
County Planning and Development Services, in its response to comment letters on the nearby Otay Ranch Village 14 project, (Otay Ranch Village 14 and Planning Area 16/19, Proposed Project Amendment, Responses to Late Comment Letters , June 2020, p. 45ff), referenced the presence and distribution of soil types including "Olivenhain cobbly loam", "San Miguel-Exchequer rocky silt loam",

and “Friant rocky fine sandy loam” and note that Quino were observed on each of these soil types. This reference to soil classifications is a red herring. These observations were all of adult Quino, which disperse, seek nectar sources, hilltop, rest on the ground basking, among other behaviors – all of which behaviors transpire irrespective of ground or soil composition. The issue of soil composition relates only to hostplant quality as this, in turn, influences the oviposition behavior (egg laying) of adults and subsequent development of larvae, which are inextricably associated with their *Plantago erecta* food plants. Raising this specter of very general soil classifications prepared decades ago by the United States Department of Agriculture (https://casoilresource.lawr.ucdavis.edu/gmap/)(classifications named after soils around exemplar California towns like Vista, Fallbrook, and Hanford) grossly oversimplifies the issue at hand by overlooking the finer intricacies of soil characteristics we have discussed here.

O5-6 cont.

As an example (Figure 1), the Quino population complex at Lake Skinner, Riverside County occurs over many classified soil types including Las Posas loam (LaD2), Cieneba rocky sandy loam (CkF2), Vista course sandy loam (VsF2), and Fallbrook sandy loam (FcD2)(see the attached map) but those on the Fallbrook sandy loam (which include rocky peaks) had only hilltopping adults along a ridgeline and never larvae or hostplant. The same was true for hilltopping adults over “Vista course sandy loam”. Hostplant stands with larvae occurred on only very tiny fragments of large areas mapped with “Las Posas loam” or “Cieneba rocky sandy loam” but none of these tiny areas could actually be classified as sandy or loamy! In fact, Osborne’s personal knowledge of this area acquired during graduate research in the late 1990’s (Osborne 1998, Osborne and Redak 2000) and subsequent detailed habitat mapping for the Metropolitan Water District, show irrelevancy of the Department of Agriculture and similar soil maps. Osborne found that *all* Quino larval occurrences, and indeed, nearly all *Plantago erecta* occurrences, are on thin clay soils derived from gabbroic geology – in areas crudely and inaccurately mapped by the Department of Agriculture as various types. Thus, Department of Agriculture and similar soil maps allow no valid conclusions as to Quino suitability absent a level of detail these maps don’t begin to capture.

The figure below presents the Department of Agriculture map for a portion of the Quino population complex just south of Lake Skinner, showing the very limited area within grossly mapped soil types where QCB larvae and hosts occur.



O5-6 cont.

US Department of Agriculture Soil types and distribution of Quino Larval sites at Lake Skinner, Riverside County Yellow lines separate soil types: Las Posas loam (LaD2), Cieneba rocky sandy loam (CkF2), Vista course sandy loam (VsF2), and Fallbrook sandy loam (FcD2). Osborne's personal observations of occurrences of Quino larvae are shaded blue.

Generally, all of the significant, lowland *Plantago erecta*-associated Quino populations occur on soil conditions that both support the butterfly hostplant ***and exclude competitive exotic annual plants.*** These specialized soil conditions allow 1) presence of the host plant in the first place and 2) relatively delayed host senescence. As we describe above the host plant's springtime longevity is a crucial component of Quino ecology, ***without which local Quino populations are not viable****.* Thus, mere presence of *Plantago* does *not* equate to suitable Quino habitat. Examples of specialized soil conditions conducive to supporting *Euphydryas editha* (of various subspecies) butterfly populations associated with *Plantago erecta* include:

- Localized occurrences of shallow soils.
- Hard surfaces with crust (and/or cryptobiotic crusts, which inhibit exotic grass invasion).
- Caustic chemical compositions (for example, derived from serpentine geology in the San Francisco Bay area of central California) and low nitrogen.

For Quino, restoration or enhancement of degraded habitat would require a colossal commitment and efforts applied persistently for many years – and likely in perpetuity – in order to recreate native soil conditions and prevent the ever-ready reinvasion of the exotic annuals. Even if the extreme measure of blading off the soil surface to mineral soils were undertaken, given the delicate and temperamental nature of the soil-*Plantago erecta* relationship, it would likely take decades of biotic soil surface development and vegetation succession, combined with great luck, to achieve any success for Quino

habitat restoration. **The soil conditions that have precluded exotic weed invasion and that promote springtime longevity of *Plantago* require special soil structures and decades or centuries of non-disturbance. In our experience, they cannot be recreated simply by weeding efforts.** The proposed weeding of disturbed areas in the Village 13 Quino "Checkerspot Butterfly Management/Enhancement Plan" is woefully inadequate to mitigate for lost Quino-quality *Plantago erecta* habitat and microenvironments that uniquely developed over ecological time.

While the management plan monitors preserved open space, if sites are found to be extirpated and vegetation has deteriorated, adaptive management "doubles down" on the failed strategy of restoration (p. 58, Appendix C). Otherwise, contingency plans for restoration failure are vague and merely "initiate other actions" absent specific requirements – let alone demonstrable efficacy – for such actions.

To summarize, even if the restoration program proposed for Alternative H were to overcome the near-impossible soil condition obstacles described above, it would *fail* as mitigation because 1) **its scale is miniscule**[1] compared to loss of hundreds of acres of known occupied Critical Habitat and 2) **it would not recreate the diverse microenvironmental range lost in the broad area impacted by the project**, the diversity of which is essential for a viable metapopulation. It is not merely the loss of larval resources, but the entirety of the mature habitat, including diversity of vegetative and topographic features (Shields 1967), which contribute to long term population stability and resilience in the face of environmental change.

O5-6 cont.

IV Conclusion

The high net loss of prime "source population" Quino habitat and inefficacious mitigation is a major unmitigated impact under CEQA and a grave threat to the *very survival* of this species.

Respectfully Submitted,





Gregory R. Ballmer

Ken H. Osborne

References

Osborne, K.H. 1998. A description of arthropod community structure in Southern Californian Coastal Sage Scrub (Chapter 4). Masters Thesis, Univ. California, Riverside, CA.

[1] Less than a dozen acres would be restored or enhanced the mitigation program (Appendix c, p. 46). "Long term management" would occur on 15 acres per year.

Osborne, K.H. and R.A. Redak. 2000. Microhabitat conditions associated with the Distribution of Post-diapause Larvae of *Euphydryas editha quino* (Behr)(Lepidoptera: Nymphalidae). Annals of the Entomological Society of America. 93(1):110-114.

Preston, K. L., R. A. Redak, M. F. Allen, and J. T. Rotenberry. 2012. Changing distribution patterns of an endangered butterfly: Linking local extinction patterns and variable habitat relationships. Biological Conservation. (152): 280-290.

Shields, O. 1967. Hilltopping – an ecological study of summit congregation behavior of butterflies on a southern California hill. J. Res. Lepid. 6: 69-178.

O5-6 cont.

From: Josh Chatten-Brown <jrcb@cbcearthlaw.com>
Sent: Tuesday, October 12, 2021 4:03 PM
To: CEQA, CountyParks
Subject: [External] Request for Extension of the Deadline to Submit Comments on the Alpine Park Project
Attachments: Alpine Park Project - PAH Request for Extension of DIR Comment Deadline.pdf

Dear Ms. Prowant,

O6-1 Please see the attached letter requesting a 45-day extension of the deadline to submit comments on the Draft Environmental Impact Report for the Alpine Park Project.

I look forward to hearing back from the County.

Sincerely,

Josh Chatten-Brown

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October 12, 2021

Via e-mail

Anna Prowant (*countyParksCEQA@sdcounty.ca.gov*)
County of San Diego
Parks and Recreation Department
5500 Overland Avenue, Suite 410
San Diego, CA 92123

Re: Request for Extension of Deadline for Submission of Comments on the Draft Environmental Impact Report for the Alpine Park Project; SCH# 2021030196

Dear Ms. Prowant,

O6-2 Our firm represents Preserve Alpine's Heritage with regard to the Alpine Park Project ("Project"). Due to the array of significant impacts of the proposed Project, the size of the Draft Environmental Impact Report ("EIR") and appendices, and the limitations on public involvement due to COVID-19 restrictions, we request a 45-day extension for public comment on the Alpine Park Project Draft EIR to ensure adequate time for community and agency review.

O6-3 The extension is especially appropriate given the County's failure to conduct an EIR Scoping Meeting pursuant to Section 15082(c)(1), despite its "Notice of EIR Scoping Meeting" claiming otherwise, and a number of other missteps. (**Exhibit A**.) Posting a link to a pre-recorded YouTube presentation does not constitute a Scoping Meeting. While COVID-19 restrictions limit in-person meetings, the Department could have used a virtual format to conduct an actual EIR Scoping Meeting. Additionally, the public comment period on the Notice of Preparation was from March 9, 2021 to April 7, 2021, yet the YouTube link to the pre-recorded presentation was not posted until March 30, 2021. The "Notice of Scoping Meeting" did not provide instructions on how to submit comments. The Notice merely provided a deadline for submission of comments and stated, "Information on how to submit comments can be found on the DPR Website." (*Ibid.*) Finally, the recorded presentation is not currently posted on the Department's website link that is referenced in the Notice.

O6-4 Therefore, we further request that prior to consideration of the Project for approval that the County hold a public meeting to consider all comments, written and oral, on the Project and the adequacy of the EIR's analysis.

O6-4 cont.

We respectfully ask for a response to these requests. Thank you for your consideration.

Sincerely,

Josh Chatten-Brown

EXHIBIT A

County of San Diego

BRIAN ALBRIGHT
DIRECTOR
(858) 966-1301

DEPARTMENT OF PARKS AND RECREATION
5500 OVERLAND AVENUE, SUITE 410, SAN DIEGO, CA 92123
Administrative Office (858) 694-3030
www.sdparks.org

NOTICE OF EIR SCOPING MEETING

PROJECT TITLE: ALPINE COUNTY PARK PROJECT

SCH #: 2021030196

APPLICANT: County of San Diego Department of Parks and Recreation

LOCATION: The project is located on South Grade Rd. between Deland Dr. and Boulder Oaks Ln. in the unincorporated community of Alpine in San Diego County.

NOTICE IS HEREBY GIVEN that the County of San Diego, Department of Parks and Recreation (DPR), as lead agency, is holding a Scoping Meeting pursuant to Section 15082(c)(1) of the State CEQA Guidelines.

Due to COVID-19 restrictions on gatherings, an in-person public meeting is not possible. Therefore, the EIR scoping meeting will be in the form of a recorded presentation. DPR is using this format to allow you to view the presentation at your convenience and to allow as many people as possible to provide input.

On March 8, 2021, a Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) was published for the Alpine County Park Project. The purpose of the public comment period is to solicit input and feedback from various agencies, stakeholders, and the public pertaining to the scope and content of the environmental information that will be included in the EIR. The public comment period for the NOP is from March 9, 2021 – April 7, 2021.

Project Description: The proposed project involves the development of an approximately 25-acre active park.

Availability: The recorded presentation along with the EIR Scoping materials can be viewed via the DPR website:

https://www.sdparks.org/content/sdparks/en/AboutUs/Plans/public-review-documents.html

or via direct link:

https://www.youtube.com/watch?v=xyKiPTawDsQ

Comments: Due to the time limits mandated by state law, your written comments on environmental concerns must be sent no later than **5:00 p.m. on Wednesday, April 7, 2021.** Information on how to submit comments can be found on the DPR Website.

For questions regarding the EIR Scoping Meeting or the Notice of Preparation, please contact Lorrie Bradley, Environmental Planner, at (619) 455-7721 or by email at lorrie.bradley@sdcounty.ca.gov.

COUNTY OF SAN DIEGO PARKS AND RECREATION

CAPRA ACCREDITED

Julianne Simper
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Thursday, November 11, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410
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RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

O7-1 As a community member living in Alpine for over 11 years and as Chair of Preserve Alpine's Heritage (www.PreserveAlpinesHeritage.org), I want to thank you for the opportunity to comment on the Alpine County Park Project's ("Project") Draft Environmental Impact Report (DEIR). I respectfully submit the following for consideration and response.

Project Alternative: A Nature-Based Park

The proposed 25-acre park plan goes far beyond the 12-15-acre community park concept originally presented to local residents. We expected a park more aligned with the natural and rural location. The County of San Diego Department of Parks and Recreation (DPR) acknowledges this discord when it states in its Frequently Asked Questions document: "Early conversations about the search for a park in Alpine may have referenced smaller acreage, however, the purchase of the 98-acre parcel made it possible to expand acreage opportunities for both active and passive uses." This unjustified increase has taken much of the community by surprise and is a fundamental source of dissatisfaction and distrust.

O7-2 The community was also led to believe by local leadership that the park would be smaller and more nature-based. To illustrate, Back Country Land Trust board member and Alpine Community Planning Group Member George Barnett stated in 2019: "My understanding is that the County will also plan on passive uses, that is – no active sports playing fields. Maybe there'll be picnic places, a pavilion, a kiddie playground, or things of that nature that town's people want."

The currently proposed 25-acre park design was released late summer 2020. The size and scope were a surprise and shock to most of the community who were expecting, and generally in support of, a significantly smaller park. As a result of the unexpected scope of the currently proposed Alpine County Park, as awareness of the design increases, so does the opposition.
On page ES-4 under the Executive Summary, the DEIR outlines how the DPR considered four other alternatives to the proposed park: a no project alternative, an even larger sports complex option, as well as two other slight variations on the current active 25-acre project. These alternatives represent extremes and not a more moderate, nature-based option as initially presented and generally supported by the community.

Furthermore, the results of the DPR public outreach reveal that a nature-based park is precisely what the community has requested: "… the top five activities the responders selected were walking/jogging, riding a mountain bike on a trail/in a park, nature, dog park, and picnicking. The 5 activities with the fewest votes were swimming pool, football, softball, bocce

O7-2 cont.

ball, and tennis/pickleball. The top five elements chosen from the questionnaire were natural areas, restrooms, sidewalks and trails, shade trees, and drinking fountains. The least preferred elements were court and field lighting. The top five elements selected from the image boards were multi-use trails, bike park, dog park, nature-based play, and picnic shelter. The least favored were horseshoe pits, table tennis, tennis, softball, and youth football." Clearly, the Alpine community strongly prefers nature-based activities over sports-facilities.

O7-3

Additional support for building a nature-based park instead of an extensive 25-acre sports park is that the abutting Joan MacQueen Middle School is planned for major renovation of its existing and extensive sports facilities. Once again, Back Country Land Trust board member and Alpine Community Planning Group member George Barnett stated: "Plans to refurbish La Crosse, soccer and softball fields at abutting Joan MacQueen Middle School, plans that include a football field, render surplus such facilities at a community park." We agree.

O7-4

Based on all of the above, we therefore ask:

- Given this significant qualitative and quantitative data and input, how can DPR justify the design of the proposed 25-acre park with extensive sports facilities as meeting a local Alpine need?

O7-5

- Why wasn't the development of a significantly smaller, nature-based park at the location adjacent to Wright's Field Ecological Preserve considered as an alternative?

O7-6

- Isn't this an option that minimizes the impact on the environment and rural setting, provides appropriate recreational activities that respect and complement the Wright's Field Ecological Preserve, and protects the preserve from habitat destruction due to fragmentation, encroachment, and overflow use from a park?

Inadequate and Biased Public Outreach

The proposed park design was released to the public late summer 2020. Since then, the County has extended many requests for public comment as part of the official planning process. In response, a significant proportion of Alpine community members have responded with thousands of commentaries; the majority of which express critical questions and concerns regarding the proposed park design. In fact, when analyzing the public records of these official meetings and calls for comment, approximately 65% have expressed concerns/questions and only 35% have voiced support. These concerns have been categorically dismissed by local and County public representatives and are not represented in the County of Parks and Recreation public outreach data.

For example, the County held its fourth and final public outreach meeting on January 14, 2021. This was an online meeting where attendees were allowed to participate only by submitting commentary/questions via the textual chat feature. A breakdown of these comments is as follows.

O7-7

Number of unique commentators	**91**
Number of commentators in support of park	15 (16%)
Number of commentators with critical questions/concerns	76 (84%)
Number of total comments	**395 entries / 430 comments**
(Breakdown totals more than 395 as some chat entries included multiple comments)	
Number of comments in support of park	25 (6%)
Number of general questions (timelines, etc.)	78 (18%)
Number of comments related to critical questions/concerns	327 (76%)

Despite this strong and disproportionate showing of opposition, the DPR omits any mention of concern from its reporting on the meeting. Its public outreach summary states: "A conceptual park design was shared with the attendees after which a question-and-answer period took place. The meeting was scheduled from 7:00 PM to 8:30PM and several questions from the attendees were asked and answered before the meeting time had ended. The questions that were left unanswered during the meeting, were answered following the meeting and then posted online at the Department of Parks & Recreation, Alpine Park web page." This descriptions whitewashes and misrepresents the public comment which generally did not support the proposed design.

O7-7 cont.

The same disproportionate expressions of concern/opposition were made by the Alpine community during the June 2021 Board of Supervisor Budget Hearings, as well as during a recent meeting on October 20, 2021. Once again, the strong public comments of concern/opposition were categorically dismissed by the County. Therefore, one must ask:

- Why are there public calls for comment during the planning process if the majority of commentary will simply be ignored?
- Why are the increasing community concerns not being taken into consideration?

O7-8

- How can the Department of Parks and Recreation state it is designing a park for the Alpine community when it ignores the input provided by a significant/majority number of Alpine residents?

View details and analysis of the public outreach and community concerns here.

O7-9

Inexistant and Unsafe Non-Automotive Access to the Park Site

There are no continuous bike/pedestrian pathways or public transportation directly servicing the proposed park location. As stated on page 4.17-2 under “4.17.2.1 Existing Transportation Conditions” the closest bus stop is approximately 0.88 miles north of the project site”. The DEIR goes on to state that “There are no bike facilities along South Grade Road adjacent to the project site.” The DEIR also acknowledges that along South Grade Road there currently are no sidewalks or other pedestrian facilities. The sidewalk to be included along the park perimeter will not connect to any of the existing pathways or public transportation leading to other parts of Alpine; most importantly, to the inhabited town center. Therefore, serious questions and concerns are as follows.

O7-10

- The DPR calls the project a “drive to” park and has repeated that the only recommended non-automotive access is via Wright’s Field. Why does the DEIR not address this major gap in the park design and provide solutions to address the lack of safe and appropriate access for those on foot or other non-vehicular modes of transportation?

O7-11

- If the park closes at dusk and the Alpine town center is 1-2 miles away on foot, how can the rugged trails with no lighting in Wright’s Field be considered safe and appropriate access before the sun comes up and/or once the sun goes down?
- How will non-vehicular access via the dangerous South Grade Road be controlled and/or discouraged?

O7-12

- If only accessible via automobile, dangerous roadways, or rocky/uneven/unlit trails, how does the park location promote equitable access for all?

O7-13

Insufficient Analysis of Impact to Wright’s Field Multiple Species Conservation Plan

In 2003, the Back Country Land Trust (BCLT) and the County of San Diego County Department of Parks and Recreation (DPR) submitted an application to the Environmental Enhancement and Mitigation Program (EEMP) to obtain funds to purchase the remaining 142-acre land as Phase IV of the Wright's Field Multiple Species Conservation Plan (MSCP). These efforts were unsuccessful and the majority of this land is now owned by the County as the location being considered for the proposed Alpine County Park. View application, including map on page 39, here.

O7-14

In the application, the BCLT and DPR state:

- The acquisition of this land “is critical to the biological and physical integrity of this MSCP preserve. The Phase IV parcel is entirely comprised of native grassland, coastal sage scrub, Engelmann oak woodland, and vernal pool habitats.” (Page 7 of the application)

O7-15

- In addition, the application also addresses sensitive habitats on this land and on Wright's Field MSCP and how the "viability of species within them is increased when they are protected together in an integrated whole". It further outlines how critical this land is as a wildlife corridor.

O7-16

This entire document describes how important this parcel of land is to the integrity of the adjacent Wright's Field MSCP and the surrounding natural environment/ecosystem. Therefore, I submit for your consideration and response, the following.

- How is it reasonable/acceptable that both the BCLT and DPR now claim the opposite and state that the 25-acre park will not impact Wright's Field MSCP?
- How many people will access the park via these trails?
- Where are the thorough studies of the impacts to Wright’s Field in the DEIR?

O7-16 cont.

- What are the biological impacts on Wright's Field Ecological Preserve from fragmentation, encroachment, and overflow use from a large active park?
- How will this be appropriately mitigated considering that Wright's Field MSCP is recognized as a unique resource in San Diego County?

In Conclusion: Not Against an Alpine Park, Just Against the Scope and Size of *This P*ark

O7-17 Based on the data and the information included in the DEIR, I am simply not convinced that the proposed 25-acre park is what is best for the community, the natural location, or what the majority of local residents want/need. Not only are existing recreational facilities in Alpine underutilized and not properly maintained, but available County survey data does not support inclusion of many of the facilities in the current plans.

O7-18 Since the park design was made public late last year, Preserve Alpine's Heritage has met with the County multiple times and responded to their requests for feedback by submitting questions, expressing concerns, and inviting compromise. We have also asked for transparency in regard to the vetting of other locations, environmental impact studies, financial sustainability, etc. All of which have been ultimately disregarded, and in fact, the park design has actually grown since! When questioned, the County explained that this was done in part to meet county-wide metrics, as well as, put quite simply, because they had the space and could do so. In summary, they doubled the park size because they could; not necessarily because it's what's best for Alpine. We are troubled by both this lack of transparency and the lack of accountability to the local community most directly impacted by the park.

Therefore, we request more transparency and responsiveness to the questions and concerns raised by an increasingly important number of Alpine residents. We recognize and thank you for the work already done to bring a park to Alpine. However, the work must continue and our requests are threefold:

O7-19

1. Recognize that there are too many concerns and unanswered questions regarding the current design to conscientiously proceed as proposed.
2. Reconsider other locations for some or all of the sports amenities.
3. Engage in a collaborative and constructive dialogue with concerned groups to redesign a park that is more balanced and respectful of the natural location.

O7-20 Our group of committed and diverse community members is working hard, investing the necessary time and resources, and will explore all options to oppose the current extensive park design. We sincerely hope the County embraces this invitation to collaborate on finding the right balance for a park that enhances, not overtakes, the amazing rural, cultural, and natural heritage that makes Alpine so special; because once it's gone, it's gone forever.

Thank you for your time, consideration, and for keeping me informed of all communications and developments related to the proposed Alpine County Park project.

Kind regards,



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November 15, 2021

Via e-mail

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Parks and Recreation Department
5500 Overland Avenue, Suite 410
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Re: Alpine County Park Project and Draft Environmental Impact Report

Dear Ms. Prowant,

O8-1 The law firm of Chatten-Brown, Carstens, & Minteer represents Preserve Alpine's Heritage in connection with the Alpine County Park Project ("Project") and its draft Environmental Impact Report ("DEIR"). Memoranda from biological expert Robert Hamilton (**Exhibit A**) and traffic expert Tom Brohard (**Exhibit C**) are hereby attached and incorporated into this comment letter, and we request responses to the concerns they raise. These comments, and all attachments, should be made part of the administrative record for the Project.

O8-2 Preserve Alpine's Heritage supports the addition of a passive community park at this location and urges the County of San Diego Parks and Recreation Department ("DPR") to consider alternative, less environmentally harmful locations for a regional sports park. The DEIR continuously mischaracterizes the Project as a community park, misleading the public and downplaying its environmental impacts.[1]

O8-3 The Project as proposed would result in significant impacts to biological resources, transportation and safety, greenhouse gas, energy, air quality, wildfire, water supply and

[1] See DEIR, p. ES-2, 3-1, 5-6, 6-2; DEIR Vol. II, pp. 666, 724-742, 750, 763, p. 887, 895, 897. In light of DPR's recent characterization of the Project as a "Regional Park" (**Exhibit D**, p. 1), and considering the scale and amenities included, the Project should be described and analyzed as a regional sports park throughout the DEIR.

O8-3 cont.

wastewater, visual resources and noise, and cumulative impacts that the EIR fails to adequately disclose, analyze, and mitigate. The DEIR must be revised and recirculated to comply fully with the California Environmental Quality Act's ("CEQA") mandate of the full disclosure of all significant environmental impacts and the application of all feasible mitigation for those impacts. (Pub. Res. Code Section 21002, 21002.1, 21081(a).)

I. Introduction

The Project site consists of 100 acres on undeveloped land, adjacent to Wright's Field Ecological Preserve ("Wright's Field"). (DEIR, p. 2-1.) Wright's Field, managed by Backcountry Land Trust ("BCLT"), is part of the County's Multiple Species Conservation Plan ("MSCP"). (*Ibid*.) The Project would develop approximately 25 acres into an active park, proposing new structures including athletic courts, turf fields, a bike park, an all-wheel park, two equestrian corrals and paved staging area, receptacles for waste and equestrian manure, permanent RV staging area, administrative and restroom buildings, dog parks, BBQ pits, a playground and exercise equipment, and a large parking lot. (DEIR, pp. ES-1, 3-2 to 3-3.) The Project identifies the inclusion of 5,000 square feet of a community garden yet does not report further information on the location or design. (*Ibid*.) Around 22 acres of grading would be required. (DEIR, p. 3-5.)

O8-4

The Project will either use on-site septic or will connect existing sewer lines. (DEIR, pp. 3-3 to 3-4.) The Project states that stormwater retention basins will be sited throughout the Park, however the Concept design (Figure 3.2) only displays one basin located near the parking lot. The remaining 70 acres around the active park would remain open space. (DEIR, p. 3-5.) DPR proposes to implement a Habitat Conservation Plan. (*Ibid*.)

II. The Project's Draft EIR Fails to Comply with CEQA

A. The EIR Fails to Consider a Reasonable Range of Alternatives

O8-5

The "core of an EIR is the mitigation and alternatives sections." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.) An adequate alternatives analysis is crucial to CEQA's substantive mandate to substantial lessen or avoid significant environmental damage where feasible. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 403, 405 [requiring more than conclusory statements about the lack of alternative locations].) The EIR "shall

describe a range of reasonable alternatives to the project, or to the location . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." (CEQA Guidelines ["Guidelines"] Section 15126.6, subd. (a).) As the DEIR states, DPR does not have to consider "every conceivable alternative," but, CEQA requires the inclusion of alternatives "necessary to permit a reasoned choice." (*Ibid.*; Guidelines Section 15126.6, subd. (f).)

O8-5 cont.

CEQA requires discussion of alternatives, even where they "would impede to some degree the attainment of the project objectives." (Guidelines Section 15126.6, subd. (b).) DPR may eliminate an alternative from detailed consideration only where it fails to meet "*most* of the basic project objectives" or is infeasible. (Guidelines section 15126.6, subd. (c), emphasis added.) DPR has failed to demonstrate these conditions preclude analysis of an alternative location, multiple alternative locations ("mini-parks"), a passive park, or a multi-prong approach.

Preserve Alpine's Heritage reiterates its requested inclusion and analysis of a passive park on this site combined with improvements to existing off-site amenities and/or placement of the environmentally destructive sports park amenities at more appropriate locations (a "Multi-Prong Approach Alternative.") This alternative would present a feasible approach to meet all or most Project objectives. The potential for Joint Exercise of Powers Agreements (JEPA) agreements, such as DPR's recent JEPA-related request for Park Lands Dedication Ordinance (PLDO) funds to improve the nearby Joan MacQueen facilities, supports the feasibility of such an alternative.[2] Therefore, the DEIR must include a Multi-Prong Approach Alternative.[3]

O8-6

Further, in dismissing certain alternatives, DPR failed to "explain the reasons" underlying its determination. (Guidelines Section 15126.6, subd. (c).) Instead, DPR merely quotes the objectives themselves without any explanation for why the requested alternatives below were not included in the alternatives analysis.

O8-7

[2] https://sdcounty.legistar1.com/daystar.legistar6.sdk.ws/View.ashx?M=F&GovernmentGUID=SDCT&LogicalFileName=ce653fb9-54f1-4b6b-b945-c672dbfacccc.docx&From=Granicus.

[3] Such an approach would be more consistent with the Alpine Community Plan Recreation Objectives 5, 6, and 9 than the Project as proposed. (https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/CP/Alpine_CP.pdf, page 37.).

O8-8 The DEIR failed to present a reasonable range of alternatives, especially considering the letters received from the public and state agencies requesting the inclusion of such alternatives. Given that one of the Project objectives is to "provide for long-term natural and cultural resource management consistent with the goals and objectives" of the Multiple Species Conservation Program ("MSCP") (DEIR, p. ES-2), it is unreasonable to refuse to consider a passive park, multi-prong approach, or alternative location. (See *Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, 547 [finding the failure to include a Smart Growth alternative unreasonable given the Project objective to reduce VMT].)

O8-9 The DEIR also includes an impermissibly narrow project objective that hinges on the park being at the location itself. (DEIR, p. 6-2, ["Provide for long-term . . . resource management. . . for the preserve portion of *the property*].) The inclusion of a project objective that only applies to this project site improperly excludes the full consideration of alternative project locations.

1. The EIR Fails to Consider Alternative Locations

Due to the presence of highly sensitive habitats (clay soils, native grasslands) and species on the proposed site, the California Department of Fish and Wildlife ("CDFW") specifically requested the consideration of alternative locations—number one on its list of comments submitted in response to the Project EIR Notice of Preparation. (CDFW Letter, p. 3; DEIR Vol. II, p. 15.) CDFW noted the ability for an alternative location to meet community needs and simultaneously prevent impacts to the large block of habitat in the conservation area. (*Ibid*.) The site's location on sensitive geological resources, identified
O8-10 as a potentially significant impact, further warrants inclusion of this alternative. (DEIR, p. ES-16.)

Yet, the DEIR does not even consider inclusion of a singular Alternative Location Alternative, and summarily dismisses the inclusion of an Alternative Locations ("mini-parks") Alternative in one paragraph. (DEIR, p. 6-4.) The DEIR also fails to demonstrate it actually considered, or is actively seeking, other locations, including those that would not result in the same harmful impacts. No evidence is provided regarding the rejection of these alternatives for further consideration. (DEIR, pp. 6-4 to 6-5.) The County's refusal to disclose the alternative locations that were supposedly considered but rejected on the basis of "confidentiality for the owners of the potential properties" is improper and

O8-10 cont.

prevents the public and decision makers from evaluating the propriety of rejecting these alternative locations for failure to "meet many of the project objectives" (DEIR, p. 6-5.) Alternatives are not required to meet all project objectives—in reality it "is virtually a given that the alternatives to a project will not attain all of the project's objectives." (*Watsonville Pilots Ass'n v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1087.)

O8-11

One commenter suggested two specific alternative locations in a scoping letter, but these were not evaluated. (DEIR Vol. II, pp. 217-218.) In its discussion of Recreation impacts, the DEIR notes that the County's Parks Master Plan found Alpine to have "much capacity" for park acquisition, and identified 70 vacant parcels totaling 219 acres that "may be suitable for park development" if acquired. (DEIR, pp. 4.16-3 to 4.) The DEIR must consider these sites.[4] The DEIR should also analyze the feasibility of improving existing Alpine facilities (**Exhibit E**) and other available sites for new amenities (**Exhibit F**). That DPR does not currently own an alternate parcel is an insufficient reason to reject the Project's feasibility on that parcel. (See *Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1461–1462.) Further, the brief dismissal of this alternative made no reference to the potential for joint use sites tailored to meet Project objectives, only referring to property "owners" in dismissing this analysis as infeasible. (*Ibid*.) Other JEPAs are noted in the DEIR. (DEIR, p. 4.15-4.) The DEIR must consider the potential properties described above, and submitted to the record, in its alternatives analysis.

O8-12

The DEIR improperly dismisses inclusion of the Alternate Locations Alternative on the grounds it "would not meet many of the project objectives, including creating a place where all Alpine residents can gather and connect as a community," and "also would not enable long-term natural and cultural resources management." (DEIR, p. 6-5.) The DEIR fails to detail why these objectives are not met and to consider the remaining objectives in deciding not to include these alternatives. As noted above, alternatives do not have to meet *every single* project objective. Additionally, no evidence supports DPR's assertion that an alternative location, including a smaller sized park with picnic tables, could not provide a place for the community to gather. Nor does DEIR demonstrate how the Alternate Location Alternative would prevent long-term resources management, as claimed. Election of an alternative location for the active sports park, while maintaining preservation of this site via a passive park, would actually serve to

[4] www.sdparks.org/content/dam/sdparks/en/pdf/Development/Parks%20Master%20Plan.pdf.

O8-12 cont.

better manage cultural and natural resources.[5] The DEIR's claims lack any actual discussion or analysis, and only serve to deprive the public and decisionmakers of a meaningful consideration of alternatives in contravention of CEQA's purpose.

Robert Hamilton further details in his attached comments why the DEIR's rejection of an alternative location lacked adequate cause. (Exhibit A, p. 18.)

O8-13

Preserve Alpine's Heritage urges DPR to include an actual Alternate Location Alternative, separate and apart from a "mini-parks" alternative, and to include both alternatives in the analysis. This is in addition to the inclusion of the Multi-Prong Approach Alternative.

2. Passive Park Alternative

Members of the public also called for the inclusion of the Passive Park Alternative. (California Native Plant Society, DEIR Vol. II p. 22, 25; Preserve Alpine's Heritage, DEIR Vol. II, p. 159; Comments, DEIR Vol. II, pp. 163, 164, 171, 187, 210, 216.)[6] Instead, the EIR similarly dismisses the inclusion of a Passive Park Alternative (in what is the closest to a passive park, the Equestrian Staging and Trails Only Alternative) in a two-sentence statement that lacks any analysis or supporting evidence. (DEIR, p. 6-5.)[7]

O8-14

The DEIR claims the Passive Park Alternative would not meet Objectives 1, 2, and 5 "because it would not provide a place where all Alpine residents can gather as a community, it would not provide a variety of active and passive recreational uses or an

[5] If the "No Project" Alternative still meets the objective to provide for long-term resource management consistent with the MSCP, it is unclear how an alternate location would fail to do so where the Project site is already in the County's possession, adjacent to a land trust capable of managing the land. (DEIR, p. 6-10.)

[6] CDFW also requested inclusion of feasible alternatives to Project design features that avoid or minimize impacts to sensitive biological resources. (CDFW Letter, p. 7.) A passive park and multi-prong approach alternative would both accomplish this.

[7] Adding salt to the wound, the EIR instead includes an increased Project alternative that doubles the size of the active park—to the detriment of the preserve—and increases the intensity of park's operations and impacts. (DEIR, p. 6-5.)

O8-14 cont.

open space preserve, and it would not enhance the quality of life in Alpine by providing exceptional park and recreational opportunities." This explanation is both deficient and inaccurate. Further, Alpine residents would not be precluded from gathering on the site—a Passive Park could still include picnic tables and other spaces. These claimed objectives also do not square with DPR's plans to designate the Project as a regional park. (Exhibit D.)

O8-15

DPR refused to include any alternative (besides the legally-required No Project alternative) that was not a large active sports park. The DEIR only considers three alternatives that all include an active sports park of at least 20 acres. (DEIR, p. 6-1.) Many of the Project objectives are predicated on a large active sports park itself—Objectives 1, 2 and 3, which are then singularly used to dismiss any alternative that is not this active park at this location. (DEIR, p. 6-2.) An agency may not use artificially narrow definitions to avoid an adequate alternatives analysis. (*North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647, 654.) Omission of a reasonable range of alternatives, including the Passive Parks Alternative, not only violates CEQA—it does the public and decisionmakers a disservice. Therefore, Preserve Alpine's Heritage respectfully requests the inclusion of a Passive Park Alternative that includes picnic tables and trails.

3. Deficient Analysis of the No Project Alternative

The DEIR fails to adequately analyze selection of the No Project Alternative. If an agency finds an alternative infeasible, its analysis must explain in "meaningful detail the reasons and facts supporting that conclusion." (*Marin Mun. Water Dist. v. KG Land California Corp*. (1991) 235 Cal.App.3d 1652, 1664.)

O8-16

In dismissing the "No Project" Alternative, the DEIR claims 0 acres will be kept for open space or conservation acreage. (DEIR, p. 6-4.) Yet, the DEIR notes the site already consists of undeveloped, vegetated rural land (DEIR, p. 6-6), which would be preserved under the No Project alternative. The DEIR states that under the No Project alternative, no Habitat Conservation Plan would be prepared, and onsite restoration would not occur. (DEIR, p. 6-7.) Based on this, the DEIR concludes there would not be much biological benefits through the No Project alternative. (DEIR, p. 6-10.) To claim there would be no biological benefits from the avoidance of destroying 25 acres of sensitive habitat and adding 500 daily visitors and the associated noise and foot-traffic impacts is disingenuous.

O8-17 The DEIR continues to claim that the No Project Alternative would result in increased recreation impacts because it would fail to provide new recreational facilities to meet demand, despite elsewhere noting the site already provides existing trails (DEIR, p. 4.16-6) and ignoring the County's ability to still maintain and improve Alpine's trail system and other nearby existing facilities under a No Project Alternative. In turn, the County contends that this would lead to "substantial deterioration" via increased use of other existing parks and facilities. (DEIR, p. 6-9.) Yet, in its discussion of the proposed Project's recreation impacts, the DEIR ignores discussion of increased traffic to Wright's Field and potential deterioration of those recreational facilities. (DEIR, p. 4.16-5.) The Project as proposed would close existing, informal trails. (DEIR, p. 1-1.) This closure combined with increased visitors would lead to substantial deterioration of the remaining trails on the Preserve and Wright's Field.

O8-18 Finally, the DEIR summarily states that the No Project Alternative would fail to meet many of the Project objectives, without providing any details, facts, or explanations to support its conclusions. (DEIR, p. 6-10.) The DEIR then incredulously concludes, without providing analysis or evidence, that the doubled-in-size Alternative 2 Sportsplex, with increased operations and added stadium lighting, "would meet *all* of the project objectives," despite its increased impacts and failure to introduce any further mitigation measures. (DEIR, pp. 6-11 to 15, emphasis added.)

B. The EIR Fails to Adequately Analyze and Mitigate the Project's Impacts

1. Biological Resources

O8-19 The Project site contains extensive vegetation communities, which include sensitive native grasslands, rare plants and Engelmann oak, as well as other onsite sensitive species. (CDFW Letter, p. 4.) The endangered Quino Checkerspot Butterfly, and associated host plants, occupy the site. Native perennial grasslands are considered special status vegetation types, and the MSCP prioritizes their protection.[8] The Project will result in the destruction of 64% of native grasslands onsite (DEIR, Table 14.4-1) and will impact the remaining open space and the adjacent Wright's Field via increased visitors and the associated indirect impacts.

[8]https://sdmmp.com/upload/SDMMP_Repository/0/MP316_Franklin_2006_MSCPcommunities_priorities.pdf.

Robert Hamilton surveyed the site property and reviewed the DEIR's analysis to biological impacts. Mr. Hamilton's qualifications and CV are attached in **Exhibit B**. For the reasons listed below, he concluded that the Project's environmental analysis and claimed mitigation measures are inadequate. (Exhibit A, pp. 23-24.) Therefore, the DEIR fails to comply with CEQA.

Mr. Hamilton's report raises several specific concerns over the DEIR's inadequate analysis, disclosure, and mitigation of the Project's impacts on biological resources. Please specifically address each of Mr. Hamilton's concerns as described extensively in Exhibit A, which is attached to this letter. These concerns include:

- The mis-mapped vegetation polygons (pp. 1-4), and the consequences of this for impacts and mitigation.
- The failure to adequately analyze, disclose, and mitigate impacts to the Western Spadefoot Toad, including Edge Effects. (pp. 4-8)
- The failure to adequately analyze, disclose, and mitigate impacts to protected bat species. (pp. 8-11)
- The failure to adequately analyze, disclose, and mitigate impacts to the federally-listed Quino Checkerspot Butterfly. (pp. 11-12)
- Concerns with the proposed Engelmann Oak mitigation measure (p. 13)
- The DEIR's unsupported wildlife movement findings. (p. 13-15)
- The Project's undermining of the MSCP. (pp. 15-18)
- The DEIR's rejection of the alternative location alternative with inadequate cause. (pp. 18-20)
- Inconsistencies with DPR's MSCP conformance statement. (pp. 20-23)

O8-20

Preserve Alpine's Heritage presents the additional comments and concerns with the DEIR's analysis and alleged mitigation of the Project's biological impacts.

i. Impacts to On-Site Preserve and Wright's Field

O8-21

The County participates in the Natural Community Conservation Planning ("NCCP") program though implementation of its approved MSCP Subarea Plan ("SAP"). The Project would be located adjacent to Wright's Field, MSCP Preserve Land. Wright's Field describes itself as the "heart of Alpine" and provides a home to multiple special

O8-21 cont.

status species.[9] The Project itself is located on Pre-Approved Mitigation Area ("PAMA") land, an area with the highest biological value where preservation is encouraged.[10] PAMAs are rare, and their loss and damage jeopardizes the MSCP plan.

O8-22

Despite CDFW's requests for a thorough analysis,[11] the DEIR skims over impacts on sensitive communities and preserved land via increased foot traffic. In particular, the EIR failed to meaningfully discuss or mitigate the Project's spillover impacts on designated preserve lands, and the species it provides a home to, from lighting, noise, foot traffic, and other increased human activity.[12] Mr. Hamilton's report further details his concerns over the Project's edge effects on the Western Spadefoot Toad. (Exhibit A, pp. 6-7.)

O8-23

The DEIR improperly assumes that species not directly located on the Project's active park will not be affected. (DEIR, p. 4.4-16.) In discussing the noise impacts of the larger Sportsplex Alternative, the DEIR admits to impacts on sensitive receptors within the adjacent biological open space areas from increased operations yet fails to adequately disclose and mitigate these impacts on the surrounding biological resources from the Project as proposed. (DEIR, p. 6-13.) The distinction between the two is not detailed or based in objective, science-based reasoning.

O8-24

In 2009, the County commented on a proposed high school development ("2009 Project") that would destroy similar areas at the same location. (**Exhibit G**, p. 2.) The County concluded there would be "significant and **not mitigable impacts** to biological impacts" and direct implications to the County's MSCP. (*Ibid.*, emphasis added.) The

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[9] https://backcountrylandtrust.org/wrights-field/.

[10] https://www.sandiegocounty.gov/pds/mscp/docs/NCPlan_FAQs.pdf.

[11] CDFW emphasized in its scoping letter: "Due to the proximity of the Project site to the Alpine Park Preserve and BCLT's Wright's Field Preserve, it is essential to understand how the open space and biological diversity within it may be impacted by Project activities. CDFW recommends providing a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts." (CDFW Letter, p. 6.)

[12] DPR also failed to meaningfully respond or consider the literature provided by Preserve Santee about the impacts of increased recreation and trail usage on the surrounding preserve. (DEIR Vol. II, p. 26.) The Project concept design shows the bike park on the edge of the Project, and the DEIR failed to consider whether some bicyclists will ride out on other elements of the Preserve and conserved lands.

County described Wright's Field Preserve as "an integral part" of its MSCP, asserting that "*any* loss of native grassland habitat will impact the overall function and viability of the grassland including the lands . . . already preserved with significant expense to the County and community." (*Ibid*.) The County asserted that "in-kind mitigation is probably not be [sic] feasible." (*Ibid.*) The Project will directly destroy 22.3 acres of grasslands. (DEIR, p. 4.4-28.) Further, the County asserted that the development of "core wildlife area within a PAMA" conflicted with the MSCP Subarea Plan. (Exhibit G, p. 3.) The 2009 Project may not have the exact same design as the Project, however the Project will result in similar impacts to the site and adjacent reserve, warrants further scrutiny into the County's changed stance on this.

O8-24 cont.

Mr. Hamilton's letter further raises concerns over the County's contradictions and inconsistencies. (Exhibit A, pp. 16, 24.)

The County also previously commented on the 2009 Project's indirect effects associated with lighting, noise, and ground moisture changes from irrigation runoff and impervious surfaces. (Exhibit G, p. 2.) Yet the DEIR fails to adequately address indirect impacts on the preserve land, despite the addition of 500 daily visitors, added lighting, and operational noise—including from a PA sound system. (DEIR, pp. 1-1, ES-21.)

O8-25

Finally, DPR defers mitigation through its reliance on APM-1 and MM-BIO-6. The CDFW noted in its Scoping Letter that a Resource Management Plan (RMP) *should be completed* for the 73-acre Preserve before any trails are opened to the public, and asserts "discussion is needed on the impacts of the designated trails . . . and the cumulative impacts that will result from an increase in human activity." (CDFW Letter, p. 4.) Onsite habitat restoration or enhancement should be discussed *in detail*. (*Id*., p. 7.) The DEIR completely avoids any discussion of the RMP, instead improperly deferring its creation to a later date.

O8-26

ii. Quino Checkerspot Butterfly

The Project's inclusion in the County's MSCP did not provide take coverage for the Quino checkerspot butterfly ("QCB"), a federally-endangered species found on site. (DEIR, p. 4.4-22; CDFW Letter, p. 5.) CDFW requested that the DEIR address indirect impacts to this species beyond simply avoiding the occupied area. (CDFW Letter, p. 5.) Yet, the DEIR failed to do so and assumes that the on-site QCB and host-plants on the preserve area will not be impacted by increased foot traffic. (DEIR, p. 4.4-22.) The DEIR

O8-27

O8-27 cont. fails to adequately disclose the Project's direct and indirect impacts on the QCB. The DEIR must consider edge effects on the preserve and conserved spaces that contain QCB and the effect of reduced habitat patch size on population viability at the site.

The DEIR proposes to mitigate impacts to the QCB through later securing an Incidental Take Permit, and subsequent approval of a Habitat Conservation Plan ("HCP"). (DEIR, p. 4.4-22.) This mitigation violates CEQA through improper deferral of mitigation. The DEIR provides no information or performance standards for the HCP. "An EIR may not defer the formulation of mitigation measures to a future time." (*Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 280.) Specific details may only be developed after project approval where including them in the DEIR is infeasible and the County commits itself to mitigation via specific performance standards and identifies actions to achieve those performance standards. (Guidelines Section 1.5126.4; *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 793.) Recent County projects that involved QCB-occupied territory had prepared such plans *before* project approval, which undercuts any claim that including them in the DEIR is infeasible.

O8-28

Mr. Hamilton's letter details further concerns with the proposed mitigation measure. (Exhibit A, pp. 11-12.)

O8-29

When DPR releases its proposed HCP, Preserve Alpine's Heritage requests to be notified of where and when it can publicly comment.

iii. Impacts on Special Status Species

The DEIR fails to analyze the Project's impacts on the Western Spadefoot Toad, despite noting the presence of spadefoot eggs in the Biological Report. (DEIR Vol. II, p. 464.) CDFW specifically requested consideration of this sensitive amphibian, among others. (CDFW Letter, p. 4.) Wright's Field features nearby vernal pools that support the spadefoot, among other sensitive species. (*Id*. at p. 5.) The Western Spadefoot Toad is a California Species of Special Concern ("SSC") and is up for listing on the U.S. Endangered Species Act ("ESA"). (Exhibit A, pp. 4-5.) Failure to analyze this impact is a major omission, as detailed in Mr. Hamilton's comments.

O8-30

O8-31 The DEIR also fails to consider impacts on the Crotch's Bumblebee (California S1S2 rank species and being considered for listing in California); Grasshopper Sparrow

O8-31 cont.

(California SSC and S3 rank species); Ferruginous Hawk (California Watch List species, California S3S4 rank species, and federal Bird of Conservation Concern); Northern Harrier (California SSC and S3 rank species); White-tailed Kite (California Fully Protected and S3S4 rank species); and the Oregon Vesper Sparrow (California SSC, S3 rank species, and being considered for listing on the ESA). These species will be most impacted by the loss of native grassland on the Project site.

O8-32

The DEIR also downplays impacts to on-site Engelmann Oak. Extensive declines in Engelmann Oak have occurred over the last 50 years—main threats to the species include grazing, development, poor regeneration of the species, and climate change.[13] While the Project re-designed the equestrian center around the oak trees, the DEIR does not demonstrate the oaks will survive. The proposed mitigation is insufficient given the increased traffic to the area, surrounding development, harsh environment, and time for trees to reach full maturity. The value of oak communities are not met by simply leaving the individual trees standing, without ensuring their survival and the function of the vegetation community around them.[14]

O8-33

Mr. Hamilton's report raises separate specific concerns with the project's Engelmann Oak mitigation measure as proposed. (Exhibit A, p. 13.) In particular, the oak plantings must be certified pathogen free. (*Ibid*.)

O8-34

The DEIR also fails to fully mitigate impacts to *permanent* habitat loss for raptors, as the sole mitigation measure (MM-BIO-4) only addresses temporary disturbance during construction. Moreover, the DEIR addresses foraging habitat of Cooper's and Red-shouldered Hawks yet fails to address the grassland obligate raptors mentioned above: Ferruginous Hawk, Northern Harrier, and White-tailed Kite.

iv. Wildlife Corridor Impacts

O8-35

The DEIR fails to analyze, disclose, and mitigate the Project's impacts to nearby wildlife corridors, instead choosing to simply label the onsite Biological Sensitive Area ("BSA) and adjacent Wright's Field as an "island" of habitat with limited connectivity. (DEIR, p. 4.4-30). The entire impact discussion consists of two sentences. (*Ibid*.)

[13] https://biodiversityla.org/species/iconic/engelmann-oak/.

[14] Further, oak woodlands in the MSP Roadmap Area (MSPA) support 16 MSP plant and animal species. https://sdmmp.com/veg_community_profile.php?taxaid=SDMMP_vegcom_10.

O8-36 Mr. Hamilton's report details the impropriety of this conclusion. (Exhibit A, pp. 13-15.)

O8-37 This greatly contrasts with the County's previous descriptions of Wright's Field and the Project's open space in previous applications for funding. A 2003 application, prepared by BCLT and DPR, describing Wright's Field and the surrounding areas as "wildlife corridors."[15] (**Exhibit H,** pp. 7, 11, 18, 29, 31, 32.) Destruction of wildlife corridors results in biological impacts and conflicts with Alpine's Community Plan. (*Id*. at p. 32.)

O8-38 Further, the DEIR admits that Alternative 3, the reconfigured project, would potentially obstruct a wildlife corridor that extends south of the project site and connects with open space land south of South Grade Road. (DEIR, 6-16.) The Project will similarly affect the open space land and Wright's Field, bringing a sizeable increase in vehicular, pedestrian, and bicycle traffic along the surrounding roads and the Project site itself that can similarly impact the wildlife corridor noted in Alternative 3.

The DEIR needs to address this discrepancy and adequately analyze, disclose, and mitigate impacts to onsite and surrounding wildlife corridors.

v. Additional Concerns

O8-39 Preserve Alpine's Heritage requests that the DEIR analyze impacts to the biological resources (on the site and nearby Wright's Field) from conversion of land to an impervious surface and the increased runoff (DEIR, p. 4.7-13), especially given the use of turf fields and hazardous materials such as pesticides (DEIR, p. 4.9-12) and the site's low permeability. (DEIR, p. 4.7-19.) The DEIR only notes that a stormwater retention basin is "proposed" as part of Project design to manage and treat runoff, yet does not provide information on the location or design of the retention basin. (DEIR, p. 4.7-13.)

[15] The County's 2009 Letter similarly commented: "The County has made a significant investment in preserving the biology in the area and the development of a high school on the site would impede the connectivity of the **wildlife corridors in the area** and significantly reduce the sensitive habitats found on-site." (Exhibit G, p. 8.)

2. Transportation & Safety Impacts

O8-40 The Project will be located along South Grade Road, creating dangers to passersby, nearby residents and Project visitors. Preserve Alpine's Heritage is concerned about the increased risk to pedestrians, drivers, bicyclists, skateboarders, and all others who use the road. Despite the fact that Preserve Alpine's Heritage raised these safety concerns in their scoping letters (DEIR Vol. II, p. 158), the DEIR utterly fails to disclose, analyze, or even mention this risk and concludes no hazards will be created by the Project design. There is no mention of previous collision-related fatalities along South Grade Road.

O8-41 Traffic expert Tom Brohard reviewed the Project design, DEIR, and supporting appendices. His findings and qualifications are detailed in Exhibit C. Mr. Brohard found the DEIR traffic safety analysis wholly inadequate, commenting, "in my over 50-years of traffic engineering and transportation planning experience, I believe that this is one of the worst [TIS] whose unsupported conclusions and recommendations were then carried forward into the [DEIR]."

O8-42 As concluded and described by Mr. Brohard, the Project will create risks of increased collisions—a significant impact that requires disclosure and mitigation under CEQA—through its location and design. (Exhibit C.) The DEIR even ignores its own Transportation Impact Study ("TIS"), which recommends the all-way stop design at the primary entrance *because* of the high pedestrian volumes the Project is anticipate to generate, and the history of collisions. The TIS further warns that the stopping sight distance is not met for the location of the all-way stop. (DEIR Vol. II, pp. 900, 940.) As detailed in Mr. Brohard's comments, the addition of the all-stop intersection actually increases the risk of collision. (Exhibit C, p. 4.)

O8-43 Mr. Brohard notes the extreme risks to bicyclists along South Grade Road, which will be increased by the Project. (*Id.*, p. 3.). Yet, the Project's attractions will bring more bicyclists—and the DEIR notes the inclusion of bike parking—potentially from the nearby schools (DEIR, p. 4.8-19.) The DEIR claims that the Project's operation would not include incompatible uses, such as farm equipment, that could create safety hazards due to increased congestion and faster moving vehicles encountering slower moving vehicles along South Grade Road. (DEIR, p. 4.17-12.) Yet as Mr. Brohard's comments emphasize, the Project will do just that, due to the existing road conditions, Project design, and expected horse trailers that will utilize the primary entrance. (Exhibit C, p. 4.)

O8-44

These real concerns were not taken seriously in the DEIR. Further, the Project's potential to create overflow parking on the shoulder and neighboring streets only increases these risks. The TIS states parking is prohibited along both sides of the roadway (DEIR Vol. II, p. 918), yet the DEIR notes signs can be used as needed to prevent potential overflow parking that may occur on South Grade Road. (DEIR, p. ES-2.) If the Project charges for parking, this risk is only increased, as more cars will park on the shoulder and on the neighboring streets. Potentially aware of these safety concerns, the TIS lists "Appendix I FHWA Uncontrolled Crosswalk Excerpt" in its Table of Contents, yet this information is missing from the Report. (DEIR Vol. II, p. 903.)

O8-45

Instead of addressing these legitimate risks during the public review process, the DEIR impermissibly defers analysis and mitigation to a later date, stating that the Department of Public Works (DPW) will review the Project for safety and sight distance. (DEIR, p. 4.17-12.) This would occur outside of the CEQA process and prevent the public and decisionmakers from understanding the true safety impacts of the Project (especially in deciding between alternatives.) This fails to mitigate the safety concerns raised by Mr. Brohard. (Exhibit C, p 3.) It is essential to understand the Project's safety impacts, and the feasibility of whether they can be mitigated, now. There also may be costs and further environmental impacts associated with future mitigation (for example, widening of the road, adding turn lanes), which must be addressed concurrently with the Project.

3. Greenhouse Gas, Energy, and Air Quality Impacts

O8-46

The DEIR presents a theme of shortcuts in analyzing the Project's impacts, especially from its operational Greenhouse Gas (GHG) and emissions. The Project alleges it will not create impacts because it will be community-serving and does not induce further growth, yet avoids any discussion of its recent application for Proposition 68 Regional Park Program grant funding, approved by the Board of Supervisors on October 20, 2021. Contrary to the DEIR's assertions, DPR stated that the Project will "attract visitors county-wide." (Exhibit D, p. 4.)[16]

[16] The DPR's September 23, 2020, bike course survey indicated that 49.2 percent of participants lived outside of the Alpine Community. (https://www.sdparks.org/content/dam/sdparks/en/pdf/Development/ATTACHMENT%20C%20September%2023,%202020%20Third%20Outreach%20Meeting%20Results.pdf.)

i. Greenhouse Gases & Vehicle Miles Traveled (VMT)

O8-47 The County recently affirmed its commitment to reduce its GHG emissions to address climate change, including through a Board of Supervisors directive to meet and exceed state GHG reduction mandates to guide the region to Zero Carbon, and to develop a legally-compliant Climate Action Plan. (**Exhibit I**.) The DEIR admits that the 2017 Scoping Plan relies on VMT reductions to achieve its goals, and the California Air Resources Board needs to lower VMT per capita by 14.3% from existing conditions to meet transportation assumptions and 2050 state climate goals. (DEIR, p. 4.6-5.)

Despite the state and County's focus on VMT reductions, the DEIR avoids a meaningful discussion or analysis of the Project's potential GHG impacts, allowing itself to avoid incorporation of feasible mitigation measures. The DEIR claims that in the absence of a numerical threshold for the project's region, the significance threshold can be determined by evaluating compliance with state, regional, or local GHG emission reduction plans. (DEIR, p. 4.8-15.)[17] The DEIR thus analyzes whether the Project would
O8-48 align with the SB 32 target, "such as CARB's 2017 Scoping Plan." (*Ibid.*)

The DEIR admits potentially significant impacts due to construction-related emissions that would not comply with the 2017 Scoping Plan, and claims mitigation through M-GHG-1. (DEIR, p. 4.8-17.) Yet, M-GHG-1 fails to adequately mitigate construction emissions and does not ensure the few practices that it purports to achieve. M-GHG-1 does not quantify the reductions it aims to achieve, and the three referenced construction BMPs are vague, unenforceable, and insufficient. (DEIR, p. 4.8-19.)[18]

O8-49 Further, the DEIR's finding of no significant GHG impacts, despite its failure to include any operational mitigation measures, lacks sufficient evidence and fails to disclose actual Project GHG impacts. In analyzing potential GHG impacts from operational emissions (502 MTCO2e annual emissions from area, electricity, mobile, waste, and water), the DEIR first describes several statewide programs in the 2017 Scoping Plan "that require no action at the project level and would benefit project-related

[17] In its transportation VMT impact analysis, Guidelines 15064.3 allows VMT to be analyzed qualitatively where existing models or methods "**are not available**". (DEIR, p. 4.17-6.) Existing models are available, evidenced by the DEIR's own VMT calculations. (DEIR Vol. II, p. 323.)
[18] For example, one BMP states: "[u]tilize alternative fueled equipment and vehicles, **such as** renewable diesel, renewable natural gas, compressed natural gas, or electric." (DEIR, p. 4.8-20.)

O8-49 cont.

emission sources." (DEIR, p. 4.8-18.) It appears that the Project first relies on outside GHG reduction efforts to find no GHG impacts, despite the fact that its avoidance of an actual GHG analysis hinders state reduction goals.

O8-50

The DEIR points to the County's decision to rescind its Transportation Study Guidelines ("TSG") on September 15, 2021, (DEIR, p. 4.17-8.) and relies on the lack of a County TSG numerical threshold as reasoning to avoid a quantitative GHG analysis and improperly claim less than significant impacts via a "VMT screening analysis." (DEIR, pp. 4.8-15, 19.)

O8-51

The DEIR states the Project will create 480 daily trips (383 MTCO2e per year), resulting in an annual VMT of 1,024,920.[19] (DEIR Vol. II, p. 323.) As a preliminary matter, these calculations appear to be erroneous. The GHG calculations use an "urban" classification despite the Projects admitted rural setting. (DEIR Vol. II, pp. 256, 320.) Further, it appears that the annual VMT projections would yield an assumed 5.85-mile distance per trip.[20] This contradicts the Project's distance from the town center and plans for a Regional Park to serve county-wide visitors. (Exhibit D, p. 4.) The Project ignores any analysis or mitigation through its improper screening criteria.

O8-52

The VMT Analysis (DEIR Vol. II, p. 869) conducted by Chen Ryan is based on an inapplicable category from the since-rescinded County Transportation and Study Guidelines (TSG.) (*Ibid.*) Chen Ryan concluded that the project falls under a "local serving public facilities and other uses [local parks and trailheads]" category. (*Ibid*.) Yet, the Appendix Study admits "this category is not in the OPR technical advisory screening criteria." OPR allows for a local serving *retail* land screening exemption on the premise it redistributes trips into the "**urban fabric.**" (DEIR Vol. II, p. 893; DEIR, p. 4.7-11.) This is inapplicable to a regional sports park. Further, the VMT study admits a "small project" exemption, projects creating less than 110 trips, would not apply to the Project. (DEIR Vol. II, pp. 889, 893.) The DEIR even claims that the Sportsplex Alternative, doubled in size and capable of hosting tournaments, would be presumed to have less than significant VMT impacts under this theory. (DEIR, p. X-12.)

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[19] The DEIR's "[e]stimation of emissions is for information purposes only." (DEIR, p. 4.8-16) The DEIR also improperly assumes a 30-year Project life. (DEIR, p. 4.8-19-20.)

[20] This number was calculated by dividing the reported VMT (1, 024, 920) by the ADT (480 trips) multiplied by 365 days a year.

O8-53 Ultimately, the DEIR provides a roundabout, self-serving "analysis" and conclusion of no GHG impacts. (DEIR, p. 4.8-19 [claiming that because the Project is assumed to have less than significant impacts, "mobile-source GHG emissions would not conflict with SB 743," therefore because reducing GHGs from passenger vehicles is a SB 743 objective, operation would not conflict with a 2030 target].)

O8-54 The DEIR also fails to quantify the release of GHG emissions from the loss of open space land that provides carbon capture.[21] The DEIR notes CARB's 2017 goal that "natural lands become carbon sinks to provide additional emissions reductions and flexibility in meeting the target," yet the DEIR fails to disclose or mitigate GHG emissions from loss of 25 acres of grasslands. (DEIR, p 4.8-17.) The DEIR also discloses the creation of area source emissions from 180 days of landscaping each year yet does nothing to mitigate these impacts. (DEIR, p. 4.8-13.)[22]

O8-55 The DEIR's failure to adequately analyze and disclose the Project's GHG impacts misses the opportunity to adopt on-site and in-County GHG mitigation measures, interfering with the County's recently-adopted climate goals, as well as state and regional climate goals.

ii. Energy Impacts

O8-56 Because energy, GHG impacts, and VMT are interrelated, the DEIR Energy Impacts discussion also improperly avoids any numerical analysis, also pointing to the County's decision to rescind its SB 743 threshold. (DEIR, p. 4.6-11.) Yet "Appendix F of the CEQA Guidelines requires that projects assess the energy impacts of a project when a fair argument can be made that the project will have significant environmental impact." *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 206.

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[21] See https://www.kqed.org/science/1927097/to-fight-climate-change-grasslands-may-be-a-safer-bet-than-forests [describing the value of grasslands for carbon capture]; https://iopscience.iop.org/article/10.1088/1748-9326/aacb39.

[22] The California Air Resources Board provides recommendations on how to mitigate landscaping emissions. (https://ww2.arb.ca.gov/our-work/programs/zero-emission-landscaping-equipment.)

O8-57 The DEIR fails to demonstrate avoidance of wasteful or inefficient energy use. (DEIR, p. 4.6-12.) First, it is unclear, and unlikely, that these are accurate representations of mobile source consumption if the DEIR continues to characterize the Project as a local-serving park, despite DPR's designation of the park as a "County-wide regional park." (Exhibit D.) The DEIR fails to provide the underlying assumptions for these figures. Further, the DEIR fails to disclose the energy impacts associated with the increased VMT to visit the park, as well as the energy required to ensure adequate water supply and wastewater treatment.

O8-58 The Project avoids a full analysis of the Project's energy impacts by delaying analysis of the water supply (which may require further infrastructure) and wastewater treatment—resulting in the improper piecemealing of the Project's impacts. Relatedly, were the energy impacts associated with the potential sewer extensions (construction and operations) included in this analysis?

O8-59 The DEIR also fails to meaningfully analyze the project's consistency with energy plans. The Project claims consistency with CARB's 2017 Scoping Plan, merely because CARB's programs would reduce project-related energy use with no action required at the project level. (DEIR, p. 4.6-15.) The DEIR notes the use of gasoline from visitors, but finds "[e]nergy requirements for fuel use associated with vehicles used for maintenance would go down over time due to improved motor vehicle fuel economy standards. The project does not include any features that would result in excessive long-term operational fuel consumption []. Therefore, fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary."[23] (DEIR, p. 4.6-14.)

O8-60 Preserve Alpine's Heritage would like to commend the DPR on the inclusion of photovoltaic (PVs) and the abstention from use of natural gas. However, the DEIR's deficient analysis results in an inaccurate finding of insignificant impacts and prevents the incorporation of feasible mitigation. The DEIR again cuts corners and avoids

[23] The DEIR also claims consistency with the SANDAG Regional Plan because the Project would not result in any population growth. (DEIR, pp. 4.6-11 to 12.) Yet, the SANDAG 2021 Regional Plan references the importance of preservation through MSCP lands. (https://sdforward.com/docs/default-source/2021-regional-plan/appendix-aa---regional-habitat-conservation-vision.pdf?sfvrsn=bb44fd65_2.) Approval of a Project that threatens MSCP Preserve land and impacts PAMA land is contrary to SANDAG's plans.

O8-60 cont. meaningful analysis of the Project's impacts from its energy-intensive amenities and creation of mobile source energy consumption as a regional park.

iii. Air Quality Impacts

O8-61 In finding insignificant air quality impacts, the DEIR similarly ignores the Project's plans to draw regional visitors. The Project DEIR admits it would generate criteria pollutants (via construction & operational emissions) of which the County is in nonattainment (DEIR, pp. 4.3-12, 15). Much of these emissions will come from mobile sources and fuel from landscaping.

O8-62 As part of determining potentially significant impacts, the DEIR asked whether the Project will conflict with an applicable air quality plan, and found consistency on the grounds that the development is consistent with anticipated growth in the applicable land use plans, because the applicable zoning allows "Community Recreation" uses subject to a Major Use Permit.[24] (DEIR, p. 4.3-20) This does not allow the DEIR to simply assume no conflict and avoid incorporating mitigation measures to reduce emissions from mobile sources and landscaping fuel.[25] (DEIR, p. 4.3-21.) Further, this finding obscures the fact the Park will "attract visitors county-wide." (Exhibit D, p. 4.) The recent Alpine Community Plan Update notes the potential addition of the Project to increase acreage for *local parks*, but explicitly indicates there are no planned Regional Parks in Alpine. (Draft Alpine Community Plan Update, pp. 71-72.)[26] Therefore, the addition of a Regional Park to Alpine was not considered in the General Plan.

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[24] The County states that a Major Use Permit is intended to provide for accommodation of land uses that include potential adverse effects on surroundings, requiring an environmental initial study and further potential environmental requirements. (https://www.sandiegocounty.gov/pds/zoning/formfields/PDS-313.pdf.) Before granting a use permit, the granting authority must make favorable findings about the Project's harmony with adjacent property, availability of public facilities and utilities, the capacity of surrounding streets, suitability of the site for the type and intensity of use, and that requirements with CEQA have been met. (*Ibid*.) The Permit requires letters to be submitted by the districts that will provide sewer service (p. 3), and water service (p. 4), which are lacking here. Therefore, the DEIR improperly used the fact that a community park *could* be allowed via such a permit as its threshold in finding no impacts. (DEIR, p. 4.3-20.)

[25] See https://ww2.arb.ca.gov/our-work/programs/zero-emission-landscaping-equipment.

[26] https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf.

Finally, Preserve Alpine's Heritage requests further clarification on two items. The DEIR lists a Potentially Significant impact from objectionable odors due to the equestrian manure, which it plans to mitigate through a Manure Management Plan that will cover the manure only by a lid or tarp. (MM-AQ-1; DEIR, p. 4.3-25.) Preserve Alpine's Heritage requests analysis and proper mitigation of the potential environmental impacts of stored manure during rain events via overflow and runoff onto surrounding landscape, especially considering the location and sloping of the equestrian staging area. Additionally, the DEIR admits that during operations, the onsite sewer treatment system may "have the potential to generate objectional odors." (DEIR, p. 4.3-25) but does not provide any mitigation. The DEIR must fully disclose and mitigate potential odor impacts from the on-site septic.

O8-63

4. Wildfire

The Project is located in a Very High Fire Hazard Severity Zone (VHFHSZ), was directly affected by wildfire in 2018, and is situated in historical major wildlife corridors. (DEIR, pp. 4.9-2 to 3.) Nonetheless, the DEIR claims no increased wildfire risks. (DEIR, p. 4.9-20.) The DEIR improperly bases this conclusion on the existence of outside ordinances and regulations, a Fire and Emergency Operation Assessment (FEOA) prepared by Rohde and Associates that was not included in the DEIR, and incorporation of voluntary measures to avoid declaration of a significant impact. Instead of independently acknowledging the Project's significant impacts to wildfire risks and subsequently discussing mitigating measures to address such impacts, the mitigation measures are characterized in the DEIR as being part of the project. (*Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 656.)

O8-64

The DEIR states it incorporates information from the FEOA, but does not include the FEOA in the DEIR body, or even attach it as an appendix. (DEIR, pp. 4.9-2; viii [listing the included appendices].) This prevents the public from fully understanding the magnitude of the Project's impacts on wildfire risks. While the DEIR cites the November 2020 FEOA in its references, it does not even provide an URL to access. (DEIR, p. 9-15.) The public is also precluded from analyzing whether the Project is in fact adequately incorporating the FEOA's recommendations.

O8-65

Exclusion of the FEOA report also prevents analysis of whether certain recommendations would have environmental impacts on their own—especially given the

O8-66

O8-66 cont. sensitive and important biological resources on-site (for example, mechanical treatment, treatment by goat grazing, modification zones, etc.)

O8-67 In finding there are no significant wildfire impacts, the DEIR claims, "County DPR will also implement the recommendations provided in the FEOA prepared by Rohde and Associates," and proceeds to list vague, general recommendations. (DEIR, p. 4.9-22.) No information is provided on the validity of the Project's claims that it will serve as a "Temporary Safe Refuge Area," or ensure safe ingress and egress. (*Ibid*.) Most importantly, **nothing in the DEIR mandates these recommendations.** The FEOA must be incorporated into the DEIR and re-circulated for public review.

O8-68 The DEIR also implies that its designation as VHFHSZ actually improves fire safety, as "in response to this designation" the surrounding fire districts maintain fire prevention regulations. Yet, compliance with applicable fire codes does not obviate the need to analyze existing significant impacts prior to mitigation measures. The Project's location in a VHFHSZ necessitates a full discussion and disclosure of the Project's wildfire risks, as well as inclusion of the FEOA in the DEIR for accurate analysis and adequate mitigation.

O8-69 A "sufficient discussion of significant impacts requires not merely a determination of whether an impact is significant, but some effort to explain the nature and magnitude of the impact." (*Sierra Club v. Cty. of Fresno* (2018) 6 Cal. 5th 502, 519.) The DEIR only briefly lists the site-specific risks and admits that adding people will increase ignition risk (DEIR, 4.9-3), yet does not adequately disclose or analyze the *magnitude* of the Project's risks given its location and presence of grasslands onsite and on Wright's Fields. Nor does the DEIR disclose how the Project's amenities—especially BBQs—add to this risk. Preserve Alpine's Heritage requests the removal of BBQ pits from the Project design. Simply "banning/taping" them off during Red Flag days (which is also not included as an enforceable mitigation measure) is insufficient. (DEIR, p. 4.9-21.) Further, onsite fire hydrants and water storage tanks should be included in Project design.

O8-70 The DEIR relies on assurances that an FEOA's recommendations will be implemented—without even including the FEOA in the DEIR, to claim no significant impacts. The DEIR admits construction can cause fires, yet concludes no wildfire impacts due to implementation of BMPs to mitigate, without even including the BMPs as enforceable mitigation measures. (*Ibid*.)

O8-71 The DEIR also finds no evacuation impacts, despite the addition of 500 daily visitors on a two-lane, winding road. This conclusion is premised on the TIS finding that the Project would not affect roadway circulation. Yet, the TIS did not appear to analyze freeway mainline segments—major evacuation routes for regional access. (DEIR Vol. II, p. 898; DEIR, p. 4.17-1.) Further, DPR has designated this to be a Regional Park—did the evacuation analysis consider the effect of regional visitors on evacuation times?

O8-72 The DEIR does not provide adequate analysis of evacuation impacts, only pointing to existing regional plans and its own future plans to prepare a Site Evacuation Plan. This defers analysis and mitigation of evacuation impacts to a later date. Further, the plan will only address evacuation within the boundaries of the Project site. (DEIR, pp. 4.17-14, 4.20-10.) The Project must consider the evacuation impacts on surrounding residents, and not simply rely on a to-be determined evacuation plan that does not extend beyond the boundaries of the Project.

O8-73 Finally, the Project claims there will be adequate response times based on the FEOA and Operational Area Emergency Operations Plan. (DEIR, p. 4.20-10.) The DEIR defers analysis of the impacts (via approval by the County Fire Marshall) to after the public review. (DEIR, pp. 4.20-11, 5-31.) Because the FEOA study is not included in the DEIR, the claim of adequate response times cannot be fully analyzed. The public needs to review the underlying assumptions for the FEOA's conclusions (for example, did the FEOS assume all emergency responders are available immediately and not delayed in route to the park?)

O8-74 Now is the time to review and mitigate potential impacts to response times, evacuation, and ignition risks. The DEIR demonstrates a theme of obscuring full analysis and disclosure of the Project's impacts, relying on outside plans and regulations in finding no impacts, improperly subsuming mitigation measures in the Project (as non-binding "recommendations"), and deferring analysis until after Project approval.

5. Utilities Impacts: Water Supply & Waste Water

O8-75 While the DEIR admits significant utilities impacts, it avoids full disclosure and mitigation, and relies on improperly deferred mitigation. (DEIR, p. 4.19-14.) The DEIR also improperly piecemeals the Project's water supply and wastewater treatment. An agency improperly "piecemeals" a project when they break it into segments and fail to analyze the whole project in one environmental document, violating CEQA's

O8-75 cont.

requirement that a "project" include the "whole of an action." (CEQA Guidelines Section 15378, subd. (a).) When a project contemplates future expansion—such as further water infrastructure—the lead agency is required to review all phases of the project before it is undertaken. (*Nat. Res. Def. Council, Inc. v. City of Los Angeles* (2002) 103 Cal. App. 4th 268, 284, *citing Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 396.)

i. Water Supply

O8-76

An adequate and reliable water supply is crucial to the Project's longevity and operation of the Project, especially as California recently declared a drought in several counties—including San Diego.[27] The DEIR reports anticipated demand of 16.4 million gallons/year. (DEIR, p. 4.1912.) The service boundary of the district water supplier, Padre Dam Municipal Water District (PDMWD), imports its entire potable water supply through San Diego County Water Authority and does not expect to meet demand through 2040 under dry year conditions. (DEIR, p. 4.19-2.) The DEIR shows that during normal conditions, supply will exactly equal demand in coming years. (*Ibid*., Table 4.19-1)

O8-77

The DEIR acknowledges a potentially significant impact to require new or expanded water facilities, "potentially requiring the relocation or construction of new or expanded water facilities" that could result in physical impacts. (DEIR, p. 4.19-14.) The DEIR claims mitigation under MM-UTIL-1, which simply requires it to complete a Water Study: "[P]rior to issuance of building permit," DPR "shall coordinate" with PDMWD to assess capacity of existing infrastructure that would serve the site, and if insufficient capacity exists, "shall implement the necessary improvements prior to the operation of the project, as determined by PDMWD." If the Project would result in need for new or expanded facilities, DPR shall analyze potential environmental effects of improvements in accordance with CEQA. (DEIR, p. 4.9-16.) This is classic piecemealing: segmenting the Project to avoid review in its entirety. Related water

[27] https://timesofsandiego.com/politics/2021/10/19/newsom-extends-drought-emergency-across-state-to-include-southern-california/. Increasing droughts from climate change absolutely should not preclude the provision of parks and recreational opportunities, including to Alpine residents. However, the realities we face from climate change require careful consideration and assurances of adequate water supply, as well as the need and viability for certain amenities and scale given a specific location and/or existing facilities. A park that fails due to insufficient resources does little for a community.

O8-77 cont. infrastructure requirements must be reviewed in conjunction with the Project—otherwise the Project's impacts are obscured and minimized.

O8-78 The DEIR also acknowledges a potentially significant impact, insufficient long-term water supplies, to serve project during operation. The Project purportedly "mitigates" this by requiring confirmation of water supply prior to the issuance of building permits. (DEIR, p. 4.19-18.)

O8-79 The California Supreme Court found a similar approach of delaying discussion of locating a water source (and associated impacts) to violate CEQA in *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 430–431. CEQA's "informational purposes are not satisfied by an EIR that simply ignores or assumes a solution to the problem of supplying water to a proposed land use project. Decisionmakers must, under the law, be presented with sufficient facts to 'evaluate the pros and cons of supplying the amount of water that the [project] will need.' Nor can the DEIR mitigate by withholding issuance of building permits absent location of adequate water supply: the DEIR must address the project and assume it will be built." (*Id*. at p. 429.) The Project's water supply (and potential associated impacts) must be disclosed now, so that decisionmakers may make an informed decision on whether to approve the Project.

ii. Wastewater

O8-80 For utilities, the Project proposes to either connect to the existing sewer system or include a septic system to serve the restroom facilities, administration facility/ranger station, and volunteer pad. The DEIR delays analysis of wastewater treatment, another example of improper piecemealing. The DEIR expects the Project to create 3.1 million wastewater gallons per year, nearly all from landscape. (DEIR, p. 4.9-11.) The DEIR should fully analyze and disclose the impacts of the proposed wastewater treatment, especially given the history of site-specific challenges associated with each option.

O8-81 To make matters worse, the DEIR admits concerns with the soils supporting the use of septic tanks. The Project is underlain by Bosanko stony clay, rated as "severe" for septic tank effluent disposal due to its low permeability (DEIR, p. 4.7-19.) The Project might include an Onsite Wastewater Treatment System (OSWS) that must conform to Regional Water Quality Control Board standards. Yet, the DEIR improperly defers this analysis as well, simply noting that the County Department of Environmental Health will

O8-81 cont.

review the design layout. The site would be evaluated "for a determination of the suitability of onsite soils for the proposed septic system." This is improper deferral of disclosure, analysis, and mitigation of the Project's impacts, especially given the soil's known poor rating for on-site septic, and should be analyzed in the DEIR. The DEIR should be re-circulated to disclose the above concerns.

6. Visual Resources & Noise Impacts

O8-82

The Project will markedly change the character and atmosphere of the site and Wright's Field. The rural site displays natural grasslands amidst a backdrop of mountains. Much of the project site is in a Resource Conservation Area (DEIR, p. 4.1-2) and Alpine is a designated Dark Sky Town. The DEIR admits the Project will substantially degrade rural views, and would transform rural, undeveloped land to a complex Regional Park. (DEIR, p. 4.1-14.)

O8-83

The DEIR claims to mitigate this impact by inclusion of "native vegetation" along project boundaries. (*Ibid*.) Yet, the Project plans for building heights of 15-19 feet. (DEIR, pp. 3-2 to 3-3.) The mitigation measure does little to mitigate the immense change to the site's aesthetic views and rural character. Visual simulations display tall trees (Figure 4.1-3), yet the mitigation measure only vaguely requires "native vegetation." (DEIR, p. 4.1-14.) Further, the DEIR admits the Alternative 2 would result in significant and unavoidable impacts on the visual quality and character of the site due to conversion of the site from undeveloped rural character to a developed site. It is unclear what distinguishes Alternative 2 from the Project besides an increase in size, as Alternative 2 plans to utilize much of the same features. (DEIR, p. 6-2.) Realistically, the mere requirement of native vegetation around the Project site, without any details or design, fails to mitigate substantial impacts to the rural views. Further, the DEIR claims mitigation of impacted nighttime views by turning lights off an hour after closing, and the DEIR reports the Park will close at dusk (p. 1-1), yet the noise mitigation requires quiet hours after 10 pm. (p. ES-21.)

O8-84

The DEIR also claims to mitigate noise by enforcement of regulations, yet carves out a large exception for use of the PA speaker. (DEIR, p. ES-21) It also contradicts earlier assertions that the park will close by sunset (p. 1-1) in starting quiet hours by 10 pm. (ES-21.)

7. Cumulative Impacts

O8-85 The Project's cumulative impacts should be considered in conjunction with the ongoing Alpine Community Plan Update ("CPU"). The DEIR Cumulative Impacts section notes the Alpine CPU, but lacks any description of the Alpine CPU or meaningful analysis. (DEIR, p. 5-2.) The cumulative impacts analysis is further deficient for the reasons detailed above in this letter.

C. DPR Improperly Pre-Committed to a Large, Regional, Active Sports Complex at this Location in Violation of CEQA

O8-86 Under *Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, an agency may not commit to a project before environmental review. Yet, there have been statements and reports made indicating that DPR has already decided to construct a large, regional, active sports park at this location.[28] The inadequate environmental review and omission of alternatives indicate this as well.

III. Approval of the Project Would Violate State Planning and Zoning Law

O8-87 Development decisions must be consistent with applicable General and Community Plans. (Government Code Section 65000 et seq.) Further, CEQA considers land use plan inconsistencies an impact that requires disclosure and analysis. For the reasons detailed above, the Project conflicts with conservation, sustainability, and development policies in the County Plan, the Alpine Community Plan, the Trail Network Plan, and the MSCP Subarea Plan.[29] Mr. Hamilton's letter further details how the Project undermines the MSCP Sub Area Plan. (Exhibit A, p. 15.)

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[28] See Alpine Steering Committee minutes received through a Public Records Act request, **Exhibit J**; https://thealpinesun.com/you-are-getting-this-park-whether-you-like-it-or-not/; https://www.sdparks.org/content/dam/sdparks/en/pdf/Development/2019%2002%2027%20(01)%20Alpine%20Park%20Acquisition%20-%2098%20Acres.pdf ["The County intends to build an active park on this site"]; Exhibit D [application for Regional Park Program].

[29] Including, but not limited to: General Plan policies LU 2, LU-2.4, LU-5.3, LU-6, LU-6.10, COS-1, COS-2, COS-4.

IV. Conclusion

O8-88 In sum, the EIR is legally inadequate and cannot provide a basis for Project approval. Further, the Project is inconsistent with applicable regional policies. For these reasons, Preserve Alpine's Heritage requests denial of the Project as proposed. Thank you for your consideration of these comments.

Sincerely,

Katie Pettit
Josh Chatten-Brown

Exhibit A

HAMILTON BIOLOGICAL

November 15, 2021

Kathryn Pettit
Chatten-Brown, Carstens & Minteer
2200 Pacific Coast Highway, Suite 318
Hermosa Beach, CA 90254

SUBJECT: REVIEW OF BIOLOGICAL RESOURCE ISSUES ALPINE COUNTY PARK PROJECT DRAFT EIR COUNTY OF SAN DIEGO

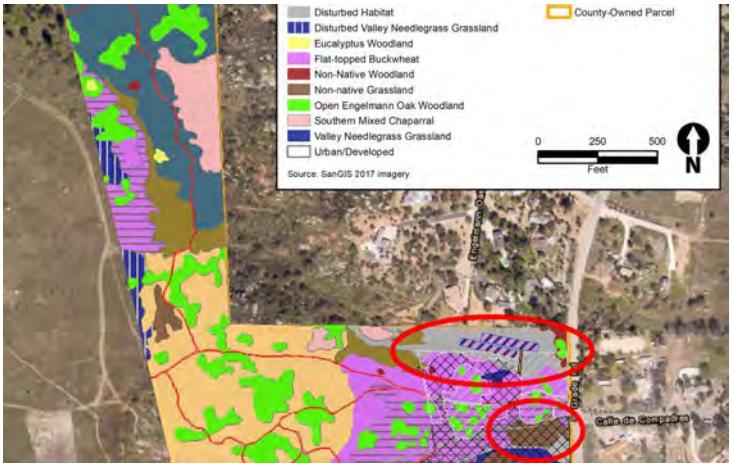
Dear Ms. Pettit,

O8-88 At your request, Hamilton Biological, Inc., has reviewed a DEIR prepared by the County of San Diego Department of Parks and Recreation (the "County") for the Alpine County Park project (the "proposed project" or "project"). As part of my review, I visited the project site and the adjacent Wright's Field Preserve on November 8, 2021.

MIS-MAPPED VEGETATION POLYGONS

My visit to the project site took place on November 8, at a time of year when the species composition of grasslands is difficult to accurately evaluate. Although the fall timing of the visit precluded a complete review of the DEIR's vegetation mapping, I did identify two areas of MSCP Tier I and Tier II communities that were erroneously mapped as Tier III and IV communities. Please refer to the marked-up excerpt from Figure 3 (Vegetation Communities) provided below, followed by Photos 1 and 2 that show the two areas in question.

O8-89



Excerpt from Figure 3 in the DEIR's Biological Resources Technical Report (Vegetation Communities). The red ellipses show areas mis-mapped as "Disturbed Habitat" (gray polygon in upper ellipse) and as "Non-native Grassland" (brown polygon in lower ellipse).

Page 1-14 of the DEIR's Biological Technical Report describes "Disturbed Habitat" as follows:

> Disturbed habitat supports either no vegetation or a cover of nonnative weedy species that are adapted to a regime of frequent human disturbance. Many of the characteristic species of this habitat are also indicator species of annual grasslands, although disturbed areas tend to be dominated more by forbs than grasses. Characteristic species may include tumblewood [*stet*] (*Salsola tragus*), tocalote (*Centaurea melitensis*), Italian thistle (*Carduus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), and African crown daisy (*Glebionis coronaria*).
>
> Disturbed habitat within the BSA consists of dirt roads and multi-use trails. A large stand of disturbed habitat was mapped in the northern portion of the BSA where vegetation has been cleared for safety reasons to minimize wildfire risk, as part of the County's fuel modification efforts.
>
> Disturbed areas consist of mostly bare ground or disturbance-adapted species and occur throughout the BSA. Disturbed habitat is not considered a sensitive vegetation community.

Photo 1, below, shows the "large stand of disturbed habitat" that the County has cleared for residential fire protection, where leach fields could be installed as part of the proposed project.

O8-89 cont.



Photo 1. Facing east toward South Grade Road, showing the 0.4-acre area of "Disturbed Habitat" that lies within a residential brush-clearance zone that the DEIR proposes for potential leach fields. Since the vegetation in this areas is predominantly native, and includes only scattered "nonnative weedy species," it should be mapped as disturbed coastal sage scrub. *Photo: Robert A. Hamilton, 11-8-21.*

Contrary to the DEIR's definition of "Disturbed Habitat," the area shown in Photo 1 supports mainly native shrub species, especially Deerweed (*Acmispon glaber*), Broom Baccharis (*Baccharis sarothroides*), California Sagebrush (*Artemisia californica*), California Buckwheat (*Eriogonum fasciculatum*), Saw-toothed Goldenbush (*Hazardia squarrosa* var. *grindelioides*), and California Matchweed (*Gutierrezia californica*). The spaces between these shrubs consists mainly of bare ground and not "a cover of nonnative weedy species that are adapted to a regime of frequent human disturbance." Therefore, the area does not fit the DEIR's description of "Disturbed Habitat;" instead, it fits the definition of disturbed coastal sage scrub.

Page 1-15 of the DEIR's Biological Technical Report describes Valley Needlegrass Grassland as follows:

> Valley needlegrass grassland is a mid-height (to 2 feet) grassland dominated by perennial, tussock-forming purple needle grass (*Stipa pulchra*). Native and introduced annuals occur between the perennials. A 5- to 10-percent cover threshold of native species indicates it is native grassland.

Photo 2, below, shows an area of native Valley Needlegrass Grassland, approximately 0.15 acre in size, mis-mapped as Non-native Grassland in the DEIR.

O8-89 cont.



Photo 2. Facing southeast toward South Grade Road, showing approximately 0.15 acre of native Valley Needlegrass Grassland that the project biologists mis-mapped as Non-native Grassland. Each of the tufts of grass is native needlegrass (*Stipa* sp.), providing substantially more than the 5- to 10-percent cover that defines this native grassland community. The polygon's location could be readily ascertained in the field, and in this photo, by its relation to the expansive disturbed area in the background. *Photo: Robert A. Hamilton, 11-8-21.*

I request that the project biologists field check all of the vegetation mapping presented in the DEIR and determine whether any additional corrections may be needed. At minimum, the EIR's impact analysis and mitigation measures should be revised to reflect the 0.4-acre polygon of disturbed coastal sage scrub (MSCP Tier II) mis-mapped as Disturbed Habitat (Tier IV) in the DEIR and the 0.15-acre polygon of Valley Needlegrass Grassland (Tier I) mis-mapped as Non-native Grassland (Tier III).

O8-89 cont.

DEIR Fails to Analyze Impacts to the Western Spadefoot

The Western Spadefoot (*Spea hammondii*), is a California Species of Special Concern. It is estimated that this grassland-associated toad has been extirpated from 80 percent of its range in southern California due to agricultural expansion and urban development (US Fish and Wildlife Service 2005; Stebbins and McGinnis 2012; Baumberger et al. 2019).

On July 11, 2012, a petition to federally list the Western Spadefoot was submitted to the US Fish and Wildlife Service (USFWS), and on June 9, 2015, a 90-day finding was issued stating that the petitioned action may be warranted. The USFWS has been evaluating the petition since 2015, and could issue its decision to either list or not list the Western Spadefoot as threatened or endangered at any time.

O8-90

On February 8, 2019, ICF biologists documented Western Spadefoot eggs on the project site. As reported in ICF's *2018-2019 Wet and Dry Season Fairy Shrimp Surveys* report (an appendix to the DEIR), the eggs were observed in seasonal pool "AP-007." Given that ICF found this species on the project site, and given that CDFW's NOP comment letter twice mentioned that Western Spadefoots are known to be present on and around the project site, it is of concern that the DEIR (a) failed to discuss the spadefoot's status and distribution on the project site; (b) identified no potential impacts to this special-status species; and (c) identified no mitigation for potentially significant impacts of the proposed project on the Western Spadefoot.

Western Spadefoot Life History and Ecological Requirements

A recently published telemetry study of Western Spadefoots in southern California provides important current information on the species' life history and ecological requirements (Halstead et al. 2021), following on earlier telemetry studies in the same region (Baumberger 2013, Baumberger et al. 2019).

Movements of Adult Spadefoots Between Breeding Pools and Aestivation Sites

O8-91

Western Spadefoots spend large parts of the year aestivating underground, often well away from their breeding ponds. As observed by Halstead et al. (2021:1385):

> The distance that western spadefoots move from breeding pools is a key metric for western spadefoot conservation. Distance from the breeding pool indicates how much terrestrial habitat around a breeding pool might be used by western spadefoots, and provides a direct link to the effective reserve sizes needed to preserve western spadefoot populations.

. . .

> The need for core terrestrial habitats around amphibian breeding sites is documented (Semlitsch 1998, Semlitsch and Jensen 2001, Semlitsch and Bodie 2003, Harper et al. 2008, Searcy et al. 2013), as are the negative consequences of roads separating adult habitat from breeding pools (Becker et al. 2007, Brehme et al. 2018). Ensuring that enough terrestrial habitat exists to provide the life cycle needs for western spadefoots is best measured by the predictive distribution of distance from breeding pools. The 95th percentile of the posterior predictive distribution for western spadefoot asymptotic distance from the breeding pool was 486 m at Crystal Cove. This predicted value encompassed the maximum distance from the breeding pool of all but 1 of the spadefoots at the site.

Baumberger et al. (2019:6) found:

> The maximum distance the spadefoots were found from the pools ranged from 16 to 262 m (Table 1, S1 Table), with a mean maximum distance of 69 m ± 61.48. The spadefoots used a mean of 13 burrows (SD ± 8.5), and the mean distance between burrow locations was 18 m (SD ± 24.2). They used 4–31 unique burrow sites (mean 11 ± 7.8) during the study. Nine of the 15 spadefoots (60%) reused one or more burrows at least once after moving to a different burrow. Outside of their aestivation period, the spadefoots shifted their burrow location an average of every 8 ± 7 days, and 147 of 194 (~76%) movements between burrows were ≤ 25 m.

O8-91 cont.

In order to mitigate potential adverse effects associated with development edge upon Western Spadefoots, and to accommodate the movement of the toads between breeding ponds and upland aestivation sites, the USGS (Rochester et al. 2017) recommended that the City of Santee protect an **undeveloped buffer measuring 300 to 400 meters** around Western Spadefoot breeding ponds. This range is consistent with conservation recommendations for the Western Spadefoot contained in the *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (US Fish and Wildlife Service 2005:II-231):

> Based on calculations from upland habitat use data analyzed by Semlitsch and Brodie (2003), a minimum conservation area to preserve the ecological processes required for the conservation of amphibians may fall within a distance of approximately 368 meters (1,207 feet) from suitable breeding wetlands.

Note that even the larger recommended buffer distance of 400 meters falls far short of the 602-meter movement of an adult spadefoot recorded in coastal Orange County (Halstead et al. 2021), and does not encompass the 486-meter distance that represents "the 95th percentile of the posterior predictive distribution for western spadefoot asymptotic distance from the breeding pool" in coastal Orange County. Figures 1 and 2, on the following page, show what buffer distances of 300 and 400 meters would look like on the project site.

O8-91 cont.





Figure 1 (left) and Figure 2 (right). The yellow circle in Figure 1 represents a 300-m buffer around Western Spadefoot breeding pool AP-007, and the yellow circle in Figure 1 represents a 400-m buffer. These are the minimum and maximum undeveloped buffer distances that the USGS recommended around spadefoot breeding ponds in Santee, San Diego County (Rochester et al. 2017). *Aerial Source: Google Earth Pro.*

"Edge Effects" of Development Near Spadefoot Habitats

The potential for long-term persistence of Western Spadefoots in a given area relates to the level of nearby urban development, which may be thought of as the accumulation of edge effects and other urban impacts. Rochester et al. (2017) discussed several classes of potential adverse effects upon Western Spadefoots that can result from nearby developed areas. Several relevant edge effects potentially associated with the proposed Alpine Regional Park project are discussed in the following paragraphs.

O8-92

Altered watershed dynamics resulting from increased impermeable surfaces within the developed areas can result in a more rapid transfer of rain into the aquatic system within the conserved area rather than the gradual accumulation of water as it seeps into the ground and makes its way through the system naturally. Runoff may also contain a higher contaminant load from vehicles, pet waste, and landscape activities. Altered hydrology can lead to increased sediment transport into the aquatic system, covering egg masses with silt. Spadefoot breeding sites are not typically within flowing drainages, and may not be impacted directly, but contaminants can be carried through the food chain and increased flows can alter the available habitats.

Introduced Argentine Ants (*Linepithema humile*) frequently extend from the urban edge into the first 200 meters of undeveloped habitat, and where streams and creeks extend into the habitat, Argentine ants may also follow. Argentine Ants have been documented to alter both the native ant community and the overall invertebrate community, and Western Spadefoots feed mostly on insects. If Argentine Ants disrupt the local invertebrate community, this could impact availability of suitable prey for the Western Spadefoot. Additionally, small Western Spadefoot metamorphs could be vulnerable to attack by the omnivorous Argentine Ant.

O8-92 cont.

Increased outdoor activity in areas adjacent to the new active park, including hiking and mountain-biking, as well as increased presence of dogs, both on- and off-leash. These uses can prevent Western Spadefoots from using otherwise suitable breeding ponds, can increase sedimentation through disturbance of pools, and can decrease the longevity of seasonal pools (e.g., due to the action of bike tires crossing through pools). Mountain bikes can also cause direct mortality of Western Spadefoot tadpoles by passing through pools and pushing water and tadpoles out of the pool.

Impact Analysis for Western Spadefoot

O8-93

Grading for Alpine Regional Park would cause direct mortality of aestivating Western Spadefoots, and would permanently remove approximately 23 acres of grasslands and other open habitats that Western Spadefoots use as breeding and aestivation habitats. Edge effects associated with ongoing operation of the park would impact Western Spadefoots in preserved habitats on the project site and in the adjacent Wright's Field Preserve. The proposed loss and degradation of 23 acres of occupied breeding and aestivation habitats represent significant impacts to the Western Spadefoot.

The Western Spadefoot is not a "covered" species under the MSCP, and therefore the project's significant impacts to this species would not occur within a regional framework designed to conserve populations of this species. Thus, the project's impacts to this species are also significant in a cumulative sense.

Mitigation for Significant Impacts to the Western Spadefoot

Given that spadefoot populations require extensive buffering from development edges to remain viable, and no such buffering has been provided for in the project design, the preservation of undeveloped portions DEIR provides no legitimate mitigation for the project's impacts to the Western Spadefoot. In fact, direct and indirect impacts associated with implementation of the Alpine Regional Park project seem likely to result in the extirpation of Western Spadefoots from the adjacent Wright's Field Preserve.

O8-94

Because the Western Spadefoot is not a covered species under the MSCP, the Alpine Regional Park DEIR cannot rely upon the MSCP's habitat tier mitigation ratios to reduce the project's impacts to Western Spadefoots to below the level of significance.

Because the County and the EIR preparer failed to so much as mention the Western Spadefoot in the DEIR, despite the species' known presence on the project site, the DEIR's CEQA analysis is grossly deficient. Furthermore, because the spadefoot is not an MSCP covered species, the tier-based compensatory mitigation strategy laid out in the DEIR fails to address the project's significant impacts to this species. It is unclear how these fundamental omissions can be adequately addressed in the FEIR.

The County is encouraged to identify a project alternative that would achieve the most important project objectives without significantly impacting the Western Spadefoot.

BAT IMPACTS AND MITIGATION

Page 1 of the bat survey report, included as a technical appendix to the DEIR, states:

> Drew Stokes, San Diego Natural History Museum biologist, conducted active and passive bat surveys within a 92.6-acre parcel (survey area) owned by the County of San Diego.

On November 12, 2021, I spoke with Drew Stokes about his surveys, and about the potential effects of the proposed project on bats, especially the Pallid Bat. Mr. Stokes stated that he conducted his surveys as a general inventory of the bats that occur on the site, not for the purpose of evaluating the effects of establishing an active park on 23 acres in the southeastern part of the project site. Figure 1 from the DEIR's Biological Resources Technical Report, reproduced below, shows that no Anabat detection stations were established in the southern third of the project site, in the native grasslands proposed for removal for the proposed project.

O8-95

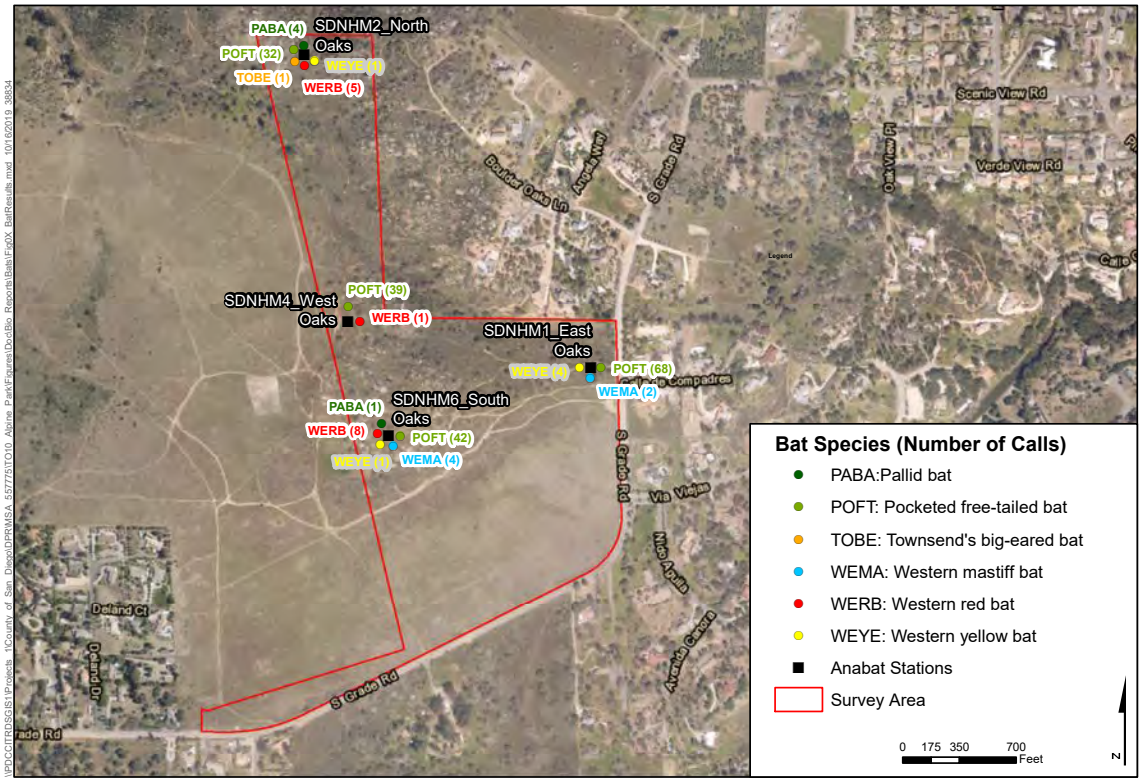


Figure 1
Biological Resources Technical Report
Alpine Park Project

Reproduction of Figure 1 from the Biological Resources Technical Report. Since no Anabat detection stations were established in the southern part of the project site, where the main area of native grasslands are proposed for removal, the project biologists lack baseline data needed to evaluate the project's impacts to bats.

In a bat study designed to evaluate the proposed park project, Anabat sampling would have taken place within the main grassland area proposed for impacts. During our conversation Mr. Stokes suggested that sampling of the grasslands and other habitats on the project site for large arthropods, which form the main prey items of Pallid Bats, also would have been useful for determining the value of the grasslands and other habitats for Pallid Bats. No such sampling was conducted, however.

Mr. Stokes found that the project site supports a remarkably high diversity of bats, with his focused surveys recording 15 of the 22 species of bat known from San Diego County. Page 3 of the DEIR's bat survey report states:

O8-95 cont.

> The oak woodland and grassland habitats found on the Alpine Park preserve are likely serving as high quality foraging (and perhaps roosting) habitats for a high diversity of bats including several California species of special concern.

Figure 1 from the bat report, reproduced on the previous page of this letter, shows that the greatest numbers of bat detections were recorded at the two southernmost Anabat stations (the area closest to proposed impacts). Although no Anabat sampling was conducted in the southern third of the project site, Mr. Stokes stated that he expects that the site's native grasslands represent important habitat for bats — especially the Pallid Bats, which is known to forage on the ground in grasslands. Whatever the case, the DEIR does identify potentially significant impacts to the Pallid Bat resulting from the loss of approximately 22 acres of prime foraging habitat located near the last two Pallid Bat roost sites known in San Diego County, as well as fragmentation of the habitat that would not be preserved. The DEIR's treatment of the Pallid Bat warrants scrutiny.

Analysis of Pallid Bat Issues

The *Management and Monitoring Strategic Plan for Conserved Lands in Western San Diego County: A Strategic Habitat Conservation Roadmap* (San Diego Management and Monitoring Program and The Nature Conservancy 2017) — also referred to as the MSP Roadmap — is a comprehensive, landscape-scale adaptive management and monitoring framework for prioritized species and vegetation communities in the MSP Roadmap Area (MSPA), which "encompasses the plan areas for the MSCP, MHCP, proposed NCP, and lands immediately to the east of these plan areas up to the watershed divide." By establishing biological goals and measurable objectives across the region, the MSP Roadmap provides for a coordinated effort among multiple key organizations in western San Diego County in the implementation of adaptive management and monitoring actions using the same approach. The MSP Roadmap categorizes and prioritizes plant and animal species, vegetation communities, and threats/stressors, identifies geographic locations for management and monitoring actions, provides specific timelines for implementation, and establishes a process for coordination and implementation. Under the MSP Roadmap, "Category SL" includes "species whose persistence in the MSPA is at high risk of loss without immediate management action above and beyond that of daily maintenance activities."

O8-96

Among the seven special-status bat species detected on the Alpine Regional Park project site, the DEIR focuses most of its attention on the Pallid Bat (*Antrozous pallidus*). As explained in the Pallid Bat species account in the MSP Roadmap (San Diego Management and Monitoring Program and The Nature Conservancy 2017):

> Pallid bats should be managed as a Species Management Focus Category SL Species due to high risk of loss from Conserved Lands in the MSPA and because managing vegetation alone will not ensure its persistence (see Vol. 1, Table 2-4). The pallid bat is at a high risk of loss from the MSPA as it is sensitive to urban development and has been lost from large areas of the MSPA where it occurred in the 1930s and 1940s (Miner and Stokes 2005; Stokes et al. 2005). It is currently known only in very small numbers in 4 MUs, and is at high risk of multiple threats (see Vol. 3, App. 1, Species Profiles).
>
> The pallid bat has declined in the MSPA because of habitat loss and fragmentation, especially oak savannahs, native grassland, and open scrub vegetation communities, and because of extermination or disturbance of bat colonies (Miner and Stokes 2005; Stokes et al. 2005). The pallid bat is especially sensitive to urbanization and is extirpated from areas with more than rural development. Bats require multiple roosts with different temperature ranges to accommodate changing seasonal climate conditions, and these roosts need to be within nightly commute distances to foraging habitat. Bats are vulnerable to destruction of roosts (e.g., construction of water projects and transportation routes) or catastrophic events at roosts (e.g., fire, human disturbance) that adversely affect a large number of individuals at once. Recreational activities like cave or mine exploration and rock climbing near roosts can adversely affect reproductive success and survival, and can even cause bat colonies to abandon roosts (Miner and Stokes 2005).
>
> Population recovery is slow as bats are relatively long-lived with low productivity. Pallid bats eat large, terrestrial insects, such as Jerusalem crickets and may be impacted by changes to habitat such as invasion of nonnative annual grasses and loss of bare ground (Stokes, pers. comm.). Pesticides can harm bats from ingestion of poisoned prey or by being sprayed inadvertently at day roosts (Miner and Stokes 2005). A warming and drying climate predicted for the arid southwest could also adversely affect reproduction by reducing surface water available for drinking by lactating bats (Adams and Hayes 2008). A recent study in an arid region of the west showed that lactating female bats visited water to drink 13 times more often than nonreproductive females. Modeling predicts that bat occurrences could decline with increasing aridity and warming forecast for the future.

O8-96 cont.

Although the DEIR identifies potentially significant impacts to the Pallid Bat, the DEIR fails to mention that the Pallid Bat is "at a high risk of loss from the MSPA" due to "habitat loss and fragmentation, especially oak savannahs, native grassland, and open scrub vegetation communities." The DEIR's Pallid Bat mitigation measure, MM-BIO-5, fails to address loss and fragmentation of habitat associated with the proposed project.

The DEIR's impact analysis, provided on page 3-3 of the Biological Resources Technical Report, states:

> There are only two known pallid bat colony sites in San Diego County (Stokes 2018). The individuals observed during focused bat surveys are believed to belong to the maternal colony that roosts in Viejas on a private residence. This species has very specific foraging strategy and utilizes grasslands and open oak woodlands as its main foraging habitat. In addition, this

> species has characteristics that affect its success with increased urbanization. This includes its tendency to fly at low altitude, its inability to fly over prolonged distances, and its specialized foraging strategies. As a result of these factors, loss of approximately 22.3 acres of pallid bat foraging habitat would result in a significant impact on the pallid bat. These significant impacts would be reduced to less-than-significant levels through implementation of MM-BIO-5, which requires the County to construct bat boxes and monitor activities within them for 5 years following installation.

The Summary of Significant Impacts provided on page 4.4-32 of the DEIR states:

> Pallid bat boxes will help attract pallid bats to a permanently protected location in the county (i.e., the open space preserve), where there is a higher chance for long-term reproductive success than in private parcels where long-term persistence of this species is less certain. Potential stress to pallid bat from the loss of foraging habitat on the project site is offset by access to bat boxes providing safe, secure roost sites.

O8-96 cont.

During our conversation, Mr. Stokes stated that he considers the loss and fragmentation of native grasslands associated with the proposed project to be a significant impact that cannot be mitigated to a less-than-significant level. In his opinion, preserving native grasslands off-site would not mitigate this project's impacts, because the off-site habitat would not be located near one of the two Pallid Bat roost sites known in San Diego County.

The provision of bat boxes specified in MM-BIO-5 represents a speculative form of mitigation, at best, because roosting habitat cannot substitute for foraging habitat. Furthermore, the mitigation measure's five-year time-frame is not commensurate with the proposed loss and fragmentation of habitat due to project implementation, which would last in perpetuity. Therefore, the DEIR lacks an adequate foundation to claim that this measure would reduce to a less-than-significant level the project's adverse effects on the Pallid Bat.

Since the project's impacts to the Pallid Bat do not appear to be mitigable to a less-than-significant level, the County should identify a project alternative that would achieve the most important project objectives without significantly impacting the Pallid Bat.

QUINO CHECKERSPOT IMPACTS AND MITIGATION

The DEIR acknowledges that project implementation would remove habitats occupied by the federally listed Quino Checkerspot Butterfly (*Euphydryas editha quino*). To mitigate this impact, MM-BIO-1 requires the County to "seek a US Fish and Wildlife Service Section 10 Incidental Take Permit (ITP) (or Section 7 Consultation if there is a federal nexus)." It is anticipated that the mitigation:

O8-97

> . . . will be provided in the form on on-site preservation of occupied habitat for Quino checkerspot butterfly within the Alpine Park Preserve, as well as the assurance that no net loss of Quino checkerspot butterfly host plants will occur because of the Project. The County will ensure that there is no net loss of Quino checkerspot butterfly host plants by performing on-

> site enhancement and restoration activities within Quino checkerspot butterfly habitat, including planting dot-seed plantain, removing thatch to support healthy populations of dot-seed plantain, and maintaining and monitoring these enhancement areas for a minimum of 5 years.

The DEIR does not commit to any performance standards demonstrating a positive response of the local Quino Checkerspot population to proposed habitat restoration and enhancement efforts. The mitigation approach described in MM-BIO-1 is thoroughly experimental and has not proven successful in conserving Quino Checkerspots when implemented elsewhere. As summarized by Center for Biological Diversity and Endangered Habitats League (2020:22):

> Indeed, based on a review of all available monitoring reports of enhancement/restoration projects to date, no evidence exists that restoration efforts on such disturbed lands will be effective in sustaining Quino occupancy (AECOM 2010, 2013, 2015, 2016, 2017; Osborne 2013, 2014, 2015, 2016, 2017; Caltrans 2018; RECON Environmental, Inc. 2018, 2019; San Diego Habitat Conservancy 2019; HELIX Environmental Planning, Inc. 2019). These efforts involve weeding, host plant seeding, and a case of larvae reintroduction (which is not proposed here). The reports document no sustained increase of carrying capacity beyond baseline levels or the establishment of self-sustaining Quino populations where none existed before. The proposed management measures therefore have no track record of efficacy.

O8-97 cont.

Considering that each of these failed efforts to increase Quino Checkerspot populations through habitat restoration was conducted in compliance with an Incidental Take Permit or Section 7 consultation with the US Fish and Wildlife Service, the public can have no reasonable expectation that restoring/enhancing habitat on the project site, under an Incidental Take Permit for the Alpine Regional Park project site as specified in MM-BIO-1, will satisfy the project's CEQA requirement to reduce the project's impacts to a less-than-significant level.

In order for MM-BIO-1 to mitigate the project's impacts on the Quino Checkerspot to a less-than-significant level, MM-BIO-1 must specify that the Incidental Take Permit issued by the US Fish and Wildlife Service shall require the County to demonstrate the continued presence of the Quino Checkerspot on the project site at the end of the five-year restoration program. If Quino Checkerspots can no longer be found on the site in a normal flight-year at the end of the five-year restoration period, MM-BIO-1 must specify a contingency measure to insure against the project significantly impacting the Quino Checkerspot, such as purchase of a specific off-site parcel that will contribute meaningfully to the species' long-term conservation. Otherwise, the available evidence indicates that implementing MM-BIO-1 is unlikely to reduce the project's impacts to a less-than-significant level.

The County could also identify a project alternative that would achieve the most important project objectives without impacting the Quino Checkerspot.

ENGELMANN OAK PLANTINGS MUST BE CERTIFIED PATHOGEN FREE

Phytophthora soil pathogens are known to cause Sudden Oak Death Syndrome and other severe plant diseases. A recent study by Sims and Garbelotto (2021) showed that the planting of native oaks and other native plant species in habitat restoration efforts has repeatedly, if inadvertently, introduced *Phytophthora* soil pathogens into stands of intact oak woodlands and other natural communities near habitat restoration sites, with disastrous results. As stated by those authors, "The inadvertent introduction of *Phytophthora* species in restoration sites and their spread into adjacent natural ecosystems will surely have long-term environmental and economic impacts." Since such plantings are specified in MM-BIO-3, this represents a potentially significant impact of the project not identified in the DEIR. O8-98

To avoid potentially significant impacts associated with the possible introduction of *Phytophthora* soil pathogens to the site's preserved Engelmann Oaks, MM-BIO-3 should specifically require that the soil and roots of any and all native plants installed as part of this project be tested and certified to be free of *Phytophthora* prior to planting. To attain this outcome, MM-BIO-3 must specify that all container plants shall be obtained from a native plant nursery that employs Best Management Practices specifically designed to reduce the incidence of *Phytophthora* to undetectable levels (see Sims et al. 2018).

UNSUPPORTED WILDLIFE MOVEMENT FINDINGS

Page 4.4-31 of the DEIR finds that the proposed project "would not result in substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedance of the use of native wildlife nursery sites. Impacts would be less than significant."

Since no study of wildlife movement was conducted for the DEIR, the above-quoted finding is based upon the following brief, vague, and conclusory quasi-analysis: O8-99

> The BSA and the adjacent Wright's Field are surrounded by low-density exurban residential development. As such, the BSA and Wright's Field currently function as an "island" of habitat with limited connectivity to open space and other preserve areas. The project would be constructed at the eastern edge of this island of open space/preserve, leaving a smaller but similarly situated island of habitat to the west of the active park.

Figures 3 and 4 on the next page are exhibits showing the project site in relation to the surrounding landscape, both now and in 2003. These figures do not show that the block of natural open space that includes Wright's Field and the project site functions "as an 'island' of habitat with limited connectivity to open space and other preserve areas." Roads and low-density housing undoubtedly constrain wildlife movement *to some extent*, but the DEIR provides no information on the severity of this constraint. Since no wildlife movement study was conducted for the DEIR, I can say only that the site does not appear to be functionally isolated to the extent claimed in the DEIR.

O8-99
cont.



Figure 3. Aerial image showing that existing residential development appears to be sparse enough to allow a variety of wildlife species to move between the project site and the extensive block of natural habitat in the Sweetwater River watershed to the south and east. *Aerial Source: Google Earth Pro.*

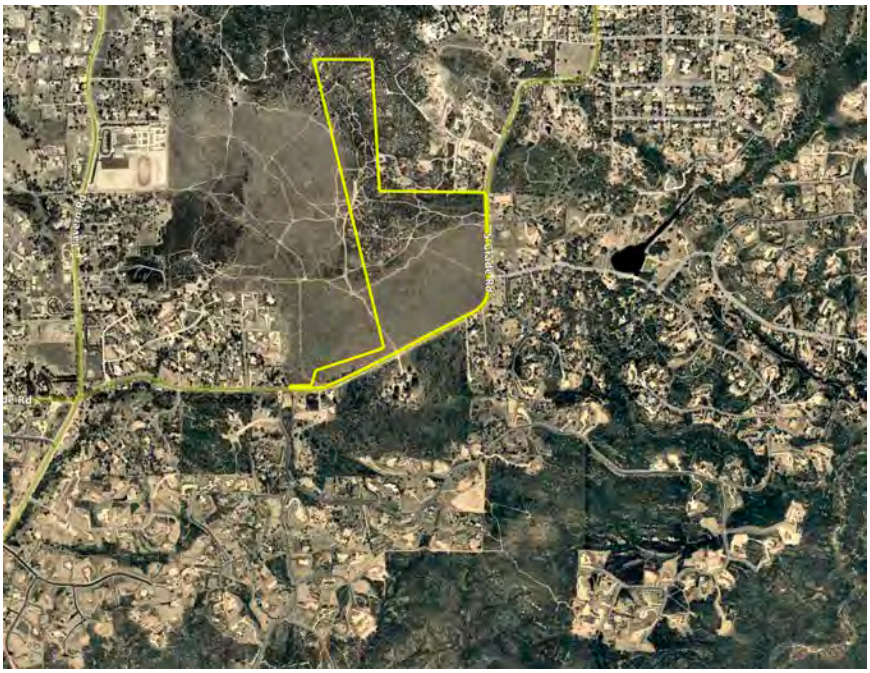


Figure 4. Aerial image taken in July 2003 showing that residential development south and east of the project site has changed very little in the past 18 years. *Aerial Source: Google Earth Pro*

This letter includes an historical aerial exhibit from 2003 (Figure 4 on the previous page) because during December of that year the Back Country Land Trust and the County of San Diego Department of Parks and Recreation submitted to the State of California's Environmental Enhancement and Mitigation (EEM) Program an application for funding of Phase IV of the Wright's Field Multiple Species Conservation Plan (MSCP) Preserve. Page 5 of the funding application states:

O8-99 cont.

> . . . Wright's Field **functions as an important wildlife corridor** between MSCP lands to the west in Harbison canyon, El Capitan Reservoir and the Oakridge preserve in Crest, and the Cleveland National Forest to the south and east. In particular, two drainages from Wright's Field lead west via Chocolate Creek to El Capitan Reservoir. **These streambed corridors are a vital link for wildlife movement between habitats.** Wildlife access to these streambeds on Wright's Field will be enhanced by the protection of the 142 acre Phase IV parcel, **connecting MSCP preserve lands to the Cleveland National Forest**. [emphasis added in bold]

Given that the County previously characterized the Alpine Regional Park project site as part of "an important wildlife corridor" and "a vital link for wildlife movement," and since review of aerial imagery suggests that many wildlife species should still be able to move into and out of the project site to the south and east, the DEIR lacks adequate support for the hyperbolic claim that the site currently functions "as an 'island' of habitat with limited connectivity to open space." In the absence of a credible wildlife movement study demonstrating that the project site no longer fulfills wildlife movement functions, a potentially significant impact to wildlife movement must be identified.

PROPOSED PROJECT UNDERMINES THE MSCP

The California Department of Fish and Wildlife (CDFW) is responsible for administering the State of California's Natural Community Conservation Planning (NCCP) program. The County participates in the NCCP program by implementing its approved Subarea Plan (SAP) for southwestern San Diego County under the Multi-species Conservation Plan (MSCP). The project site lies within an MSCP-designated Biological Resource Core Area (BRCA) and a Pre-Approved Mitigation Area (PAMA) because it satisfies the following conservation criteria:

O8-100

- Supports high-quality, uncommon habitat that contains biological resources that contribute to the long-term survival of sensitive species.
- Has a very high conservation value.
- Is within a block of habitat at least 500 acres in size.

Citing the presence of numerous special-status species and highly sensitive habitats in a block of habitat designated as PAMA, page 2 of CDFW's NOP comment letter requested that the DEIR "include an alternative location or locations that would meet the needs of the community yet avoid or minimize impacts while not reducing the remaining acreage of the large block of habitat encompassing the Wright's Field conservation area." The same letter stated, "The DEIR should include measures to fully avoid and

otherwise protect Sensitive Natural Communities from Project-related impacts." The County ignored CDFW's requests and moved forward with plans to establish an active regional park on sensitive PAMA lands.

The DEIR acknowledges direct impacts to 13.9 acres of native grassland; 4.3 acres of flat-topped buckwheat stands; and 4.1 acres of annual grasslands. In addition, the DEIR states that grading would extend into the root protection zone of up to 25 sensitive Engelmann Oaks (*Quercus engelmannii*; 0.94 acre). This is a minimum of 23.2 acres of sensitive plant communities proposed for direct impacts within a designated PAMA. The DEIR acknowledges these as potentially significant impacts, but concludes that the impacts would be mitigated to below the level of significance through a combination of on-site preservation and purchase of credits and/or land acquisition.

It is relevant that the current Alpine Regional Park project site was evaluated as a potential location for a high school in a 2009 Draft Program EIR (DPEIR). In the 2009 DPEIR, the current project site was referred to as "Alternative Site B." On page S-5 of the 2009 DPEIR, ICF Jones & Stokes reached the following conclusion:

O8-100 cont.

> Alternative Site B would result in a significant loss of approximately 8.23 acres of native grassland within the MSCP and San Diego County Subarea Plan through development of a core wildlife area within a Pre-Approved Mitigation Area (PAMA). **With implementation of the mitigation measures identified in the EIR, the impact associated with Alternative B would remain significant.** Development of a substantial portion of the PAMA and the resulting loss of approximately 85 percent of the native grassland located within that PAMA would result in a significant, cumulative impact on the MSCP identified significant loss of approximately 8.23 acres of native grassland within the MSCP and San Diego County Subarea Plan through development of a core wildlife area within a Pre-Approved Mitigation Area (PAMA). [emphasis added in bold]

Thus, even prior to discovery of the federally endangered Quino Checkerspot Butterfly (*Euphydryas editha quino*) in the site's grasslands, the biologists of ICF Jones & Stokes determined that the then-proposed loss of **8.23 acres** of native grassland would represent a "significant, cumulative impact on the MSCP . . . through development of a core wildlife area within a Pre-Approved Mitigation Area (PAMA)."

ICF Jones & Stokes also stated the following on page 3.4-1 of the 2007 DPEIR:

> The protection of land within the PAMA is important for meeting the goals of the County conservation program and is necessary to obtain permits that allow the loss of some habitat areas by fulfilling the requirements of the federal and state regulations.

Page 3.4-20 of the 2009 DPEIR stated, "All impacts on vegetation communities on this site would occur within a PAMA and would, therefore, be inconsistent with the MSCP."

On page 2 of a letter dated February 20, 2009, commenting on the 2009 DPEIR, the County concurred with ICF's analysis:

> Loss of this much grassland habitat would impact the overall function and viability of the grassland including the lands that have already been set aside as preserve with significant expense to the County and community. A significant amount of native grassland, such as at Wright's Field, is a very rare habitat in San Diego County **and any impacts to it would be considered significant**. Since Wright's Field is one of only approximately three remaining areas of significant amounts of intact native grassland in San Diego County, **we agree with the significant and not mitigable finding in the DEIR since in-kind mitigation is probably not be feasible.** [emphasis added in bold]
>
> . . .
>
> It is agreed that Alternative B would result in a direct and cumulative conflict with the San Diego County MSCP Subarea Plan and would remain significant with implementation of the measures identified in the EIR. Any loss of native grassland habitat will impact the overall function and viability of the grassland including the lands that have already been preserved with significant expense to the County and community. Additionally, indirect effects associated with lighting, noise, invasive plants from landscaping, and ground moisture changes from irrigation runoff and impervious surfaces would also negatively affect the surrounding natural and preserved areas. From a biological and regional planning perspective Alternative B remains the least preferable of the three alternative sites.

O8-100 cont.

When the County and ICF Jones & Stokes made these findings and concurring comments in 2009, the endangered Quino Checkerspot Butterfly was considered absent from the site. Although this species' eventual discovery on the site has provided even greater ecological justification for preserving the site's grasslands, the County and ICF now conclude that the loss of 13.9 acres of native grassland within PAMA (a loss 69% greater than that proposed in 2009), along with the project's other significant impacts to sensitive biological resources, should be deemed consistent with the MSCP. What caused the County to change their previous analysis? On what basis did the County conclude that in-kind mitigation was "probably not feasible" in 2009, but definitely feasible in 2021?

In 2009, the County stated, "Any loss of native grassland habitat will impact the overall function and viability of the grassland including the lands that have already been preserved with significant expense to the County and community." The County now concludes that 13.9 acres of native grasslands, and 9.3 acres of other sensitive communities, can be developed within this PAMA, and that the associated significant impacts to sensitive biological resources can be reduced to below significance by preserving part of the project site, putting up bat boxes, managing habitats, and acquiring 11.7 acres of Tier 1 habitats off-site. Furthermore, as discussed in this letter, the mitigation measures identified in the DEIR do not adequately address the project's significant impacts to (a) the Western Spadefoot, a species not covered under the MSCP that the DEIR fails to acknowledge as occurring on the site; (b) the Pallid Bat, a species "at a high risk of loss from the MSPA" due to removal and fragmentation of its foraging habitat; or (c) the

Quino Checkerspot, a federally endangered species notoriously resistant to increasing its numbers in response to habitat restoration efforts.

O8-100 cont.

As previously acknowledged the County and ICF Jones & Stokes, and for additional reasons discussed in this letter, the proposed establishment of an active park within sensitive grassland, coastal sage scrub, and Engelmann Oak woodland habitats designated as PAMA — on land the County characterized in 2003 as an "an important wildlife corridor" and a "vital link for wildlife movement" — would undermine the ability of CDFW and the County to achieve the regional conservation goals of the MSCP program.

ALTERNATE LOCATION ALTERNATIVE REJECTED WITH INADEQUATE CAUSE

As described on Page 6-4 of the DEIR, the Alternate Location Alternative "would relocate the amenities proposed for the park to several 'mini-parks' that would be located throughout Alpine instead of within one consolidated location." In a letter commenting on the NOP, dated April 2, 2021, local resident Anne Falasco Norton wrote:

> In addition, at last week's ACPG meeting I offered an alternative location for many of the Project's activities that are not suitable to the Project's location: Alpine Elementary School (AES) in the heart of Alpine. It is an historical site sitting idle and empty. This site could be the perfect fit with regards to providing the activities in the park (the skateboard and bike parks, the playing fields, the community garden and the dog park) that ought to be clustered within the higher populated area of Alpine. This higher populated area is our village center. If designed properly, AES could become a stalwart example of incorporating historical value with the present needs of our community. AES already has the infrastructure. It has playing fields. It has reasonable off-street parking. It has existing electrical, water and sewage hookups. It addresses the traffic flow. Fields could be lighted without causing light pollution. Situated at the school, in the heart of town, the bike, skate and dog parks would not cause noise pollution. This is the location where these types of activities belong and are best served. This alternative should be analyzed in the EIR.
>
> Another alternative park site in the heart of Alpine is the old Alpine School District's offices which also has similar amenities that are suitable for the active portion of the Project. This alternative should be analyzed in the EIR.

O8-101

Given the range of environmental impacts associated with the Proposed Project that cannot be mitigated to a less-than-significant level, this type of creative solution is sorely needed. Rather than conducting a legitimate analysis of this alternative, however, page 6-5 of the DEIR dismisses it out of hand:

> This alternative was rejected because it would not meet many of the project objectives, including creating a place where all Alpine residents can gather and connect as a community. This alternative also would not enable long-term natural and cultural resources management. Furthermore, this alternative does not meet the CEQA standard as being a "feasible" alternative given that the County does not own other properties in Alpine, and therefore could not accomplish implementation of a new park at these other potential locations within a reasonable period of time.

On page 3-1 of the DEIR, Project Description, the first Project Objective listed is "To create a place where all Alpine residents can gather and connect as a community." The County cites failure of the Alternate Location Alternative to achieve this Project Objective as the first reason for dismissing this alternative. But would the Proposed Project itself create "a place where all Alpine residents can gather and connect"?

Page 3 of the County's *Multiple Species Conservation Program Conformance Statement*, provided in Volume 2 of the DEIR, states:

> Operation of the proposed project would be expected to serve regional residents and visitors and is anticipated to have an average daily use of 500 people. The sewer system would be designed for peak park use (a maximum of 1,000 people which is only anticipated up to twice a year).

Acknowledgment that the Proposed Project would be "expected to serve regional residents and visitors" contradicts the County's claim that the Proposed Project is focused on "creating a place where all Alpine residents can gather and connect." The Conformance Statement goes on to indicate that the Proposed Project would serve an average of 500 people per day, and a maximum of 1,000 people two days per year. Since the population of Alpine sits at approximately 15,000[1], these daily use figures represent approximately 3 to 7 percent of the population of Alpine. Thus, even if park attendance were limited to only Alpine residents, 93-97% of the population of Alpine would be excluded. Of course, since Alpine Regional Park would be "expected to serve regional residents and visitors," many park users would not be Alpine residents. The approach of creating multiple "mini-parks" appears to be better suited to meeting the local recreation needs of Alpine residents, consistent with the stated Project Objectives, compared with the proposed project's vision of a large, centralized recreation center designed to draw in visitors from the wider region.

O8-101 cont.

The DEIR continues: "This alternative also would not enable long-term natural and cultural resources management." The Proposed Project would be sited within PAMA, and constructing and operating the park would impact the Quino Checkerspot, Western Spadefoot, and Pallid Bat, as well as disrupting local wildlife movement patterns. As discussed in this letter, the mitigation measures identified in the DEIR would not mitigate these impacts to a less-than-significant level. Under the Alternate Location Alternative, there would be no need to establish an on-site resource manager, because the special-status species that currently exist on the site would be able to persist there without the management actions identified in the DEIR.

The DEIR concludes that the Alternate Location Alternative "does not meet the CEQA standard as being a 'feasible' alternative given that the County does not own other properties in Alpine, and therefore could not accomplish implementation of a new park at these other potential locations within a reasonable period of time." The County has

[1] https://worldpopulationreview.com/us-cities/alpine-ca-population

not explained why the project site itself represents a feasible location for a large, active regional park. As reviewed in this letter, the County in 2003 described the project site as part of "an important wildlife corridor" and "a vital link for wildlife movement," but now the County dismisses the site as part of an "island" of open space with only "limited connectivity to open space and other preserve areas." In 2009, the County stringently opposed a high school project that proposed removing a smaller area of native grassland than the County now proposes to remove for Alpine Regional Park. The DEIR does not provide new information indicating that the resource value of the site has declined in the years since the County made these evaluations. In fact, the recent discovery of endangered Quino Checkerspots on the site and Wright's Field only increased the area's importance as a natural habitat.

O8-101 cont.

Ms. Norton's NOP comment letter recommended consideration of two shuttered public facilities: the Alpine Elementary School property and the Alpine School District's offices. Although the closed facilities are not County-owned, public agencies routinely cooperate to arrive at creative solutions to serve the public. The DEIR gives no indication that the County made any effort to work with the Alpine Unified School District to evaluate the feasibility of repurposing one or both of these public facilities to provide recreational opportunities to the residents of Alpine. Until the County makes a good-faith effort to find venues that can fulfill the legitimate objectives of the proposed project with less damage to the environment, the DEIR's alternatives analysis must be considered inadequate.

REVIEW OF MSCP CONFORMANCE STATEMENT

I reviewed the *MSCP Conformance Statement*, dated September 2021 and attributed to the County Department of Parks and Recreation, which is included within Volume 2 of the DEIR.

Page 4 of the Conformance Statement states:

> Implementation of a septic system and associated leach field to accommodate sewage from the proposed restroom facilities could result in up to 0.4 acres of additional permanent impacts on disturbed habitat.

As documented on page 2 of this letter, the proposed septic system/leach field would be established in an area of disturbed coastal sage scrub (MSCP Tier II habitat) and not "Disturbed Habitat" as defined and used in the DEIR (MSCP Tier IV habitat).

O8-102

Page 6 of the Conformance Statement acknowledges the project's significant impacts to the federally listed Quino Checkerspot Butterfly. Page 10 asserts, "The Section 10 species permitting process would ensure that there is no reduced likelihood of recovery of Quino checkerspot butterfly." As discussed on pages 11–12 of this letter, the DEIR does not commit to a performance standard requiring that the local Quino Checkerspot population show a positive response to the proposed habitat restoration and enhancement

efforts. Previous habitat restoration and enhancement efforts undertaken under federal Incidental Take Permits have failed to result in increased Quino Checkerspot populations. Unless the Incidental Take Permit for this project includes a requirement that Quino Checkerspots be detectable on the project site in a normal flight-year at the end of the five-year restoration period, the available evidence indicates that implementing MM-BIO-1 is unlikely to reduce the project's impacts to a less-than-significant level.

Page 9 of the Conformance Statement states that significant impacts to foraging habitat used by the Pallid Bat "would be reduced to less-than-significant levels through implementation of MM-BIO-5, which requires the County to construct bat boxes and monitor activities within them for 5 years following installation." As discussed on pages 8–11 of this letter, the provision of bat boxes cannot be expected to mitigate for the loss and fragmentation of a large area of prime Pallid Bat foraging habitat located near this species' two remaining roosts known in San Diego County.

O8-102 cont.

The Conformance Statement fails to mention the occurrence of Western Spadefoots on the project site. Although the spadefoot is not a covered species under the MSCP, it is a declining special-status species that would experience significant adverse effects if the proposed project is implemented.

Page 5 of the Conformance Statement: The impact and preservation acreages presented in Table 1 should be adjusted to reflect the mis-mapped areas discussed on pages 1–4 of this letter. It is requested that the project biologists re-check the rest of the project site to determine whether any other areas were mapped incorrectly.

Page 5 of the Conformance Statement states, "The Project area is also directly adjacent to a busy arterial road, South Grade Road, that already limits wildlife movement in the area to the south and east." South Grade Road is a two-lane collector, not an arterial road, and cannot be accurately described as "busy." The DEIR provides no evidence that this road "already limits wildlife movement in the area to the south and east."

Page 12 of the Conformance Statement states:

> The BSA and the adjacent Wright's Field are surrounded by low-density exurban residential development, which result in an "island" of habitat with limited connectivity to open space and other preserve areas.

As discussed previously in this letter, the DEIR presents no wildlife movement study data, or other convincing analysis, to substantiate its claims that wildlife movement through the project site and surrounding areas is greatly limited by existing low-density development. The County itself described the project site as being part of "an important wildlife corridor" and "a vital link for wildlife movement" in 2003, and conditions on the ground have not changed much since that time (see Figures 3 and 4 on page 14 of this letter).

Page 12 of the Conformance Statement continues:

> The conversion of a maximum of 22.3 acres of native habitat to a developed park facility would not constrain wildlife movement, because the park would be located adjacent to existing development on three sides. . . No features would be constructed which would impinge any movement areas, including ridgelines or canyons.

The proposed landscaped berm along South Grade Road, which would be as much as 12 feet higher than the roadway, is a feature that could potentially impinge upon the movement of wildlife into and out of the project site across South Grade Road.

Page 15 of the Conformance Statement states:

> To mitigate for potentially significant impacts on Tier I, Tier II, and Tier III habitats, the County DPR will provide compensatory mitigation consistent with the BMO to reduce significant impacts on sensitive vegetation communities.

O8-102 cont.

The Quino Checkerspot and Western Spadefoot are not covered species under the MSCP. As discussed in this letter, the project's potentially significant impacts to habitats occupied by these species would not be reduced to less-than-significant levels through the DEIR's tier-based compensatory mitigation approach.

Page 16 of the Conformance Statement presents *Findings of Conformance*, which rely upon several unsupported assertions to conclude that the proposed project qualifies as an "essential public project." Contrary to the *Findings of Conformance*, the proposed project conflicts with the following goals of the County's General Plan:

- Maintenance of the County's Rural Character (GOAL LU-2) encouraging conservation and enhancement of the unincorporated County's varied communities, rural setting, and character.

The proposed project would remove approximately 22 acres of sensitive natural communities in order to establish an active regional park in a rural setting.

- Sustainability of the Natural Environment (GOAL COS-2) sustaining ecosystems with long-term viability to maintain natural processes, sensitive lands, and sensitive as well as common species, coupled with sustainable growth and development.

The DEIR does not demonstrate the project's consistency with GOAL COS-2. By removing 22 acres of sensitive natural communities, fragmenting the remaining habitat, and bringing large numbers of people into this sensitive area, project implementation would threaten the long-term (and short-term) viability of populations of at least three special-status species known from the site and adjacent Wright's Field Preserve: the Quino Checkerspot Butterfly, Western Spadefoot Toad, and Pallid Bat.

- Recreational Opportunities in Preserves (GOAL COS-23) promoting the acquisition, monitoring, and management of valuable natural and cultural resources where public recreational opportunities are compatible with the preservation of those resources.

The proposed active park is not compatible with preservation of the site's sensitive natural resources. As reviewed in this letter, the County acknowledged this fundamental incompatibility in its comments on the 2009 DPEIR for the proposed High School No. 12 on this same property, which stated, among other things:

O8-102 cont.

> It is agreed that [the high school project] would result in a direct and cumulative conflict with the San Diego County MSCP Subarea Plan and would remain significant with implementation of the measures identified in the EIR. Any loss of native grassland habitat will impact the overall function and viability of the grassland including the lands that have already been preserved with significant expense to the County and community. Additionally, indirect effects associated with lighting, noise, invasive plants from landscaping, and ground moisture changes from irrigation runoff and impervious surfaces would also negatively affect the surrounding natural and preserved areas.

Page 17 of the Conformance Statement asserts the following:

> All feasible mitigation measures have been incorporated into the Project, and there are no feasible, less environmentally damaging locations, alignments or non-structural alternatives that would meet Project objectives.

As discussed on pages 18–20 of this letter, the DEIR's alternatives analysis provides inadequate justification for failing to evaluate the Alternate Location Alternative, which could potentially achieve the main project objectives with far fewer adverse effects on sensitive natural resources.

SUMMARY AND CONCLUSION

O8-103

Plant community mapping presented in the DEIR should be field-checked for accuracy and analyses presented in the FEIR should reflect the corrected mapping.

The DEIR fails to evaluate the project's adverse effects to the Western Spadefoot, a special-status species known to be present on the site. The DEIR's tier-based compensatory mitigation strategy fails to address the project's significant impacts to this species. It is unclear how these fundamental omissions can be adequately addressed in the FEIR.

The mitigation measures identified to address potentially significant impacts to two other species, the Quino Checkerspot Butterfly and Pallid Bat, are flawed and inadequate, and do not provide reasonable assurance that their implementation will reduce impacts to these species to a less-than-significant level.

As previously acknowledged by the County, and for additional reasons discussed in this letter, establishing an active park within sensitive grassland, coastal sage scrub, and

Engelmann Oak woodland habitats designated as PAMA, and impinging upon potential wildlife movement linkages, would undermine the ability of CDFW and the County to achieve the regional conservation goals of the MSCP program.

The *MSCP Conformance Statement* provided in Volume 2 recapitulates many of the deficiencies contained in the DEIR, as needed to determine that the project conforms to the requirements of the MSCP. The statement includes *Findings of Conformance* that rely upon several unsupported assertions to conclude that the proposed project qualifies as an "essential public project."

O8-103 cont.

Issuing a DEIR that flatly contradicts the County's own previous evaluations of the project site's high ecological values — without citing any new biological data to justify the new appraisal — erodes the County's credibility and trustworthiness, and reduces public confidence in the integrity of the CEQA process. When the County assures local residents that this active park will never be subject to environmentally damaging night-lighting, or that extending a sewer line to the new park will not lead to future increases in rural housing density because new houses would not be allowed to hook up to the new sewer line, why should these assurances be believed? Once the basic park facilities have been established, the County could change its mind again and determine that incremental increases in impacts would be less than significant. Establishing credibility and trust, and engendering public confidence in the legitimacy of CEQA analyses, are important reasons for the County to refrain from arbitrarily contradicting itself on crucial planning issues.

I appreciate the opportunity to provide these comments on the DEIR and I look forward to the County's responses. If you have questions, please call me at (562) 477-2181 or send e-mail to robb@hamiltonbiological.com.

Sincerely,

O8-104



Robert A. Hamilton
President, Hamilton Biological, Inc.

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Long Beach, CA 90803
562-477-2181
robb@hamiltonbiological.com

Attached: Literature Cited and Curriculum Vitae

LITERATURE CITED

Adams, R. A., and M. A. Hayes. 2008. Water Availability and Successful Lactation by Bats as Related to Climate Change in Arid Regions of Western North America. Journal of Animal Ecology 77(6):1115–121.

AECOM. 2010. Year 5 Monitoring Report for the State Route 125 South Vernal Pool and Quino Checkerspot Butterfly Habitat Restoration Site (November 2009-October 2010).

AECOM. 2013. Final Sunrise Powerlink Restoration Year 1 Maintenance and Monitoring Report.

AECOM. 2015. Sunrise Powerlink Restoration Year 2 Maintenance and Monitoring Report (2013/2014).

AECOM. 2016. Sunrise Powerlink Restoration Year 3 Maintenance and Monitoring Report (October 2014 through September 2015).

AECOM. 2017. Sunrise Powerlink Restoration Year 5 Maintenance and Monitoring Report (October 2016 through September 2017).

Back Country Land Trust and County of San Diego Department of Parks and Recreation. 2003. Environmental Enhancement and Mitigation Program Application. Document dated December 6, 2003, requesting funding from the State of California for Phase IV of the Wright's Field MSCP Preserve. 40 pp.

Baumberger, K. L., M. V. Eitzel, M. E. Kirby, and M. H. Horn. 2019. Movement and habitat selection of the Western Spadefoot (*Spea hammondii*) in southern California. PLOS ONE 14(10): e0222532. https://doi.org/10.1371/journal.pone.0222532

O8-105 Becker, C. G., C. R. Fonseca, C. F. B. Haddad, R. F. Batista, and P. I. Prado. 2007. Habitat split and the global decline of amphibians. Science 318:1775–1777.

Brehme, C. S., S. A. Hathaway, and R. N. Fisher. 2018. An objective road risk assessment method for multiple species: ranking 166 reptiles and amphibians in California. Landscape Ecology 33:911–935.

Caltrans. 2018. Year 5 Monitoring Report for the Lonestar Ridge West Restoration Site November 2016-October 2017.

Halstead, B. J., K. L. Baumberger, A. R. Backlin, P. M. Kleeman, M. N., Wong, E. A. Gallegos, J. P. Rose, J.P. and R. N. Fisher. 2021. Conservation implications of spatiotemporal variation in the terrestrial ecology of Western Spadefoots. Journal Wildlife Management 85:1377–1393.

Harper, E. B., T. A. G. Rittenhouse, and R. D. Semlitsch. 2008. Demographic consequences of terrestrial habitat loss for pool-breeding amphibians: predicting extinction risks associated with inadequate size of buffer zones. Conservation Biology 22:1205–1215.

HELIX Environmental Planning, Inc. 2019. Otay Crossings Commerce Park Mitigation Project Year 2 Monitoring Report.

ICF Jones & Stokes. 2009. High School Number 12. Draft Program Environmental Impact Report. Report dated January 2009. Prepared for Grossmont Union High School District, San Diego, CA.

Miner, K. L., and D. C. Stokes. 2005. Bats in the South Coast Ecoregion: Status, Conservation Issues, and Research Needs. USDA Forest Service Gen. Tech. Rep. PSW-GTR-195.

Osborne, K. H. 2013. Year 2013 Quino Checkerspot Butterfly Monitoring for the SDG&E Sunrise Powerlink Habitat Restoration Project, San Diego County.

Osborne, K. H. 2014. Year 2014 Quino Checkerspot Butterfly Monitoring for the SDG&E Sunrise Powerlink Habitat Restoration Project, San Diego County.

Osborne, K. H. 2015. Year 2015 Quino Checkerspot Butterfly Monitoring for the SDG&E Sunrise Powerlink Habitat Restoration Project, San Diego County.

Osborne, K. H. 2016. Year 2016 Quino Checkerspot Butterfly Monitoring for the SDG&E Sunrise Powerlink Habitat Restoration Project, San Diego County.

Osborne, K. H. 2017. Year 2017 Quino Checkerspot Butterfly Monitoring for the SDG&E Sunrise Powerlink Habitat Restoration Project, San Diego County.

RECON Environmental, Inc. 2018. Annual Report for the Otay Ranch Preserve January 1–December 31, 2017.

RECON Environmental, Inc. 2019. Annual Report for the Otay Ranch Preserve January 1–December 31, 2018.

Rochester, C. J., K. L. Baumberger, and R. N. Fisher. 2017. Draft Final Western Spadefoot (*Spea hammondii*): Independent Scientific Advisor Report for the City of Santee MSCP Subarea Plan.

San Diego Habitat Conservancy. 2019. Otay Crossings Commerce Park On-site Biological Open Space Annual Report. PDS2016-RMP-16–004.

San Diego Management and Monitoring Program and The Nature Conservancy. 2017. The Management and Monitoring Strategic Plan for Conserved Lands in Western San Diego County: A Strategic Habitat Conservation Roadmap. Report prepared for San Diego Association of Governments and published online at https://sdmmp.com/mspdoc.php.

Searcy, C. A., E. Gabbai-Saldate, and H. B. Shaffer. 2013. Microhabitat use and migration distance of an endangered grassland amphibian. Biological Conservation 158:80–87.

Semlitsch, R. D. 1998. Biological delineation of terrestrial buffer zones for pond-breeding salamanders. Conservation Biology 12:1113–1119.

O8-105 cont.

Semlitsch, R. D. 2008. Differentiating migration and dispersal processes for pond-breeding amphibians. Journal of Wildlife Management 72:260–267.

Semlitsch, R. D., and J. B. Jensen. 2001. Core habitat, not buffer zone. National Wetlands Newsletter 23:5–6, 11.

Semlitsch, R. D., and J. R. Bodie. 2003. Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. Conservation Biology 17:1219–1228.

Sims, L.L., Tjosvold, S., Chambers, D., and Garbelotto, M. 2018. Control of *Phytophthora* species in plant stock for habitat restoration through best management practices. Plant Pathology 68:196–204.

Sims, L.L., and Garbelotto, M. 2021. *Phytophthora* species repeatedly introduced in Northern California through restoration projects can spread into adjacent sites. Biological Invasions.

Stebbins, R. C., and S. M. McGinnis. 2012. Field guide to amphibians and reptiles of California. California Natural History Guides. Revised Edition. Berkeley: UC Press.

Stokes, D. C., C. S. Brehme, S. A. Hathaway, and R. N. Fisher. 2005. Bat Inventory of the Multiple Species Conservation Program Area in San Diego County, California, 2002–2004. US Geological Survey, Western Ecological Research Center; final report prepared for the County of San Diego and California Department of Fish and Game.

Stokes. D. 2018. Draft final report for focused Pallid Bat (*Antrozous pallidus*) and Townsend's Big-eared Bat (*Corynorhinus townsendii*) surveys in San Diego County, California. Report prepared by the San Diego Natural History Museum for the San Diego Management and Monitoring Program.

US Fish and Wildlife Service. 2005. Recovery plan for vernal pool ecosystems of California and southern Oregon. Portland, OR.

Exhibit B

Robert A. Hamilton

President, Hamilton Biological, Inc.

Expertise

Endangered Species Surveys
General Biological Surveys
CEQA Analysis
Population Monitoring
Vegetation Mapping
Construction Monitoring
Noise Monitoring
Open Space Planning
Natural Lands Management

Education

1988. Bachelor of Science degree in Biological Sciences, University of California, Irvine

O8-106

Professional Experience

1994 to Present. Independent Biological Consultant, Hamilton Biological, Inc.

1988 to 1994. Biologist, LSA Associates, Inc.

Permits

Federal Permit No. TE-799557 to survey for the Coastal California Gnatcatcher and Southwestern Willow Flycatcher

MOUs with the California Dept. of Fish and Game to survey for Coastal California Gnatcatcher, Southwestern Willow Flycatcher, and Coastal Cactus Wren.

California Scientific Collecting Permit No. SC-001107

Robert A. Hamilton has been providing biological consulting services in southern California since 1988. He spent the formative years of his career at the firm of LSA Associates in Irvine, where he was a staff biologist and project manager. He has worked as an independent and on-call consultant since 1994, incorporating his business as Hamilton Biological, Inc., in 2009. The consultancy specializes in the practical application of environmental policies and regulations to land management and land use decisions in southern California.

A recognized authority on the status, distribution, and identification of birds in California, Mr. Hamilton is the lead author of two standard references describing aspects of the state's avifauna: *The Birds of Orange County: Status & Distribution* and *Rare Birds of California.* Mr. Hamilton has also conducted extensive studies in Baja California, and for seven years edited the Baja California Peninsula regional reports for the journal *North American Birds*. He served ten years on the editorial board of *Western Birds* and regularly publishes in peer-reviewed journals. He is a founding member of the Coastal Cactus Wren Working Group and in 2011 updated the Cactus Wren species account for *The Birds of North America Online*. Mr. Hamilton's expertise includes vegetation mapping. From 2007 to 2010 he worked as an on-call biological analyst for the County of Los Angeles Department of Regional Planning. From 2010 to present he has conducted construction monitoring and focused surveys for special-status bird species on the Tehachapi Renewable Transmission Project (TRTP). He is a former member of the Los Angeles County Significant Ecological Areas Technical Advisory Committee (SEATAC).

Mr. Hamilton conducts general and focused biological surveys of small and large properties as necessary to obtain various local, state, and federal permits, agreements, and clearances. He also conducts landscape-level surveys needed by land managers to monitor songbird populations. Mr. Hamilton holds the federal and state permits and MOUs listed to the left, and he is recognized by federal and state resource agencies as being highly qualified to survey for the Least Bell's Vireo. He also provides nest-monitoring services in compliance with the federal Migratory Bird Treaty Act and California Fish & Game Code Sections 3503, 3503.5 and 3513.

Board Memberships, Advisory Positions, Etc.

Friends of Colorado Lagoon, Board Member (2014–present)

Coastal Cactus Wren Working Group (2008–present)

Los Angeles County Significant Ecological Areas Technical Advisory Committee (SEATAC) (2010–2014)

American Birding Association: Baja Calif. Peninsula Regional Editor, North American Birds (2000–2006)

Western Field Ornithologists: Associate Editor of Western Birds (1999–2008)

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California Bird Records Committee (1998–2001)

Nature Reserve of Orange County: Technical Advisory Committee (1996–2001)

California Native Plant Society, Orange County Chapter: Conservation Chair (1992–2003)

Professional Affiliations

American Ornithologists' Union

Cooper Ornithological Society

Institute for Bird Populations

California Native Plant Society

Southern California Academy of Sciences

Western Foundation of Vertebrate Zoology

Mr. Hamilton is an expert photographer, and typically provides photo-documentation and/or video documentation as part of his services.

Drawing upon a robust, multi-disciplinary understanding of the natural history and ecology of his home region, Mr. Hamilton works with private and public land owners, as well as governmental agencies and interested third parties, to apply the local, state, and federal land use policies and regulations applicable to each particular situation. Mr. Hamilton has amassed extensive experience in the preparation and independent review of CEQA documents, from relatively simple Negative Declarations to complex supplemental and recirculated Environmental Impact Reports. In addition to his knowledge of CEQA and its Guidelines, Mr. Hamilton understands how each Lead Agency brings its own interpretive variations to the CEQA review process.

Representative Project Experience

From 2008 to present, Mr. Hamilton has served as the main biological consultant for the Banning Ranch Conservancy, a local citizens' group that successfully defeated efforts to implement a large proposed residential and commercial project on the 400-acre Banning Ranch property in Newport Beach. Mr. Hamilton reviewed, analyzed, and responded to numerous biological reports prepared by the project proponent, and testified at multiple public hearings of the California Coastal Commission. In September 2016, the Commission denied the application for a Coastal Development Permit for the project, citing, in part, Mr. Hamilton's analysis of biological issues. In March 2017, the California Supreme Court issued a unanimous opinion (*Banning Ranch Conservancy v. City of Newport Beach*) holding that the EIR prepared by the City of Newport Beach improperly failed to identify areas of the site that might qualify as "environmentally sensitive habitat areas" under the California Coastal Act. In nullifying the certification of the EIR, the Court found that the City "ignored its obligation to integrate CEQA review with the requirements of the Coastal Act."

Insurance

$3,000,000 professional liability policy (Hanover Insurance Group)

$2,000,000 general liability policy (The Hartford)

$1,000,000 auto liability policy (State Farm)

Other Relevant Experience

Field Ornithologist, San Diego Natural History Museum Scientific Collecting Expedition to Central and Southern Baja California, October/November 1997 and November 2003.

Field Ornithologist, Island Conservation and Ecology Group Expedition to the Tres Marías Islands, Nayarit, Mexico, 23 January to 8 February 2002.

Field Ornithologist, Algalita Marine Research Foundation neustonic plastic research voyages in the Pacific Ocean, 15 August to 4 September 1999 and 14 to 28 July 2000.

Field Assistant, Bird Banding Study, Río Ñambí Reserve, Colombia, January to March 1997.

References

Provided upon request.

O8-106 cont.

From 2012 to 2014, Mr. Hamilton collaborated with Dan Cooper on *A Conservation Analysis for the Santa Monica Mountains "Coastal Zone" in Los Angeles County*, and worked with Mr. Cooper and the County of Los Angeles to secure a certified Local Coastal Program (LCP) for 52,000 acres of unincorporated County lands in the Santa Monica Mountains coastal zone. The work involved synthesizing large volumes of existing baseline information on the biological resources of the study area, evaluating existing land use policies, and developing new policies and guidelines for future development within this large, ecologically sensitive area. A coalition of environmental organizations headed by the Surfrider Foundation selected this project as the "Best 2014 California Coastal Commission Vote" (http://www.surfrider.org/images/uploads/2014CCC_Vote_Chart_FINAL.pdf).

In 2010, under contract to CAA Planning, Mr. Hamilton served as principal author of the *Conservation & Management Plan for Marina del Rey, Los Angeles County, California*. This comprehensive planning document has two overarching goals: (1) to promote the long-term conservation of all native species that exist in, or that may be expected to return to, Marina del Rey, and (2) to diminish the potential for conflicts between wildlife populations and both existing and planned human uses of Marina del Rey (to the benefit of humans and wildlife alike). After peer-review, the Plan was accepted by the Coastal Commission as an appropriate response to the varied challenges posed by colonial waterbirds and other biologically sensitive resources colonizing urban areas once thought to have little resource conservation value.

Contact Information

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cont.

Third Party Review of CEQA Documents

Under contract to cities, conservation groups, homeowners' associations, etc., Mr. Hamilton has reviewed EIRs and other project documentation for the following projects:

- Otay Village 13 (residential, County of San Diego)
- Otay Village 14, Planning Areas 16/19 (residential, County of San Diego)
- Western Snowy Plover Mgmt. Plan (resource management, City of Newport Beach)
- Sanderling Waldorf School (commercial, City of Encinitas)
- Diamond Bar General Plan (open space planning, City of Diamond Bar)
- UC San Diego Long-range Development Plan (institutional, UC Regents)
- El Monte Sand Mining Project (resource extraction, County of San Diego)
- Faria/Southwest Hills Annexation Project (residential, City of Pittsburg)
- Los Cerritos Oil Consolidation/Wetland Restoration Project (resource extraction/habitat restoration, City of Long Beach)
- Safari Highlands Ranch (residential, City of Escondido)
- Newland Sierra (residential, County of San Diego)
- Harmony Grove Village South (residential, County of San Diego)
- Vegetation Treatment Program (statewide fire management plan, California Department of Forestry and Fire Protection)
- Watermark Del Mar Specific Plan (residential, City of Del Mar)
- Newport Banning Ranch (residential/commercial, City of Newport Beach)
- Davidon/Scott Ranch (residential, City of Petaluma)
- Mission Trails Regional Park Master Plan (open space planning, City of San Diego)
- Esperanza Hills (residential, County of Orange)
- Warner Ranch (residential, County of San Diego)
- Dog Beach, Santa Ana River Mouth (open space planning, County of Orange)
- Gordon Mull subdivision (residential, City of Glendora)
- The Ranch at Laguna Beach (resort, City of Laguna Beach)
- Sunset Ridge Park (city park, City of Newport Beach)
- The Ranch Plan (residential/commercial, County of Orange)
- Southern Orange County Transportation Infrastructure Improvement Project (Foothill South Toll Road, County of Orange)
- Gregory Canyon Landfill Rest. Plan (proposed mitigation, County of San Diego)
- Montebello Hills Specific Plan EIR (residential, City of Montebello; 2009 and 2014 circulations)
- Cabrillo Mobile Home Park (illegal wetland filling, City of Huntington Beach)
- Newport Hyatt Regency (timeshare conversion project, City of Newport Beach)
- Lower San Diego Creek "Emergency Repair Project" (flood control, County of Orange)
- Tonner Hills (residential, City of Brea)
- The Bridges at Santa Fe Units 6 and 7 (residential, County of San Diego)
- Villages of La Costa Master Plan (residential/commercial, City of Carlsbad)
- Whispering Hills (residential, City of San Juan Capistrano)
- Santiago Hills II (residential/commercial, City of Orange)
- Rancho Potrero Leadership Academy (youth detention facility, County of Orange)
- Saddle Creek/Saddle Crest (residential, County of Orange)
- Frank G. Bonelli Regional County Park Master Plan (County of Los Angeles)

Selected Presentations

Hamilton, R. A. Birds of Colorado Lagoon. 2018-2019. 60-minute multimedia presentation on the history and avifauna of Colorado Lagoon in southeastern Long Beach, given at Audubon Society chapter meetings.

Hamilton, R. A. Six Legs Good/Invertebral Limit. 2012-2020. 60-to-90-minute multimedia presentation on the identification and photography of dragonflies, damselflies, butterflies, and other invertebrates, given at Audubon Society chapter meetings, Irvine Ranch Conservancy, etc.

Hamilton, R. A., and Cooper, D. S. 2016. Nesting Bird Policies: We Can Do Better. Twenty-minute multimedia presentation at The Wildlife Society Western Section Annual Meeting, February 23, 2016.

Hamilton, R. A. 2012. Identification of Focal Wildlife Species for Restoration, Coyote Creek Watershed Master Plan. Twenty-minute multimedia presentation given at the Southern California Academy of Sciences annual meeting at Occidental College, Eagle Rock, 4 May. Abstract published in the Bulletin of the Southern California Academy of Sciences No. 111(1):39.

O8-106 cont.

Hamilton, R. A., and Cooper, D. S. 2009-2010. Conservation & Management Plan for Marina del Rey. Twenty-minute multimedia presentation given to different governmental agencies and interest groups.

Hamilton, R. A. 2008. Cactus Wren Conservation Issues, Nature Reserve of Orange County. One-hour multimedia presentation for Sea & Sage Audubon Society, Irvine, California, 25 November.

Hamilton, R. A., Miller, W. B., Mitrovich, M. J. 2008. Cactus Wren Study, Nature Reserve of Orange County. Twenty-minute multimedia presentation given at the Nature Reserve of Orange County's Cactus Wren Symposium, Irvine, California, 30 April 2008.

Hamilton, R. A. and K. Messer. 2006. 1999-2004 Results of Annual California Gnatcatcher and Cactus Wren Monitoring in the Nature Reserve of Orange County. Twenty-minute multimedia presentation given at the Partners In Flight meeting: Conservation and Management of Coastal Scrub and Chaparral Birds and Habitats, Starr Ranch Audubon Sanctuary, 21 August 2004; and at the Nature Reserve of Orange County 10th Anniversary Symposium, Irvine, California, 21 November.

Publications

Gómez de Silva, H., Villafaña, M. G. P., Nieto, J. C., Cruzado, J., Cortés, J. C., Hamilton, R. A., Vásquez, S. V., and Nieto, M. A. C. 2017. Review of the avifauna of The Tres Marías Islands, Mexico, including new and noteworthy records. *Western Birds* 47:2–25.

Hamilton, R. A. 2014. Book review: The Sibley Guide to Birds, Second Edition. *Western Birds* 45:154–157.

Cooper, D. S., R. A. Hamilton, and S. D. Lucas. 2012. A population census of the Cactus Wren in coastal Los Angeles County. *Western Birds* 43:151–163.

Hamilton, R. A., J. C. Burger, and S. H. Anon. 2012. Use of artificial nesting structures by Cactus Wrens in Orange County, California. *Western Birds* 43:37–46.

Hamilton, R. A., Proudfoot, G. A., Sherry, D. A., and Johnson, S. 2011. Cactus Wren (*Campylorhyn-chus brunneicapillus*), *in* The Birds of North America Online (A. Poole, ed.). Cornell Lab of Ornithology, Ithaca, NY.

Hamilton, R. A. 2008. Cactus Wrens in central & coastal Orange County: How will a worst-case scenario play out under the NCCP? *Western Tanager* 75:2–7.

Erickson, R. A., R. A. Hamilton, R. Carmona, G. Ruiz-Campos, and Z. A. Henderson. 2008. Value of perennial archiving of data received through the North American Birds regional reporting system: Examples from the Baja California Peninsula. *North American Birds* 62:2–9.

Erickson, R. A., R. A. Hamilton, and S. G. Mlodinow. 2008. Status review of Belding's Yellowthroat *Geothlypis beldingi*, and implications for its conservation. Bird Conservation International 18:219–228.

Hamilton, R. A. 2008. Fulvous Whistling-Duck (*Dendrocygna bicolor*). Pp. 68-73 *in* California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California (Shuford, W. D. and T. Gardali, eds.). Studies of Western Birds 1. Western Field Ornithologists, Camarillo, CA, and California Department of Fish and Game, Sacramento, CA.

California Bird Records Committee (R. A. Hamilton, M. A. Patten, and R. A. Erickson, editors.). 2007. Rare Birds of California. Western Field Ornithologists, Camarillo, CA.

O8-106 cont.

Hamilton, R. A., R. A. Erickson, E. Palacios, and R. Carmona. 2001–2007. *North American Birds* quarterly reports for the Baja California Peninsula Region, Fall 2000 through Winter 2006/2007.

Hamilton, R. A. and P. A. Gaede. 2005. Pink-sided × Gray-headed Juncos. *Western Birds* 36:150–152.

Mlodinow, S. G. and R. A. Hamilton. 2005. Vagrancy of Painted Bunting (*Passerina ciris*) in the United States, Canada, and Bermuda. *North American Birds* 59:172–183.

Erickson, R. A., R. A. Hamilton, S. González-Guzmán, G. Ruiz-Campos. 2002. Primeros registros de anidación del Pato Friso (*Anas strepera*) en México. Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Serie Zoología 73(1):67–71.

Hamilton, R. A. and J. L. Dunn. 2002. Red-naped and Red-breasted sapsuckers. *Western Birds* 33:128–130.

Hamilton, R. A. and S. N. G. Howell. 2002. Gnatcatcher sympatry near San Felipe, Baja California, with notes on other species. *Western Birds* 33:123–124.

Hamilton, R. A. 2001. Book review: The Sibley Guide to Birds. *Western Birds* 32:95–96.

Hamilton, R. A. and R. A. Erickson. 2001. Noteworthy breeding bird records from the Vizcaíno Desert, Baja California Peninsula. Pp. 102-105 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Hamilton, R. A. 2001. Log of bird record documentation from the Baja California Peninsula archived at the San Diego Natural History Museum. Pp. 242–253 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Hamilton, R. A. 2001. Records of caged birds in Baja California. Pp. 254–257 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Erickson, R. A., R. A. Hamilton, and S. N. G. Howell. 2001. New information on migrant birds in northern and central portions of the Baja California Peninsula, including species new to Mexico. Pp. 112–170 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Howell, S. N. G., R. A. Erickson, R. A. Hamilton, and M. A. Patten. 2001. An annotated checklist of the birds of Baja California and Baja California Sur. Pp. 171–203 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Ruiz-Campos, G., González-Guzmán, S., Erickson, R. A., and Hamilton, R. A. 2001. Notable bird specimen records from the Baja California Peninsula. Pp. 238–241 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Wurster, T. E., R. A. Erickson, R. A. Hamilton, and S. N. G. Howell. 2001. Database of selected observations: an augment to new information on migrant birds in northern and central portions of the Baja California Peninsula. Pp. 204–237 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Erickson, R. A. and R. A. Hamilton, 2001. Report of the California Bird Records Committee: 1998 records. *Western Birds* 32:13–49.

O8-106 cont.

Hamilton, R. A., J. E. Pike, T. E. Wurster, and K. Radamaker. 2000. First record of an Olive-backed Pipit in Mexico. *Western Birds* 31:117–119.

Hamilton, R. A. and N. J. Schmitt. 2000. Identification of Taiga and Black Merlins. *Western Birds* 31:65–67.

Hamilton, R. A. 1998. Book review: Atlas of Breeding Birds, Orange County, California. *Western Birds* 29:129–130.

Hamilton, R. A. and D. R. Willick. 1996. The Birds of Orange County, California: Status and Distribution. Sea & Sage Press, Sea & Sage Audubon Society, Irvine.

Hamilton, R. A. 1996–98. Photo Quizzes. *Birding* 27(4):298-301, 28(1):46-50, 28(4):309-313, 29(1): 59-64, 30(1):55–59.

Erickson, R. A., and Hamilton, R. A. 1995. Geographic distribution: *Lampropeltis getula californiae* (California Kingsnake) in Baja California Sur. *Herpetological Review* 26(4):210.

Bontrager, D. R., R. A. Erickson, and R. A. Hamilton. 1995. Impacts of the October 1993 Laguna fire on California Gnatcatchers and Cactus Wrens. *in* J. E. Keeley and T. A. Scott (editors). Wildfires in California Brushlands: Ecology and Resource Management. International Association of Wildland Fire, Fairfield, Washington.

Erickson, R. A., R. A. Hamilton, S. N. G. Howell, M. A. Patten, and P. Pyle. 1995. First record of Marbled Murrelet and third record of Ancient Murrelet for Mexico. *Western Birds* 26: 39–45.

Erickson, R. A., and R. A. Hamilton. 1993. Additional summer bird records for southern Mexico. *Euphonia* 2(4): 81–91.

Erickson, R. A., A. D. Barron, and R. A. Hamilton. 1992. A recent Black Rail record for Baja California. *Euphonia* 1(1): 19–21.

Exhibit C

Tom Brohard and Associates

November 12, 2021

Mr. Josh Chatten-Brown
Chatten-Brown, Carstens & Minteer
302 Washington Street, #710
San Diego, CA 92103

SUBJECT: Alpine County Park Project – Traffic Safety Issues

Dear Mr. Chatten-Brown:

O8-107 Tom Brohard, P.E., has reviewed the September 2021 Draft Environmental Impact Report (Draft EIR), the Concept Plan, and the July 2020 Transportation Impact Study (TIS) for the Proposed Alpine County Park Project within the unincorporated community of Alpine in San Diego County. The Proposed Project includes 24 acres of active park uses on the west and north sides of South Grade Road. Facilities and amenities include a baseball field, soccer fields, skate park, bike skills area, dog park, basketball and pickleball courts, playground, fitness stations, equestrian staging area with corral, community garden, picnic areas with shade structures, picnic tables, and multi-use trails.

O8-108 In my over 50-years of traffic engineering and transportation planning experience, I believe that this is one of the worst Transportation Impact Studies whose unsupported conclusions and recommendations were then carried forward into the Draft Environmental Impact Report.

O8-109 A linear parking lot with about 250 parking spaces is proposed along both sides of a two-way driveway that accesses South Grade Road at each end. The maximum parking demand must be calculated, and provisions must be added (such as event scheduling) to contain all parking within the site so it does not overflow the park onto South Grade Road or into the adjacent residential areas. No parkway or roadway improvements such as sidewalks for pedestrians, lanes for bicyclists, or turning lanes for vehicles on South Grade Road are shown on the Concept Plan or described in any of the documents.

O8-110 My review disclosed that the lack of sidewalks, bicycle lanes, and turning lanes on South Grade Road will compromise traffic safety for users of the proposed park and for those passing by. Physical infrastructure improvements must be thoroughly studied now and implemented with the Project. This letter points out inconsistencies and conflicts among the various documents and recommends that these items be resolved. Implementing recommendations in the documents to install unwarranted multi-way STOP controls 700 feet apart on high-speed South Grade Road where stopping sight distance is inadequate will significantly increase the potential for numerous severe injuries and/or fatal traffic collisions, some involving pedestrians.

81905 Mountain View Lane, La Quinta, California 92253-7611
Phone (760) 398-8885
Email tbrohard0@gmail.com

Mr. Josh Chatten-Brown
Alpine County Park Project – Traffic Safety Issues
November 12, 2021

Education and Experience

O8-111

Since receiving a Bachelor of Science in Engineering from Duke University in Durham, North Carolina in 1969, I have gained over 50 years of professional traffic engineering and transportation planning experience. I am licensed as a Professional Civil Engineer both in California and Hawaii and as a Professional Traffic Engineer in California. I formed Tom Brohard and Associates in 2000 and have served sixteen diverse communities as the City Traffic Engineer and/or the Transportation Planner. During my career in both the public and private sectors, I have reviewed numerous environmental documents and traffic studies for various projects as shown in a brief summary of my experience in the enclosed resume.

South Grade Road Conditions

- Google Earth photography dated June 2019 shows that South Grade Road adjacent to the Proposed Park is comprised of an 11' travel lane with a 2' wide asphalt shoulder in each direction.

  Comment: Development of this park or any other project on this site must be required to provide street improvements as called out by the County of San Diego Department of Public Works (DPW) for the entire frontage of the project, plus adequate transitions, and tapers to join existing improvements to the north and west.

- The exiting travel lanes are separated by a double yellow centerline which prohibits passing and the narrow shoulders are delineated by a 4" wide white edge stripe.

O8-112

  Comment: The need for left turn lanes for traffic entering at the park access points as well as for acceleration and deceleration lanes must be evaluated and incorporated into the park project.

- The roadway contains a horizontal curve as the alignment changes from north/south to east/west approximately midway adjacent to the park site. The curve is posted in both directions with 90-degree curve warning signs and advisory 30 MPH speed plates. North of the curve, the regulatory posted speed limit is 40 MPH, and it is 45 MPH south of the curve.

  Comment: Improvements to South Grade Road must be designed in accordance with sight distance requirements for the design speeds on the roadway, 10 MPH above existing posted speed limits of 40 and 45 MPH.

Alternate Modes of Transportation

- Page 4.17-2 of the Draft EIR states "The closest bus stop is approximately 0.88 miles north of the project site."

  Comment: With this condition and without any sidewalk improvements, no park users can be expected to use public transportation to reach the closest bus stop and then walk to or from the Proposed Park.

- Page 4.17-2 of the Draft EIR states "There are no bike facilities along South Grade Road adjacent to the project site. All County roadways are open for travel by bicycle regardless of bikeway treatment."

  Comment: With narrow shoulders and traffic speeds of many vehicles on South Grade Road likely exceeding the posted speed limits of 40 and 45 MPH, it is unsafe for even an experienced bicycle rider to use South Grade Road to and from the park. While the heading in the Draft EIR on Page 4.17-2 indicates "Pedestrian and Bicycle Facilities"; the total lack of all pedestrian facilities is not mentioned or discussed.

O8-113

- The Concept Plan indicates that the park facilities will be separated from South Grade Road by a "bermed landscape screen." Page 4.17-9 of the Draft EIR states "The project includes improvements to circulation facilities including a decomposed granite walking path situated between the proposed berm and South Grade Road..."

  Comment: This walking path is not shown on the Concept Plan. Either a sidewalk within the public right of way or a walking path within the park should be provided to improve pedestrian safety.

Project Access Considerations

- Page 4.17-12 of the Draft EIR states "The project would involve two ingress/egress driveways providing access to the parking and staging areas within the park from South Grade Road. As part of the standard project approval process, the proposed access improvements would be reviewed by the County Department of Public Works (DPW) for safety and sight distance standards. Upon review of the improvements, County DPW would either approve the plans or provide specific recommendations for improving the safety of the proposed ingress/egress. County DPR would comply with all recommendations of County DPW."

O8-114

  Comment: Now is the time to evaluate basic traffic engineering requirements and conditions at the access points such as stopping sight distance as well as the need for left turn lanes. The TIS should have

O8-114 cont.

evaluated these items but failed to do so. Relying on DPW to catch design oversights during the plan review process is not appropriate.

- Page 4.17-12 of the Draft EIR states "Based on the queuing analysis, the vehicle queues at the project driveways and South Grade Road are expected to fit within the existing storage and would not impede traffic at the driveway or the adjacent roadway system."

O8-115

Comment: Without any improvements such as separate left turn lanes on South Grade Road at the project access driveways, eastbound and northbound vehicles will be required to wait in the high speed through lane until opposing traffic passes. This condition creates significant safety issues, particularly if the vehicle at the northern vehicle park access is a slow-moving pick-up truck hauling a horse trailer and waiting to access the equestrian facilities.

- In discussing the park access at Calle de Compadres, Page 4.17-13 of the Draft EIR states "...the intersection does not meet the minimum peak hour volumes for an all-way stop controlled intersection... The intersection at Calle de Compadres will operate with an all-way stop controlled intersection."

O8-116

Comment: From Google Earth photographs, Calle de Compadres provides access to six properties east of South Grade Road. The west leg will provide primary access to the park, serving about 250 vehicle trips a day in and out. To be effective by commanding respect of motorists as an all-way stop, traffic volumes on South Grade Road should be about equal to those at the park/Calle de Compadres. Multi-way stop control is not warranted at this intersection as the traffic volumes on South Grade Road are many times greater than on the cross streets. The TIS and Draft EIR should not propose multi-way Stop control if warrants are not satisfied. Installing unwarranted multi-way stop control will create more serious traffic collisions than would otherwise occur, especially when installed at locations with high vehicle speeds on the major roadway.

- In discussing the park access at Calle de Compadres, Page iii as well as multiple other pages in the TIS state "...the intersection does not meet the minimum peak hour volumes for an all-way stop controlled intersection. However, due to a number of pedestrian collisions occurring in the vicinity of this intersection, and since the project driveway at this intersection is considered an important and integral safety design feature of the Proposed Project, it is suggested that this intersection be converted to an all-way stop-controlled intersection with implementation of the Alpine Community Park. All-way stop controls would provide for an enhanced pedestrian safety route from the residential neighborhood on the east side

O8-117

of South Grade Road to the park as well as reduce the potential severity conflict between pedestrians and motorists."

Comment: The TIS has not disclosed or analyzed the "number of pedestrian collisions occurring in the vicinity of this intersection." There are no sidewalks in the vicinity of this intersection or on any of the other residential side streets that could channelize pedestrians to a single crossing point. Only six homes are served by Calle de Compadres, and other unconnected residential streets are further away. Unwarranted multi-way stops on this high-speed road with highly unbalanced intersection traffic volumes defies proper traffic engineering judgement and rationale. All-way stop controls would not provide for an enhanced pedestrian safety route from the residential neighborhood on the east side of South Grade Road to the park. Furthermore, the severe conflict between pedestrians and motorists would be increased and not reduced as stated in the TIS.

O8-117 cont.

- In discussing the intersection of South Grade Road and Via Viejas, Page 37 of the TIS states "...the intersection does not meet the minimum peak hour volumes for an all-way stop controlled intersection. However, due to the high pedestrian volumes that the Alpine Community Park is anticipated to generate, it is recommended to convert the intersection to an all-way stop controlled intersection to control vehicle/pedestrian conflicts... It is important to note that "STOP AHEAD" signs are recommended to be installed on the south leg of the intersection as the stopping sight distance at this approach is not met (360 feet required)."

O8-118

Comment: First, no vehicle or pedestrian access through the landscaped berm in the park to South Grade Road opposite Via Viejas is proposed in the Concept Plan. The TIS has not forecast the number of pedestrian crossings between the park and Via Viejas in order to properly determine if stop signs on South Grade Road would be warranted based upon pedestrian crossings. I believe few pedestrians will cross as there are no sidewalks on any of the residential side streets to the east. Providing an unwarranted multi-way stop on a high-speed road where motorists may not believe there is a legitimate reason to stop and where there is inadequate stopping sight distance defies proper traffic engineering judgement and rationale. If implemented, multi-way stop control on South Grade Road at Via Viejas will create unsafe conditions. All-way stop controls would not provide for an enhanced pedestrian safety route from the residential neighborhood on the east side of South Grade Road to the park. Furthermore, the potential severe conflict between pedestrians and motorists would be increased and not reduced as stated in the TIS.

O8-119

In summary, further study must be made to properly address the numerous comments in this letter. Following recommendations to install unwarranted multi-way STOP controls 700 feet apart on high-speed South Grade Road where stopping sight distance is inadequate will significantly increase the potential for numerous serious injury and/or fatal traffic collisions, with some likely involving pedestrians.

If you have questions regarding these comments, please contact me at your convenience.

Respectfully submitted,

Tom Brohard and Associates

Tom Brohard, PE
Principal

Enclosure





Tom Brohard, PE

Licenses: 1975 / Professional Engineer / California – Civil, No. 24577
1977 / Professional Engineer / California – Traffic, No. 724
2006 / Professional Engineer / Hawaii – Civil, No. 12321

Education: 1969 / BSE / Civil Engineering / Duke University

Experience: 50 Years

Memberships: 1977 / Institute of Transportation Engineers – Fellow, Life
1978 / Orange County Traffic Engineers Council - Chair 1982-1983
1981 / American Public Works Association – Life Member

Tom is a recognized expert in the field of traffic engineering and transportation planning. His background also includes responsibility for leading and managing the delivery of various contract services to numerous cities in Southern California.

Tom has extensive experience in providing transportation planning and traffic engineering services to public agencies. In addition to conducting traffic engineering investigations for Los Angeles County from 1972 to 1978, he has previously served as City Traffic Engineer in the following communities:

O8-120

- Bellflower ..... 1997 - 1998
- Bell Gardens ..... 1982 - 1995
- Big Bear Lake..... 2006 - 2015
- Indio..... 2005 - 2019
- Huntington Beach ..... 1998 - 2004
- Lawndale..... 1973 - 1978
- Los Alamitos ..... 1981 - 1982
- Oceanside..... 1981 - 1982
- Paramount ..... 1982 - 1988
- Rancho Palos Verdes ..... 1973 - 1978
- Rolling Hills ..... 1973 - 1978, 1985 - 1993
- Rolling Hills Estates ..... 1973 - 1978, 1984 - 1991
- San Fernando..... 2004 - 2019
- San Marcos..... 1981
- Santa Ana ..... 1978 - 1981
- Westlake Village ..... 1983 - 1994

During these assignments, Tom has supervised City staff and directed other consultants including traffic engineers and transportation planners, traffic signal and street lighting personnel, and signing, striping, and marking crews. He has secured over $10 million in grant funding for various improvements. He has managed and directed many traffic and transportation studies and projects. While serving these communities, he has personally conducted investigations of hundreds of citizen requests for various traffic control devices. Tom has also successfully presented numerous engineering reports at City Council, Planning Commission, and Traffic Commission meetings in these and other municipalities.

In his 14 years of service to the City of Indio, Tom accomplished the following:

- Oversaw preparation and adoption of the 2008 Circulation Element Update of the General Plan including development of Year 2035 buildout traffic volumes, revised and simplified arterial roadway cross sections, and reduction in acceptable Level of Service criteria under certain conditions.

- Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Jackson Street and on Monroe Street over I-10 as well as justifications for protected-permissive left turn phasing at I-10 on-ramps, the first such installations in Caltrans District 8 in Riverside County; reviewed plans and provided assistance during construction of both $2 million projects to install traffic signals and widen three of four ramps at these two interchanges under Caltrans encroachment permits.

- Reviewed traffic signal, signing, striping, and work area traffic control plans for the County's $45 million I-10 Interchange Improvement Project at Jefferson Street.

- Reviewed traffic impact analyses for Project Study Reports evaluating different alternatives for buildout improvements of the I-10 Interchanges at Jefferson Street, Monroe Street, Jackson Street and Golf Center Parkway.

O8-120 cont.

- Oversaw preparation of plans, specifications, and contract documents and provided construction assistance for over 70 traffic signal installations and modifications.

- Reviewed and approved over 2,000 work area traffic control plans as well as signing and striping plans for all City and developer funded roadway improvement projects.

- Oversaw preparation of a City-wide traffic safety study of conditions at all schools.

- Obtained $47,000 grant from the California Office of Traffic Safety and implemented the City's Traffic Collision Database System. Annually reviews "Top 25" collision locations and provides traffic engineering recommendations to reduce collisions.

- Prepared over 1,500 work orders directing City forces to install, modify, and/or remove traffic signs, pavement and curb markings, and roadway striping.

- Oversaw preparation of engineering and traffic surveys to establish enforceable speed limits on over 500 street segments.

- Reviewed and approved traffic impact studies for more than 35 major projects and special events including the annual Coachella and Stagecoach Music Festivals.

- Developed and implemented the City's Golf Cart Transportation Program.

Since forming Tom Brohard and Associates in 2000, Tom has reviewed many traffic impact reports and environmental documents for various development projects. He has provided expert witness services and also prepared traffic studies for public agencies and private sector clients.

Exhibit D

COUNTY OF SAN DIEGO

LAND USE AGENDA ITEM

BOARD OF SUPERVISORS

NORA VARGAS
First District

JOEL ANDERSON
Second District

TERRA LAWSON-REMER
Third District

NATHAN FLETCHER
Fourth District

JIM DESMOND
Fifth District

DATE: **October 20, 2021** **05**

TO: Board of Supervisors

SUBJECT
RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE REGIONAL PARK GRANT PROGRAM (DISTRICTS: 1, 2, 5)

OVERVIEW
On June 5, 2018, California voters approved the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 (Proposition 68). Proposition 68 authorized $4.0 billion in general obligation bonds to support projects that enhance environmental and social equity in communities with median household incomes less than 60 percent of the statewide average by expanding access to local and regional outdoor spaces and investing in infrastructure that builds community resiliency. The Statewide Regional Park Grant Program (RPP) funding was made available by Proposition 68. The competitive program is in its first round of applications with $23,125,000 available to create, expand, or improve regional parks and recreational facilities across California. Proposition 68 requires that at least 20% ($4,625,000) of the $23,125,000 is awarded to severely underserved communities with a median household income below $42,737.

O8-121

The first minimum eligibility criteria for the RPP grant is the project site must be at least 50 acres. The second criteria is a new recreational amenity attracting visitors from at least a 20-mile radius or a county-wide population. The Department of Parks and Recreation (DPR) must submit a resolution adopted by the Board of Supervisors approving one, or more, application(s) for the grant program. DPR uses a Capital Investment Model to assess community needs. This model assesses park infrastructure and compares it to national and local standards to determine how a community's amenities compare to those standards. DPR reviewed all 97 active park projects with this model and compared the projects to the grant eligibility criteria. Four projects met the eligibility requirements. DPR is applying for up to $9,525,000: $3,000,000 each for Alpine County Park, Bonsall Community Park, Sweetwater Summit Regional Park Campground Expansion Phase II, and $525,000 for Stelzer Park Ranger Station and Visitor Center in the community of Lakeside to fund construction. Beyond satisfying minimum qualifications, these projects also meet the majority of RPP's stated priorities.

This request is to adopt a resolution authorizing DPR to apply for, and accept, up to $9,525,000 from the RPP's first round of grant funding administered by the Office of Grants and Local Services (OGALS). In addition, this request would authorize the Director of DPR, or designee, to

conduct all negotiations and to execute and submit all documents that may be necessary to apply for and accept the grant funds. Applications are due November 7, 2021 and grants will be awarded in Spring 2022.

RECOMMENDATION(S)
CHIEF ADMINISTRATIVE OFFICER

1. Find that the proposed project is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the State CEQA Guidelines.

2. Adopt a resolution entitled: RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN DIEGO APPROVING THE APPLICATION FOR REGIONAL PARK PROGRAM GRANT FUNDS

3. Authorize the Director, Department of Parks and Recreation, or designee, as agent of the County, to conduct all negotiations and submit all documents including, but not limited to, applications, contracts, payment requests and to execute the grant agreements, including any extensions or amendments thereof that do not materially impact or alter the grant program or funding levels.

EQUITY IMPACT STATEMENT

O8-121 cont.

Improvements at various parks will ensure continuation of accessible recreational amenities for families and youth throughout the region. It is anticipated that the recreational improvements at Alpine Park and Bonsall Park will be located in two unincorporated communities that do not currently have a County park, and both projects will provide healthy recreational opportunities that are open and accessible to all demographics in the county by providing new parks and recreational facilities. It is anticipated that the campground expansion at Sweetwater Summit Regional Park Campground and the Stelzer Ranger Station and Visitor Center will have a positive health impact on all demographics in the county by expanding two parks and recreational facilities that will remain open and accessible.

FISCAL IMPACT

There is no fiscal impact associated with today's request to apply for and accept grant funds from the Proposition 68 Statewide Regional Park Program Grant. If approved, today's actions would authorize the submittal of one, or more, project application(s) for grant funds up to $9,525,000. There are no matching funds required for this grant.

The Board approved a waiver of Board Policy B-29 for LUEG grants on June 24, 2020 (12), therefore a waiver is not requested as part of this action. The waiver authorizes LUEG department Directors, or designee(s), to submit, negotiate, and execute all documents that may be necessary to secure and spend grant funds for LUEG department projects and/or programmatic activities through June 30, 2025, including, but not limited to, applications, payment requests, agreements, and amendments to the agreements. If a grant is awarded, any unrecovered cost per Board Policy B-29 would be funded by existing General Purpose Revenue in the Department of Parks and Recreation (DPR) as determined by the nature of the project(s) or program(s).

If grant funds are awarded, the DPR will return to the Board of Supervisors to establish the necessary appropriations in Fiscal Year 2022-23. There will be no change in net General Fund cost and no additional staff years associated with the award of this grant. Alpine County Park Phase I, Bonsall Community Park, and Sweetwater Summit Regional Park Campground Expansion Phase II will require staffing additions. The funding source, costs, and full-time employee (FTE) requests will be included in future Operational Plans.

Phase I of Alpine County Park is projected to open in Fiscal Year 2023-24, and ongoing operations will be supported by existing maintenance crews and temporary staff with costs estimated at $322,330 and including the need for 4.0 additional FTEs. These ongoing operations costs have not been allocated and will be included in future Operational Plans for the DPR.

Bonsall Community Park is projected to open in Fiscal Year 2023-24 and will have ongoing costs of approximately $552,000 including the need for 4.0 additional FTEs. These ongoing operations costs have not been allocated and will be included in future Operational Plans for the DPR.

O8-121
cont.

Sweetwater Summit Regional Park Campground Expansion Phase II is projected to open in Fiscal Year 2022-23 and will have ongoing costs of approximately $224,174 including the need for 2.0 additional FTEs.

Stelzer Park Ranger Station and Visitor Center is projected to open in Fiscal Year 2022-23. Upon completion, annual operations and maintenance of improvements will be provided by existing Department of Parks and Recreation staff. The funding source is Department of Parks and Recreation budgeted General Purpose Revenue. There will be no change in net General Fund and no additional staff years.

BUSINESS IMPACT STATEMENT
N/A

ADVISORY BOARD STATEMENT
N/A

BACKGROUND
California voters approved the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 (Proposition 68). Proposition 68 authorized $4.0 billion in general obligation bonds to support projects that enhance environmental and social equity in disadvantaged communities, expand access to local and regional outdoor spaces, invest in infrastructure that builds community resiliency, and protect California's natural, historic, and cultural legacy. Upon passage of Proposition 68, funding for the Statewide Regional Park Program (RPP) was made available. The competitive program is in its first round of applications with $23.125 million available to create, expand, and improve regional park and recreational amenities.

To receive an RPP grant contract, the Department of Parks and Recreation (DPR) must submit a signed resolution approving application(s) for the grant program and one, or more, project application(s) that equal up to the amount of its allocation. DPR must also certify availability of funding to complete, operate, and maintain the project prior to commencement of any project work. In accordance with Public Resources Code §80001(b)(8 A-G), should DPR be selected as a funding recipient, DPR must also consider a range of actions promoting diversity and inclusion as identified in the "Presidential Memorandum – Promoting Diversity and Inclusion in our National Parks, National Forests, and Other Public Lands and Waters." The Presidential Memorandum includes expanding outreach efforts, building partnerships, and improving programs to increase access to parks for diverse populations. DPR is applying for grant funds to support the construction of four large-scale parks that attract visitors county-wide: Alpine County Park, Bonsall Community Park, Stelzer Park Ranger Station and Visitor Center, and Sweetwater Summit Regional Park Campground Expansion Phase II.

The minimum eligibility criteria for the RPP grant are that the project site is at least 50 acres and offers a feature that attracts (or will attract) visitors from at least a 20-mile radius or a county-wide population. DPR uses a Capital Investment Model (CIM) to assess community needs. This model assesses park infrastructure and compares it to national and local standards to determine how the community's amenities compare to these standards. DPR reviewed 97 active park projects with this model and compared the projects to the minimum grant eligibility criteria described above. Four projects met the eligibility requirements: Alpine County Park, Bonsall Community Park , Stelzer County Park Ranger Station and Visitor Center, and Sweetwater Summit Regional Park Campground Expansion Phase II.

O8-121 cont.

Alpine County Park is 98 acres, Bonsall Community Park is 63 acres, Louis A. Stelzer County Park is 373 acres, and Sweetwater Summit Regional Park is 500 acres. DPR is applying for $3,000,000 each for Alpine County Park Phase I, Bonsall Community Park, Sweetwater Summit Regional Park Campground Expansion Phase II, and $525,000 for Stelzer Park Ranger Station and Visitor Center to fund construction of these projects.

The proposed Alpine Community Park is located at the intersection of South Grade Road and Via Viejas in the unincorporated community of Alpine in District 2. Currently, the Alpine community does not have any County-owned active parkland or park amenities. The County acquired the 98-acre site that will become a 25-acre park and 73 acres of preserve land in March 2019. Currently, DPR is finalizing construction documents and an Environmental Impact Report for the park. Design of the park is based on input received during four public outreach meetings conducted between May 2019 and January 2021. Proposed amenities include multiuse pathways, baseball/softball field, basketball court, pickleball courts, restrooms, playgrounds, bike skills park, all-wheel skate park, picnic areas, community garden, dog park, and equestrian staging area. Total project cost is estimated at $28,000,000, and $6,500,000 was appropriated for Alpine Park acquisition, design and environmental analysis in the Fiscal Year 2018-19 Operational Plan, and $10,500,000 was appropriated in Fiscal Year 2021-22 Operational Plan for Phase 1 Construction. Phase 1 construction is anticipated to begin in Fall 2022 and include a baseball field, a dog park, playgrounds, picnic areas, a restroom, equestrian staging area, a volunteer pad, a maintenance

building and pervious parking. Phase 2 is anticipated to include a community garden, sport courts, nature play area, multi-purpose grass area, all-wheel area, and additional trails and additional parking, pending receipt of funding. Phase 3: is anticipated to include a bike skills course, fitness stations, and expansion of the multi-purpose grass area and trail system, pending allocation of funding. DPR will include solar carports and two Electric Vehicle (EV) charging stations in the bidding and construction documents as additive alternates. The solar carports are anticipated to provide enough energy for the energy demands of the park. Additive alternates will be included with the construction contract if the bids received for the base contract and additive alternates are below the total amount of funding available for construction. If awarded, the grant funding would be applied to the project in order to realize the community's vision and provide high-quality, recreational experiences throughout the region.

The proposed Bonsall Community Park is part of the greater San Luis Rey River Park located near the intersection of Highway 76 and Camino Del Rey in the unincorporated community of Bonsall in District 5. Currently, the Bonsall community does not have any County-owned active parkland or park amenities. The County acquired the 63-acre site that will become the new park in 2015. At present, DPR is finalizing construction documents for the park and preparing an environmental analysis. Design of the park is based on input received during three public outreach meetings conducted between April 2019 and November 2020. Proposed amenities include multiuse pathways, soccer fields, baseball/softball fields, basketball courts, tennis courts, restrooms, playgrounds, bike skills park, skate park, picnic areas, and a dog park. To offset electrical usage from proposed buildings and lighting, DPR will include solar carports in the bidding and construction documents as additive alternates. In addition, green infrastructure including pervious parkving, infiltration basins, and low-water use, native plants will be featured at the new park. The proposed improvements will be the first active recreational amenities implemented from the San Luis Rey River Park Master Plan. Total project cost is estimated at $25 million, and $800,000 was appropriated for Bonsall Park in the Fiscal Year 2018-19 Operational Plan, and $22,950,000 was appropriated in the Fiscal Year 2020-21 Operational Plan. If awarded, the grant funding would be applied to the project in order to realize the community's vision and provide high-quality, recreational experiences throughout the region. Construction is anticipated to begin in spring 2022.

O8-121 cont.

The proposed replacement of the Stelzer Ranger Station is located in Louis A. Stelzer County Park (Stelzer Park) off of Wildcat Canyon Road in the unincorporated community of Lakeside in District 2. Stelzer Park is a 420-acre facility that includes several miles of multi-use hiking trails, old-growth canopy trees, play equipment, and a 702 square-foot, single story ranger station that serves as staff headquarters and a visitor center. The existing ranger station was built in 1983. Recent conditions assessments determined that a replacement was needed. The proposed replacement building will be one story, 990 square feet. The new building will create a visitor and interpretive facility in addition to provide office space and storage for the park rangers. In addition to compliance with Title 24 of the California Code of Regulations and the California Green Building Standards Code, the project utilizes rain barrels to capture and reduce runoff. Stelzer Park is the headquarters for the Department of Parks and Recreation's Discovery Program, a program that immerses students and teachers in nature-related activities designed to educate them about

science and history of the local environment. DPR is currently finalizing construction documents for the project and has already completed an environmental analysis. No changes to access the park or parking are required. The total project cost is anticipated to be $500,000, which was appropriated in the Fiscal Year 2018-2019 Operational Plan. If awarded, the grant funding would be applied to the project in order to provide a high-quality, recreational and educational experience available for all visitors. Construction is anticipated to begin in winter 2021-2022.

The proposed Sweetwater Summit Regional Park Campground Expansion Phase II project is located within Sweetwater Regional Park at the intersection of State Route 125 and Summit Meadow Road in the unincorporated community of Sweetwater in District 1. The Sweetwater Regional Park is 500-acres and offers a variety of recreational activities and amenities to the public including 15 miles of multi-use trails, a playground, picnic facilities, a community garden, splash pad, a community building, bicycle skills course, and an amphitheater. The project includes a new photovoltaic solar panel installation which will completely offset the energy requirements of the 27 new campsites. The project also plants shade-providing trees along with a thousand native shrubs. The Sweetwater Summit Campground continues to be one of DPR's most popular facilities, with reservations booking out six months in advance and an average occupancy of 90 percent. Weekends typically reach 100 percent capacity. The proposed project will help meet the consistent demand for campsites at the park by constructing 34 full hook-up campsites, bringing the total number of campsites for the campground to 144, which will complete the facility's masterplan. The project also includes trees, day-use parking, walkways, solar carports, improved circulation throughout the campground and landscaping. DPR will include two Electric Vehicle (EV) charging stations in the bidding and construction documents as additive alternates. Additive alternates will be included with the construction contract if the bids received for the base contract and additive alternates are below the total amount of funding available for construction. By expanding the campground, the proposed project will also increase access to nature by its proximity to Sweetwater Regional Park amenities and adjacent open space areas. DPR is presently finalizing construction documents for the project and has already completed an environmental analysis. The estimated total project cost for the proposed Campground Expansion Phase II is $4,150,000 in the Fiscal Year 2020-21 Operational Plan. If awarded, the grant funding would be applied to the project in order to expand recreational opportunities and provide an improved visitor experience at the existing campground. Construction is anticipated to begin in winter 2021-2022.

O8-121 cont.

The robust public engagement processes for each park, combined with the potential to deliver multiple environmental and social benefits, make each project well-suited to compete for funding statewide. In particular, the projects' capacities to: improve local health and wellness through access to nature and recreation opportunities; enhance community connectivity through the addition of multiuse paths; provide volunteer opportunities through collaboration with the California Conservation Corps, reduce greenhouse gas emissions and energy use through tree-planting and enhanced connectivity, improve stormwater infiltration and local habitat through use of retention basins or native rainwater harvesting gardens, align closely with RPP's stated priorities.

SUBJECT: RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE REGIONAL PARK GRANT PROGRAM (DISTRICTS: 1, 2, 5)

Today's request is to adopt a resolution authorizing DPR to apply for, and accept, up to $9,525,000 in grant funding from the Statewide Park Development and Community Revitalization Program administered by the Office of Grants and Local Services. In addition, this request would authorize the Director, DPR, or designee, to conduct all negotiations, sign and submit all documents, including, but not limited to applications, agreements, amendments, and payment requests that may be necessary to apply for and accept the grant funds. The Department of Parks and Recreation will return to the Board of Supervisors to establish the necessary appropriations in Fiscal Year 2022-23.

O8-121 cont.

ENVIRONMENTAL STATEMENT

The request for approval to apply for and accept grant funding is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the CEQA Guidelines. Section 15061(b)(3) of the CEQA Guidelines provides that a project is exempt from CEQA review where "it can be seen with certainty that there is no possibility the activity in question may have a significant effect on the environment…" The proposed action seeks to authorize the Department of Parks and Recreation to apply for and accept Proposition 68 grant funds to offset costs to develop and implement future projects. Since the action involves delegation of authority to seek and accept grant funding without a commitment to implement any particular project, the action is exempt from CEQA review because it can be seen with certainty that the activity will not have a significant effect on the environment. If funded, each project will be required to comply with CEQA prior to project implementation.

SUBJECT: RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE REGIONAL PARK GRANT PROGRAM (DISTRICTS: 1, 2, 5)

O8-121 cont.

LINKAGE TO THE COUNTY OF SAN DIEGO STRATEGIC PLAN
The proposed actions to adopt resolutions to apply for and accept grant funds, if awarded, support the Sustainable Environments/Thriving Initiative in the County of San Diego's 2021-2026 Strategic Plan by promoting an environment where residents can enjoy parks, open spaces, and outdoor experiences.

Respectfully submitted,



SARAH E. AGHASSI
Deputy Chief Administrative Officer

ATTACHMENT(S)
Attachment A: Vicinity Map
Attachment B: RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN DIEGO APPROVING THE APPLICATION FOR REGIONAL PARK PROGRAM GRANT FUNDS

SUBJECT: RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE REGIONAL PARK GRANT PROGRAM (DISTRICTS: 1, 2, 5)

AGENDA ITEM INFORMATION SHEET

REQUIRES FOUR VOTES: ☐ Yes ☒ No

WRITTEN DISCLOSURE PER COUNTY CHARTER SECTION 1000.1 REQUIRED
☐ Yes ☒ No

PREVIOUS RELEVANT BOARD ACTIONS:
N/A

BOARD POLICIES APPLICABLE:
B-29 Fees, Grants, Revenue Contracts- Department to certify that project would be worthy of County financial support.

BOARD POLICY STATEMENTS:
Board Policy B-29 mandates that departments seek to recover the full cost of all services provided to agencies or individuals outside the County of San Diego organization. Reimbursement by fees, contracts and grants will be for the full cost of all services, with certain exceptions approved by the Board.

O8-121 cont.

The Board approved a waiver of Board Policy B-29 for all LUEG Grants on June 24, 2020 (12). The proposed grant funding from the California Statewide Park Program Grant Program may not offset all administrative costs. If a grant is awarded, any unrecovered cost per Board Policy B-29 would be funded by existing General Purpose Revenue in the Department of Parks and Recreation, as determined by the nature of the project(s) or program(s). The projects to be funded will enhance the quality of life in San Diego County by offering the public exceptional parks and recreation experiences and preserving significant natural resources.

In accordance with Board Policy B-29, the Director of the Department of Parks and Recreation certifies that the activities proposed to be funded by the California Statewide Park Program Grant Program would be worthy of County funding if external financing were unavailable.

MANDATORY COMPLIANCE:
N/A

ORACLE AWARD NUMBER(S) AND CONTRACT AND/OR REQUISITION NUMBER(S):
N/A

ORIGINATING DEPARTMENT: Parks and Recreation

OTHER CONCURRENCE(S): N/A

CONTACT PERSON(S):

SUBJECT: RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE REGIONAL PARK GRANT PROGRAM (DISTRICTS: 1, 2, 5)

O8-121 cont.

Brian Albright	David Norgard
Name	Name
858-966-1300	858-966-1320
Phone	Phone
Brian.Albright@sdcounty.ca.gov	David.Norgard@sdcounty.ca.gov
E-mail	E-mail

Exhibit E

Preserve Alpine's Heritage
Alpine Community Plan Area (CPA) Recreational Facilities
Date: October 7, 2021

Included below are the six parks listed as Local Parks for Alpine CPA on Table 6-4: Parks and Specialty Facilities Serving Each CPA, from the County of San Diego Parks Master Plan, December, 2020. Missing from that list but included here are the facilities at Boulder Oaks Elementary School, Grossmont Adult Education/Alpine Education Center and Van Buskirk Field, all located in Alpine.

1. SUMMARY

Some fields are shared, based on the season. See specifics in Section 2, Details of Facilities By Location

- Baseball: 13 fields
- Basketball: 14 full courts, 1 half court
- Lacrosse: 2 fields
- Parks/Areas with play structures: 7 parks/play areas of varying sizes
- Soccer: 7-11 fields depending on age group
- Softball: 2 fields currently open; 3 additional fields currently closed
- Tennis: 1 court

2. DETAILS OF FACILITIES BY LOCATION

- Facility rating scale is Good - Fair - Poor
- Condition determined by visual observations from May - July, 2021
- Acres included are approximates based on the best available information

Alpine Community Center (ACC) 3.12 total acres (2.25 acres of fields/tennis courts; 0.87 acres of park/playground/grass)	
Owner	Alpine Community Center http://alpinecommunitycenter.com **Objectives of ACC:** To provide a site for youth, senior citizens, family, civic, and community activities; To promote friendship among all peoples in the Alpine Community; To encourage and aid the development of youth in the area; To explore, promote and support innovative and creative programs to meet the changing social and recreational need in the community; To encourage and provide opportunities for recreation and educational growth for all people in the Alpine Community.
Google maps view	https://www.google.com/maps/place/Alpine+Community+Center/@32.8389291,-116.77622,186m/data=!3m1!1e3!4m5!3m4!1s0x80d9608d1a20b2b5:0xb6277cb065893046!8m2!3d32.8382192!4d-116.7757626
Fields/Courts and conditions	Softball (Otto Fields) • One full-size softball field with backstop, dugouts and bleachers. Condition: Good • One smaller softball field with backstop, dugouts and bleachers used for games and practices. Condition: Poor • Announcer's booth/snack bar. Condition: Fair • Batting cage. Condition: Good Tennis

O8-122
cont.

	• One lighted tennis court. Condition: Good
Other amenities and conditions	• Park and playground with seven picnic tables, fenced playground area with multiple play structures, built-in stage and grass lawn area. Condition: Good • Community Center with a variety of indoor and outdoor event and meeting rooms. Condition: Good
Organization(s) known to use facilities	Alpine Girls Softball (includes girls from all of East County and many games are played in El Cajon and Lakeside) www.alpinesoftball.com

Boulder Oaks Elementary School 2.85 total acres (2.85 acres of fields, 0.78 acres of asphalt courts)	
Owner	Alpine Union School District https://www.alpineschools.net
Google maps	https://www.google.com/maps/place/Boulder+Oaks+Elementary+School/@32.8192568,-116.7781493,371m/data=!3m1!1e3!4m12!1m6!3m5!1s0x80d960bed597682f:0xe6e1c001c3714a61!2sBoulder+Oaks+Elementary+School!8m2!3d32.8187664!4d-116.7775683!3m4!1s0x80d960bed597682f:0xe6e1c001c3714a61!8m2!3d32.8187664!4d-116.7775683
Fields/Courts and conditions	Baseball (Fields not used during soccer season) • One baseball field with backstop, dugouts and bleachers. Condition: Poor Soccer (Fields not used during baseball season) • One U8 or three small soccer fields. Condition: Poor
Other amenities and conditions	Unknown
Organization(s) known to use facilities	Alpine Youth Soccer Organization www.alpineayso.org/region295

Boulder Oaks Neighborhood Park 3.97 total acres (3.97 acres of grass/playgrounds)	
Owner	Alpine Union School District https://www.alpineschools.net
Google maps	https://www.google.com/maps/place/Boulder+Neighborhood+Park/@32.8204985,-116.7770847,186m/data=!3m1!1e3!4m9!1m2!2m1!1sboulder+oaks+neighborhood+park!3m5!1s0x80d960beddbd1061:0x5bd256d3e24be78a!8m2!3d32.8206788!4d-116.7766609!15sCh5ib3VsZGVyIG9ha3MgbmVpZ2hib3Job29kIHBhcmtaQAoeYm91bGRlciBvYWtzIG5laWdoYm9yaG9vZCBwYXJrIh5ib3VsZGVyIG9ha3MgbmVpZ2hib3Job29kIHBhcmuSAQRwYXJrmgEjQ2haRFNVaE5NRzluUzBWSlEwRm5TVU5SZEdOVFVGRm5FQUU
Fields/Courts and conditions	No fields or courts
Other amenities and conditions	• Park and playground with 18 picnic tables, some benches, multiple play structures and grass lawn area. Condition: Good to Fair, depending on amenity
Organization(s)	Fit4Mom Alpine and Rancho San Diego

O8-122
cont.

known to use facilities	https://alpine.fit4mom.com San Diego Yo-Yo Club https://www.facebook.com/San-Diego-Yo-Yo-club-107183227832486/

Grossmont Adult Education/Alpine Education Center (former site of Alpine Elementary School) 1.6 total acres (1 acre of grass field; 0.6 acres of asphalt)	
Owner	Alpine Unified School District Currently used by Grossmont Union High School District https://adultschool.guhsd.net/Locations/Alpine-Education-Center/index.html
Google maps	https://www.google.com/maps/place/Alpine+Elementary+School/@32.8385975,-116.7748317,186m/data=!3m1!1e3!4m8!1m2!2m1!1salpine+ca+elementary+school!3m4!1s0x80d9608cdb814cb9:0xd7a6c49ca27e8736!8m2!3d32.8383495!4d-116.7736817
Fields/Courts and conditions	Basketball • Two basketball courts. Condition: Fair Soccer • One artificial turf soccer field. NOTE: Good for practices and games for younger children because not regulation size. Condition: Fair
Other amenities and conditions	• Play structure. Condition: Fair
Organization(s) known to use facilities	Unknown

Joan MacQueen Middle School (JMMS) 7.16 total acres (5.9 acres of fields; 1.26 acres of asphalt)	
Owner	Alpine Union School District https://www.alpineschools.net
Google maps view	https://www.google.com/maps/place/Joan+MacQueen+Middle+School/@32.8240762,-116.7748061,373m/data=!3m1!1e3!4m5!3m4!1s0x80d960bfda1e0f17:0xb0ca8383a4882a8d!8m2!3d32.8249219!4d-116.7736928
Note(s)	Per Dr. Rich Newman, Superintendent of Alpine Union School District, plans for a major renovation of JMMS fields have been approved and the County is expected to fund the project in October or November, 2021. Groundbreaking will happen as soon after that as possible. The area to be renovated is approximately 9 acres.
Fields/Courts and conditions	Basketball • Eight basketball courts. Condition: Poor Lacrosse (Fields not used during soccer season) • One “upper” lacrosse field. Condition: Poor • One “lower” lacrosse field. Condition: Fair

O8-122
cont.

	Soccer (Fields not used during lacrosse season) • One “upper” regulation U12 soccer field. Condition: Poor • One “lower” regulation U10 soccer field. Condition: Fair Softball (Per Alpine Girls Softball website, field is closed) • Two softball fields with back stops, dugouts and bleachers. Condition: Poor • Batting cage. Condition: Poor
Other amenities and conditions	• Gravel track circling the “lower” field. Condition: Poor
Organization(s) known to use facilities	Alpine Youth Soccer Organization www.alpineayso.org/region295 Alpine Eagles Lacrosse https://www.alpineeagleslax.com

Old Ironsides County Park 3.6 total acres	
Owner	San Diego County Department of Parks and Recreation https://www.sdparks.org/content/sdparks/en/park-pages/OldIronsides.html
Google maps	https://www.google.com/maps/place/Old+Ironsides+County+Park,+El+Cajon,+CA+92019/@32.8218489,-116.8298151,601m/data=!3m1!1e3!4m5!3m4!1s0x80d95e38ddb32001:0xc09f8cc6d5fea113!8m2!3d32.8227154!4d-116.8271627
Fields/Courts and conditions	Basketball • One half court. Condition: Good
Other amenities and conditions	• Two playground areas with multiple play structures, one exercise course, seven picnic tables, horseshoe pit, small gazebo. Condition: Good to Fair, depending on amenity • Community Center, restrooms and large outdoor covered meeting area. Condition: Unknown
Organization(s) known to use facilities	Unknown

Rios Baseball Park 9.88 total acres	
Owner	Appears to be San Diego County Department of Parks and Recreation. While Rios Baseball Park is not listed on the County Parks and Rec (DPR) website as a park, a notice posted at the facility states, “The County of San Diego Department of Parks and Recreation is reopening park amenities in sync with public health orders.” An additional 3-page form (with a date of completion of 12/4/20 and naming a contact person who, as of July 22, is an employee of DPR) details the Safe Reopening Plans for the facility. https://www.rioscanyonll.com

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cont.

Google maps	https://www.google.com/maps/place/Rios+Canyon+Little+League+fields/@32.8571424,-116.8604813,323m/data=!3m1!1e3!4m5!3m4!1s0x80d95f6f71a4595b:0x61e89e0844eecf5!8m2!3d32.8570996!4d-116.859226
Fields/Courts and conditions	Baseball • Four baseball fields with backstops, dugouts and bleachers. Condition: Good – Fair depending on the amenity • Two additional baseball fields. Condition: Poor
Other amenities and conditions	• Snack bar. Condition: Good • Restrooms. Condition: Unknown • Batting cage. Condition: Good • Picnic tables and playground with play structure. Condition: Good
Organization(s) known to use facilities	Rios Canyon Little League https://www.rioscanyonll.com

Shadow Hills Elementary School/Creekside Early Learning Center 7.76 total acres (3.94 acres of fields and 0.6 acres of asphalt at SHES, and 2.2 acres of fields and 1.02 acres of asphalt at CELC,)	
Owner	Alpine Union School District https://www.alpineschools.net
Google Maps view	https://www.google.com/maps/place/Creekside+Early+Learning+Center/@32.8326704,-116.8174808,373m/data=!3m1!1e3!4m5!3m4!1s0x80d95e340c6b36fb:0xbddb006f5c0dc81c!8m2!3d32.8337725!4d-116.8154235
Note(s)	Alpine American Little League and Alpine American Youth Soccer Organization partnered at the end of 2020 to complete significant upgrades to the grass fields behind both schools, including overhauling irrigation, laser leveling the fields, spreading topsoil with seeds for grass and adding new dirt for baseball infields. They each use the facilities during their respective seasons. Alpine Unified School District contributed by fixing a drainage issue on Creekside fields to help with runoff during the rainy season.
Fields/Courts and conditions	Baseball (Fields not used during soccer season) • Two full-size baseball fields with backstops, dugouts and bleachers behind Shadow Hills. Condition: Good • Two smaller baseball fields with backstops, dugouts and bleachers behind Shadow Hills. Condition: Fair for fields, backstops and dugouts; Poor for bleachers. • Two full-size baseball fields with backstops, dugouts, and bleachers behind Creekside. Condition: Good Soccer (Fields not used during baseball season) • Two soccer fields (One U12 and one U10) behind Shadow Hills. For practices, several teams use one field. Condition: Good • One U19 soccer field or two - three fields for younger children behind Creekside. Condition: Good Basketball • Two basketball courts at Shadow Hills. Condition: Fair • Two slightly smaller basketball courts (one with lower baskets) at Creekside. Condition: Fair
Other amenities and conditions	• Snack bar with an announcer's booth. Condition: Fair • Restrooms. Condition: Unknown • Batting cage. Condition: Good • Playground (behind Creekside). Condition: Good
Organization(s)	Alpine American Little League

O8-122
cont.

known to use facilities	www.alpineamericanlittleleague.com Alpine Youth Soccer Organization www.alpineayso.org/region295

Van Buskirk Field **1323 Administration Way, Alpine, CA 91901** 0.88 total acres	
Owner	Alpine Union School District https://www.alpineschools.net
Google maps	https://www.google.com/maps/place/Administration+Way,+Alpine,+CA+91901/@32.8364246,-116.7748212,186m/data=!3m1!1e3!4m5!3m4!1s0x80d9608d6fd3c775:0xfe226b8b63ec7a24!8m2!3d32.8363688!4d-116.7752698
Fields/Courts and conditions	Softball (Per Alpine Girls Softball website, field is closed) • One softball field with backstop, dugouts and bleachers used for practice. Condition: Poor
Other amenities	Unknown
Organization(s) known to use facilities	In the past, Alpine Girls Softball (includes girls from all of East County and many games are played in El Cajon and Lakeside) used the field. www.alpinesoftball.com

Exhibit F


Alpine Parks and Larger Parcels
AID 17 acres
P&R 2.9 acres
AES 1 soccer field
Alpine elementary playing fields 2 acres
AUSD 1 ball field
AUSD rec area 2.5 ac
P&R 2.4 acres
P&R 1.8 acres
Shadow Hills AUSD recreation area 11 acres
Soccer (room for 3 fields)
Shadow Hills 2 ball fields
Walser 12.5ac
Knifing 21.5 ac
P&R 4.6 acres
Tucci 9.ac
P&R 1.8 acres
P&R 2.6 acres
Yee Group Sal
Nelson 9.5ac
Halstead-Tyler 35.5ac
Bailey 14 acres
Wright's Field Preserve 201 ac
Carpenter 6.5 ac
Light 1.5 ac
JMMS 3 soccer fields
JMMS AUSD Fields 9 acres
Boulder Oaks Park 4.3 ac
Boulder Oaks playfield 3 acres
private
Lionhead Properties LLC 21ac
Tent City Dev Corp 20 ac
Wise 63 ac
Blackwolf Partners 184 ac
(significant mountain bike interest)
Thorman 33 ac
Jabro 2.5ac
O4A 23ac
Albertsons Shopping Center
P&R 4.4 ac
Albertsons 11.5 acres
CUHSD 93 ac
AID 46 ac
P&R 9 ac
P&R 19 ac
P&R 21 ac
Augustyn 49 ac
P&R 29 ac
Coleman 21 Acres
SDC 98 acres
proposed 26 acre County Park
300 total parking spaces
park takes 50% of property's CA native grassland (green)
Pizza Hut / PVR2 - 580 acres

Exhibit G

ERIC GIBSON
DIRECTOR

County of San Diego

DEPARTMENT OF PLANNING AND LAND USE

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666
INFORMATION (858) 694-2960
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February 20, 2009

Jim Harry
ICF Jones & Stokes
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE GROSSMONT UNION HIGH SCHOOL DISTRICT'S HIGH SCHOOL NO. 12

The County of San Diego has received and reviewed the Draft Environmental Impact Report (DEIR) dated January 6, 2009 for the Grossmont Union High School District's proposed High School No. 12 in the unincorporated community of Alpine. In response to the DEIR the County, as a responsible agency under CEQA Section 15381, has comments that identify environmental issues that may have an affect on the unincorporated lands of San Diego County. County Department of Planning and Land Use (DPLU), Department of Public Works (DPW) Transportation Division, and Department of Parks and Recreation (DPR) offer the following comments regarding the content of the document:

O8-124

GENERAL

The document is well written and does a good job of identifying the issues and environmental impacts on the three potential sites for the new high school. We appreciate the thoroughness of the document in analyzing all three locations at the same level of review. Due to the significant and not mitigable impacts to biological resources for Alternative B (Wright's Field) and the direct implications to the County's Multiple Species Conservation Plan, the County cannot recommend that this site be

chosen for such an intensive land use. However, the other two sites appear to be viable options for consideration.

BIOLOGY

1. Study Area B is located within the County's Wright's Field Pre-Approved Mitigation Area (PAMA) and adjacent to Wright's Field Preserve, an integral part of the County of San Diego's South County Multiple Species Conservation Program (MSCP) Subarea Plan. To date, the County, in partnership with the Back Country Land Trust (BCLT), has acquired 252 acres for open space within the Wright's Field Preserve, owned and managed by the BCLT. The County contributed approximately $1.4 million toward this open space preservation. Loss of this much grassland habitat would impact the overall function and viability of the grassland including the lands that have already been set aside as preserve with significant expense to the County and community. A significant amount of native grassland, such as at Wright's Field, is a very rare habitat in San Diego County and any impacts to it would be considered significant. Since Wright's Field is one of only approximately three remaining areas of significant amounts of intact native grassland in San Diego County, we agree with the significant and not mitigable finding in the DEIR since in-kind mitigation is probably not be feasible.

O8-124 cont.

2. It is agreed that Alternative B would result in a direct and cumulative conflict with the San Diego County MSCP Subarea Plan and would remain significant with implementation of the measures identified in the EIR. Any loss of native grassland habitat will impact the overall function and viability of the grassland including the lands that have already been preserved with significant expense to the County and community. Additionally, indirect effects associated with lighting, noise, invasive plants from landscaping, and ground moisture changes from irrigation runoff and impervious surfaces would also negatively affect the surrounding natural and preserved areas. From a biological and regional planning perspective Alternative B remains the least preferable of the three alternative sites.

3. Executive summary -The acreage of impacts to native grasslands associated with Alternative B is inconsistently stated at Summary of Impacts, Biological Resources (8.23 acres) and Significant Residual Impacts (27 acres) and Table S-1 MM BIO B.1.b (29 acres).

4. Executive summary - Please correct references to the San Diego County MSCP Subarea Plan instead of the MSCP and San Diego County Subarea Plan in the executive summary and elsewhere in the document.

5. The County concurs with impact BIO B.8 that the impacts to the Pre-Approved Mitigation Area (PAMA) are significant and not mitigable.
6. Executive Summary, Significant, Residual Impacts - Please revise as follows: Alternative B would result in a significant, potentially unmitigable loss of approximately 27 acres of native grassland within the ~~MSCP and~~ San Diego County MSCP Subarea Plan through development of a core wildlife area within a PAMA. The impact on native grassland within the PAMA conflicts with the MSCP Subarea Plan and the goals of the General Plan and the Alpine Community Plan related to preservation of natural resources.

CULTURAL RESOURCES

Staff has reviewed the cultural resources portions of the report titled, *"Draft Program Environmental Impact Report for High School Number 12"*, dated January, 2009, prepared by ICF Jones & Stokes. (Note: The Cultural Resources Technical Report, Appendix E, was not provided.) The DIER provides an overview of the potential impacts to cultural resources that were identified at each of the three alternative locations: Alternate B-Wright's Field, Alternate G-Chocolate Summit and Alternate J-Lazy-A Ranch. Each alternative location will impact significant or potentially significant cultural resources.

O8-124 cont.

7. County DPLU concurs with the record search and survey work summarized in the DEIR for this project relating to cultural resources both historic and prehistoric. Staff found the research thorough and well documented and is satisfied that the known important prehistoric sites will be avoided. Sites to be avoided and preserved by easement include CA-SDI-5199 in Alternative B, and sites CA-SDI-8722, CA-SDI-17194, CA-SDI-17195, CA-SDI-17196 and CA-SDI-17197 in Alternate J.

8. Staff does have concerns with the sites that have not been tested and/or evaluated (both historic and prehistoric) that will be impacted in each of the three alternatives. All site testing and evaluation is proposed after project approval and location selection, prior to grading. However, should human remains be uncovered in the prehistoric sites, or the historic structures prove to be significant, there is no opportunity is provided for alternatives to the proposed mitigation. In addition, no opportunity is given for the public to comment on the testing and evaluation of these resources.

9. Staff is concerned that the proposed mitigation for Historical Documentation (HABS/HAER) alone may not be adequate for the destruction of significant historic structures (should site assessment determine significance). In the case

of Architectural Heritage Association v. County of Monterey, 122 Cal.App.4th 1095 (2004), it was found that "archival documentation cannot normally reduce destruction of an historic resource to an insignificant level". Also in the case of League Protection of Oakland, 52 Cal.App.4th 896 (1997), the Court of Appeal held that the historic resources of the building to be demolished "normally cannot be adequately replaced by reports and commemorative markers".

10. Should future evaluation of the historic structures determine significance pursuant to CEQA criteria, DPLU recommends that adaptive reuse of the historic structures be considered as an alterative. It is understood that some of the buildings may be in poor condition, and that there is a cost associated with rehabilitation; however, CEQA requires mitigation of significant structures to a level below significance and all mitigation measures should be considered. In addition, rehabilitation can use the California Historical Building Code as adopted by the State Historical Building Safety Board, located in Title 24, Part 8. It is also published in the latest adopted California Building Code as Chapter 34, Existing Buildings, Division II, California Historical Building Code. DPLU recommends that the EIR evaluation of the historic structures include an analysis of what would be required for adaptive reuse of the significant structures.

O8-124 cont.

11. Staff has noted that site of Alternative B, Wright's Field is the same site for the proposed Park Alpine project TM 5433, a 142 acre subdivision for 41 single family residential lots.

12. Additionally, a portion of Alternative J, Lazy-A Ranch, is an open County project: Oak Creek at Lazy A Ranch, project numbers: SP 07-002; GPA 07-010, REZ 07-011, TM 5546, MUP 07-016 for a residential subdivision. The parcels included in the Oak Creek project are: 404-231-05 and 404-042-01.

If you have questions regarding cultural resources, please contact Gail Wright with the Department of Planning and Land Use at (858) 694-3003.

LAND USE

13. Summary Page S-41 – LU B.1 states in the second paragraph that "mitigation measures could be implemented to reduce stadium and PA noise" yet on page S-44, it appears that these are required. LU B.1 does not imply that these measures will be required or pursued. Please clarify.

14. Section 3.8 Land Use - Discussion of the effects of the proposed project on planned land uses should include reference to the County's Community Trails

Master Plan (CTMP), which is the implementing document for the County Trails Program described in the Public Facilities Element of the San Diego General Plan. The CTMP contains adopted individual community trails and pathway plans.

Communities participating in the CTMP are doing so because they have reached a consensus on the importance of recreational trails in their area and have expended considerable time and effort in formulating community trails plans. The Alpine Community Trails and Pathways Plan identifies proposed trail corridors within each of the three proposed school sites. The DEIR should be revised to include an analysis of any potential conflicts with or impacts to these proposed trails and pathways.

If you have any questions regarding trails or pathways locations, trail alignment study, or potential options, please contact Maryanne Vancio, County Trails Program Coordinator, Department of Parks and Recreation at 858-966-1372 or e-mail at: maryanne.vancio@sdcounty.ca.gov.

TRANSPORTATION AND TRAFFIC

O8-124 cont.

Transportation Division staff has reviewed the following documents regarding the proposed Grossmont Union High School District, High School #12 in the Alpine community:

- Traffic Impact Analysis (TIA) prepared by Kimley-Horn and Associates dated December 2008
- Draft Program Environmental Impact Report prepared by ICF Jones & Stokes dated January 2009

TRAFFIC IMPACT ANAYSIS (TIA)

15. The proposed high school project will generate substantial new and redistributed trips onto County Circulation Element roads in the Alpine area. The proposed projects will result in significant cumulative traffic impacts to Circulation Element Road throughout the Alpine area.

16. The proposed project should contribute to the County's Transportation Impact Fee (TIF) Program to mitigate the proposed projects cumulative traffic impacts.

17. An opening year traffic assessment with 1,100 students and the existing road network and horizon year (2030) traffic assessment with 2,200 students and

build-out of the County Circulation Element Roads by others assessment is provided. At this time, there is no proposed condition that would restrict expansion of the school to 2,200 students prior to 2020. The TIA should include an analysis of the school's peak capacity of 2,200 students in the Existing/Opening-Year Scenario. There is also no guarantee that other projects will construct the Circulation Element Roads prior to expansion of the school to 2,200 students. A phased traffic assessment should be provided based upon the anticipated road network at the time the school enrollment is expanded.

18. A near term cumulative traffic assessment, (existing plus project plus near term projects) should be provided. Preparation of the list of near-term / cumulative proposed / pending projects should be coordinated with the Department of Planning and Land Use.

19. On page 6-30 it is noted that fairshare contributions toward the installation of traffic signals should be provided to mitigate direct impacts at several intersections. Fairshare contributions alone will not fully mitigate a direct traffic impact.

O8-124 cont.

20. The TIA should identify what uses are allowed under the existing land use permits for each of the proposed alternatives and compare it to the proposed school trip generation.

21. The TIA should include an assessment of potential impacts at the Marshall Road (El Tinge Drive)/Alpine Boulevard intersection.

22. The TIA should specify the traffic volume on Alpine Boulevard between East Victoria Drive and Marshall Road (El Tinge Drive). The TIA should assess potential traffic impacts at this location.

23. Construction permits from the County of San Diego will be required for access onto the County Circulation Element Roads at the proposed driveways and for any other work within the County right-of-way.

24. The TIA should provide greater detail and analysis of the proposed driveways / access points for each of the alternatives. The need for turn pockets and acceleration lanes should be assessed. Based upon the anticipated traffic volumes turn pockets and other access improvements should be constructed by the proposed project prior to construction of the proposed school.

25. Conceptual plans for access, intersection and other improvements in the County right-of way should be provided. The following are access related items which should be addressed:

    - Corner sight distance adequacy at the project driveways.
    - Lane geometric improvements at each of the project driveways/intersections.
        - Conceptual striping and signing plans should be provided for all proposed road improvements and should identify existing and/or proposed bike lanes. (Both South Grade Road and Alpine Boulevard are part of the County's Bicycle Roadway Network.)
        - The TIA should demonstrate that the throat length at driveways and the bay length of any dedicated turn lanes on County roadways will be sufficiently long enough to minimize traffic queues during peak pick-up/drop-off times.
    - County's Design Standards for minimum driveway/road spacing.

26. Frontage improvements along the proposed school sites should be provided.

27. Dedications and preservation of right-of-way along the ultimate County Circulation Element Road cross sections should be identified and provided.

O8-124 cont.

28. The safe routes to school for each project site should be identified. Identification and assess of the provision of pedestrian facilities along the proposed safe routes to school should be provided for each site.

29. The TIA should identify the proposed school operation times and how those proposed times would impact the peak traffic periods.

30. The Traffic Volume Adjustment exhibits should be included in the main body of the text, not in the Appendix. Also, this section should include an exhibit showing the existing school's traffic volumes on roadway segments. At this time, it is not possible to determine if "Plus Project " scenarios/tables/exhibits are correctly showing the net result between adding the proposed projects' trips and subtracting the existing school's trips.

31. Tables 8-1 and 8-2 should be consistent when arranging the study area columns.

32. For the Study Area B alternative, the TIA recommends the installation of traffic signals as mitigation measures for impacts to several intersections. Traffic signal warrants should be prepared to verify that traffic signal warrants are

satisfied. The installation of traffic signals on County maintained roads would also require approval from the County Board of Supervisors.

33. For Study Area G, an evaluation of the potential for pedestrians crossing the South Grade Road at the intersection of South Grade and Via Viejas should be provided.

34. For the Study J alternative, pedestrian facilities should be provided/verified between the intersection of Alpine Boulevard/East Victoria Drive and the access to the proposed high school.

35. For the Study J alternative, the proposed high school project will result in direct traffic impacts to the Alpine Boulevard/East Victoria Drive intersection, the Alpine Boulevard Willows Drive intersection, the I-8 Eastbound off ramp/Willows Road intersection and the I-8 Westbound onramp/Willows Road intersections. Mitigation measures to address these impacts should be proposed.

DEIR

O8-124 cont.

36. Comments listed above for the proposed project's TIA should also be addressed in the DEIR.

Note to Land Development Project Manager: A copy of the TIA should be submitted to Caltrans for their review and comments.

If you have any questions regarding the above comments, please call Bob Goralka, County Traffic Engineer, with the Department of Public Works at (858) 874-4202.

In conclusion, the County would like to reiterate that Alternatives G and J appear to be viable sites for the intensity of development that a new high school would require. The biological impacts associated with Alternative B, considered a Biological Resouce Core Area (BRCA) would have far reaching impacts to the region and jeopardizes the ability of the County to meet the regional conservation goals of the San Diego County MSCP Subarea Plan. The County has made a significant investment in preserving the biology in the area and the development of a high school on the site would impede the connectivity of the wildlife corridors in the area and significantly reduce the sensitive habitats found on-site.

The County of San Diego appreciates the opportunity to participate in the environmental review process for the Grossmont Union High School District's proposed High School No. 12 in Alpine. We look forward to receiving future documents related to this project for review or to provide additional assistance at your request. If you have

any questions regarding these comments, please contact LeAnn Carmichael at (858) 694-3739.

Sincerely,

O8-124
cont.

ERIC GIBSON, Director
Department of Planning and Land Use

cc: Vince Nicoletti, CAO Staff Officer, DCAO, M.S. A-6
Bob Goralka, Transportation Division, Department of Public Works, M.S. O334
Trish Boaz, Department of Parks and Recreation, M.S. O-29
Priscilla Jaszkowiak, Administrative Secretary, Department of Planning and Land Use, M.S. O650
LeAnn Carmichael, Department of Planning and Land Use, M.S. O650

Exhibit H

Wright's Field MSCP Preserve
Phase IV



O8-125

Environmental Enhancement and Mitigation Program Application

Submitted by

The Back Country Land Trust
and
The County of San Diego
Department of Parks and Recreation

BACK COUNTRY LAND TRUST
338 W. Lexington Avenue, Suite 204
El Cajon, CA 92020
(619) 590-2258 FAX (619) 590-2248 www.bclt.org

Preserving San Diego's Back Country Since 1991

December 6, 2003

Mr. Dave Brubaker
EEM Program Coordinator
State of California Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dear Mr. Brubaker,

It is our pleasure to submit this application to the Environmental Enhancement and Mitigation (EEM) Program on behalf of the Back Country Land Trust and the County of San Diego Department of Parks and Recreation for Phase IV of the Wright's Field Multiple Species Conservation Plan (MSCP) Preserve. Support from the EEM Program has been critical to the success achieved to date in this land acquisition project.

Wright's Field encompasses a large, high quality native grassland in association with coastal sage scrub, Engelmann oak woodland, vernal pool and riparian habitats, and includes a number of endangered and sensitive species. It is a critical component of the County's Multiple Species Conservation Plan and the State's Natural Communities Conservation Program. In the first three phases of this land acquisition project, starting in 1997, the EEM Program has provided $1,250,000. This has been matched by the County with $1,445,000, and $212,000 mitigation from the Alpine School District, to acquire 230 acres in collaboration with The Back Country Land Trust, which manages the preserve.

O8-125 cont.

This land acquisition project has the wholehearted support of the Alpine community while the preserve itself provides an outstanding educational resource for students in the adjacent Joan McQueen Middle School. The County Supervisor for eastern San Diego County, Dianne Jacob, who has been instrumental in establishing the MSCP, enthusiastically supports the creation of an MSCP preserve in Wright's Field.

We seek the continued support of the EEM Program in this highly worthy project.

Yours Sincerely,

C. D. Stout, Ph.D.

Director of Resources
Back Country Land Trust

Page 3
Insert ‘EEMP Application’ Cover form page (A)
Print separate Word doc, ‘EEMP_page_3_5_insert.doc’

Program Application

INSERT FAX FROM
DON POPE

B. RELATED TRANSPORTATION PROJECT

(B.1) Transportation District	(B.2) City	(B.3) County	(B.4) Route Number/Name

(B.5) Location

(B.6) Description of Related Transportation Project

(B.7) Name of Transportation Agency

(B.8) Date Construction Began or Scheduled

O8-125
cont.

(B.9) Name of Approved/Certified Capital Outlay Program for Related transportation Project

I certify that the information contained in this project application form, including required attachments, is accurate and that I have read and understand the Assurances which are a part of this application.

Signed Only YMS needs to sign **Date**

(Grant Applicant's Authorized Representative, as shown on the Resolution)

RA (9/03)

C. ASSURANCES

Applicant possesses legal authority to apply for the grant and to finance, acquire, and construct the proposed project; and by formal action (i.e., a resolution) the applicant's governing body authorized the filing of the application, including all understandings and assurances contained therein, and authorized the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

Applicant will manage and maintain into the future any property acquired, developed, rehabilitated, or restored with grant funds provided through this program. For property acquisition or conservation easement, applicant will sign, notarize, and record an Agreement Declaring Restrictive Covenant (ADRC) developed by the California Department of Transportation. With the granting agency's prior approval, the applicant or its successors in interest may transfer the management and maintenance responsibilities in the property. If the property is not managed and maintained for the purposes stated in the Agreement, the state shall be reimbursed an amount at least equal to the amount of the grant award or, for real property, the pro rata fair market value of the property, including improvements, at the time of sale, whichever is higher.

O8-125 cont.

Applicant will give the state's authorized representative access to and the right to examine all records, books, papers, or documents related to the grant.

Applicant will cause work on the project to be commenced within a reasonable time after receipt of notification from the state that funds have been approved and that the project will be carried to completion with reasonable diligence. If applicant cannot submit its first invoice for reimbursement to Caltrans by May 31, 2005, applicant will submit a statement of project progress appropriate to the project that provides real assurances that the project will be completed prior to April 30, 2007, including but not limited to: project advertisement or firm advertisement schedule, entry into escrow for acquisitions, date project plans will be completed, anticipated date of receipt of other needed funds from specified entity, etc.

Applicant will comply where applicable with provisions of the California Environmental Quality Act and the California Relocation Assistance Act and any other state, and/or local laws, rules and/or regulations.

Signed_____**Date**_____
(Grant Applicant's Authorized Representative)

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3. Environmental Project Summary

3. Environmental Project Summary

A. Project Scope

Phase IV of the Wright's Field project will add the largest remaining and most critical parcel to the preserve. The 142 acre parcel surrounds already acquired Multiple Species Conservation Plan (MSCP) preserve land on three sides. The acquisition will bring the total area to 372 acres, and is critical to the biological and physical integrity of this MSCP preserve. The Phase IV parcel is entirely comprised of native grassland, coastal sage scrub, Engelmann oak woodland, and vernal pool habitats.

The MSCP is a nationwide model for habitat conservation and a key component of the State of California's Natural Communities Conservation Plan (NCCP). In 1998 the County of San Diego designated approximately 400 acres in Alpine in eastern San Diego County, encompassing Wright's Field, as a pre-approved mitigation area within the MSCP. The Department of Fish and Game, and the U.S. Fish and Wildlife Service support this designation. Inclusion of Wright's Field in the MSCP accomplishes significant protection of sensitive species and habitats, and provides wildlife corridors between components of the MSCP to the west and the Cleveland National Forest to the south and east.

O8-125 cont.

The Wright's Field acquisition project has protected 230 acres to date. Phase I added 80 acres under the FY 98/99 EEM cycle (Project #98-34). Phases II and III were combined to add 120 acres under two awards, EEM 2000(068) and EEM 2001(040). An additional 30 acres (Findel Ranch) was acquired directly by the County of San Diego in 2002. Phase IV will add 142 acres. Only 40 acres in the total planned preserve area of ~400 acres remains.



Wright's Field MSCP preserve in Alpine, CA.

Phases I, II and III are complete. Matching funds for Phase I were $212,000 in the form of mitigation from the Alpine Union School District, and $175,000 from the County of San Diego. Matching funds for Phase II and III were $350,000 and $450,000, respectively, provided by the County of San Diego, with in-kind services from the County and the Back Country Land Trust. (The initial matching funds of $250,000 for Phase III were increased by the County to $450,000 to complete the transaction.) In 2002, the County of San Diego purchased 30 acres of the Findel Ranch for $470,000 and transferred title of the land to the Back Country Land Trust. This land represents a very important addition to the preserve; its purchase demonstrates the County's very strong commitment to the MSCP, and to the Wright's Field preserve. The Phase IV parcel is currently under option contract between the property owner and the Back Country Land Trust. The balance of the Phase IV acquisition cost will be provided by other habitat and open space protection funds. Management of the MSCP preserve is the obligation of the Back County Land Trust.

The continuing support of the EEM program, in partnership with the Back Country Land Trust and the County of San Diego, remains essential to the success of this project. Overall the project is preserving high quality natural and historical resources, accomplishing significant mitigation, affecting regional and local planning, and providing an outstanding educational and recreational resource for the community of Alpine, the County of San Diego, and the State of California.

B. Location, Purpose, and Amount of Request

Wright's Field is located within the rural community of Alpine along Interstate 8, 35 miles east of San Diego, in the foothills of the Cuyamaca Mountains in San Diego County.

The Wright's Field project fulfills or exceeds all of the goals of the EEM Program. It combines resource protection and mitigation with a regional planning effort while creating an open space preserve with outstanding educational and recreational opportunities. Recognized for its habitat value, Wright's Field was included in the pre-approved mitigation area of the County of San Diego's Multiple Species Conservation Plan (MSCP). Local area and MSCP habitat maps are included in Exhibit F.

O8-125 cont.

In the first three phases of the Wright's Field MSCP Preserve project, and with the addition of Findel Ranch, 230 acres have been acquired with $1,250,000 from the EEM Program and $1,445,000 from the County of San Diego. Mitigation from the Alpine School District provided an equivalent of $212,000 in matching funds for Phase I. Therefore, $2,907,000 has been expended to date in establishing the preserve.

This Phase IV proposal by the Back Country Land Trust and the County of San Diego Department of Parks and Recreation, requests an EEMP grant of $300,000. The County of San Diego has committed $470,000 as matching funds through purchase of 30 acres of Findel Ranch for the preserve. The Phase IV funds will be used toward purchase of the largest and most critical parcel of 142 acres required to complete the preserve.

Four sensitive habitats present on this parcel are coastal sage scrub, native grassland, Engelmann oak woodland and vernal pools, which occur throughout the Wright's Field area. The biodiversity within the grassland is high, and it is one of the best native grasslands remaining in the state of California. The preserve area has outstanding ecotonal value because the habitats are integrated. The preserve area provides a critical corridor between MSCP lands to the west and the Cleveland National



Native grassland, coastal sage scrub and Engelmann oak woodland are integrated in the Wright's Field MSCP preserve area.

Forest to the east. The purpose of the Wright's Field MSCP preserve project therefore is to add this critical component to the County-wide MSCP preserve.

The Back Country Land Trust and the County of San Diego are working as partners with community organizations to manage the preserve while providing the community with much needed opportunities for passive outdoor recreation. Moreover, Wright's Field provides an outstanding educational resource for students in the adjacent Joan McQueen Middle School, ensuring that future generations will learn about environmental resources and stewardship. These virtues of the project complement the MSCP goals of protecting sensitive habitats and species.

C. Explanation for Expanded Grant Request

In the combined Phase II and Phase III acquisitions, 120 acres were purchased at fair market value for $1.8M ($1,000,000 EEM funds and $800,000 County matching funds). Escrow closed in September 2003. However, the property owner mandated that the original parcel boundaries be redefined, in order for the transaction to occur. Consequently, the remaining but newly defined 142 acre parcel surrounds the land already in the preserve to the west, south and east, while being north of the Findel component of the preserve (parcel map included in Exhibit J). It is essential to purchase this remaining parcel in order to create the MSCP preserve.

O8-125 cont.

The current market value of the 142 acre Phase IV parcel is $2,124,000. The expanded grant request for $300,000 is required to complement the ~$1.8M that the County of San Diego and Back Country Land Trust must secure to acquire this critical component of the preserve.

Wright's Field lies within the rapidly growing community of Alpine and, as such, has great development potential. It has been under repeated threat of development since 1992. However, due to the efforts of local citizens, the strong support of the County under the leadership of Supervisor Dianne Jacob, and the critical support of the EEM program, great progress has been made, and now 230 acres are permanently protected. However, without the remaining 142 acres, the entire preserve would severely diminished in value. The Phase IV land contains large expanses of high quality California native grassland (Exhibits F, G, J). The pre-approved mitigation area for the MSCP preserve encompasses ~400 acres and all of Wright's Field.



An Engelmann oak in Wright's Field. Engelmann oak woodland is the most rare native oak habitat in California.

The landowner remains a willing seller, and an option contract is presently in force. However, this agreement will expire in July 2005, and the land will again be at risk of development. Indeed, the reason for the owner's demand to redefine the parcel boundaries (Exhibit J) was to improve the

development potential of the remaining land, if habitat acquisition funds are not secured. In other words, the property owner is intent on selling the land either for the MSCP or for development. This expanded grant request is key to our efforts to complete this acquisition in a timely manner.

4. Agency Eligibility

A. Authorizing Resolution

The Authorizing Resolution was approved November 10, 1995 by the Back Country Land Trust Board of Directors (Attachment A), the first year that an EEMP application was submitted. This Resolution remains in effect. The IRS letter regarding the tax exempt 501c(3) status of the Back Country Land Trust is included as Attachment B.

B. Related Prior Experience

The Back Country Land Trust

The mission of the Back Country Land Trust is to preserve land in eastern San Diego County containing significant natural and cultural resources for the benefit of the public and future generations. This effort entails research and education, promotion of land conservation through donation, easement or purchase, and establishment and maintenance of trails. The land trust has been instrumental in the acquisition of over 3500 acres of resource lands in San Diego's back country since 1990.

O8-125 cont.

The Back Country Land Trust is a non-profit 501(c)(3) organization with a paid Executive Director, established office in El Cajon, California, current annual budget of ~$60,000, and an active membership of over 400 throughout the County. The land trust five-year strategic plan calls for significant growth in membership, increased community involvement, expansion of the annual operating budget, and significant additions to its endowment fund. The Back Country Land Trust received a $100,000 gift from an Alpine businessperson in 2000. Land trust education and management programs have received significant grant awards from the San Diego Foundation.



A native plant nursery at Joan McQueen Middle School is maintained by the students for vegetation and restoration projects on the school campus and in Wright's Field, and for sales at the annual Back Country Land Trust plant sale in Alpine.

The Back Country Land Trust has ownership and management responsibilities of Wright's Field MSCP preserve. The County of San Diego County Department of Parks and Recreation and the land trust are working together closely to implement a management plan. This on-

going effort involves the Center for Natural Lands Management, the California Conservation Corps, the San Diego Coalition of Conservancies and local community groups, to obtain expertise and provide manpower. Projects have included the installation of fences, gates and signs, clean-ups, erosion control and exotic plant removal. In collaboration with San Diego State University a grassland restoration project is planned for a 10 acre disturbed area in the Phase I mitigation parcel.

The Back Country Land Trust has an extensive volunteer base. The land trust has operated the Youth for Conservation Program for several years, and works closely with the nearby Joan McQueen Middle School in outdoor education projects. The land trust has an active docent training program concerning natural resources, and docents lead nature walks with local and county-wide organizations (*e.g.* Alpine Historical Society, Chamber of Commerce, Audubon Society). The land trust hosts community outreach events, including an annual native plant sale and a dinner lecture series, and maintains a native plant demonstration garden in central Alpine.

O8-125 cont.

The County of San Diego Parks and Recreation Department

The mission of the County of San Diego Department of Parks and Recreation is to preserve regionally significant natural and cultural resources and provide opportunities for high quality parks and recreation experiences. The Department has been developing, operating, and maintaining parks since 1913.

The Department has taken a leadership role in the region in the acquisition, development and operation of 90 open space preserves, regional and local parks and facilities, with over 40,000 acres administered. These lands include the acquisitions for the MSCP.

The Department has received well over $85 million in state, federal and other types of grants for acquisition, development, rehabilitation/restoration and preservation projects.

The Department has received $2.2 million in EEM grants, which were instrumental in the preservation and restoration of lands in Volcan Mountain, Tijuana River Valley, Guajome Regional County Park, and for the North County MSCP.

The Department and the Back Country Land Trust have collaborated in the preservation of 230 acres of unique biological resources, wildlife corridors, and sensitive habitats in the Wright's Field area of Alpine.

O8-125
cont.

Page 12
Insert Attachment A – 1st page

O8-125
cont.

Page 13
Insert Attachment A – 2nd page

O8-125
cont.

Page 14
Insert Attachment B – 1st page

O8-125
cont.

Page 15
Insert Attachment B – 2nd page

5. Related Transportation Projects

A. Discussion of Required and Additional Mitigation

This EEM project will greatly enhance the mitigation for environmental impacts to 34.6 acres coastal sage scrub habitat due to construction of a new 6-lane segment of Interstate 125 between La Mesa, El Cajon, and Santee in San Diego County. This impact has been mitigated by preservation of 70 acres of coastal sage scrub in Rancho San Diego according to the California Environmental Quality Act (CEQA).

This Phase IV enhanced mitigation project would result in the protection of ~40 additional acres of high quality coastal sage scrub. Hence, the enhanced mitigation raises the mitigation ratio from 2:1 to over 3:1. It also provides enhanced mitigation by being at another location (Alpine), and by contributing to a MSCP preserve. Diegan coastal sage scrub is one of the most threatened habitats in San Diego County, and is a critical habitat within the MSCP.

O8-125 cont.

In addition, this EEM project will protect integrated habitat partners of coastal sage scrub, including ~70 acres of native grassland and ~30 acres of Engelmann oak woodland. The total 142 acre Phase IV area also includes ~10 acres of vernal pool habitat on heavy clay soils (Exhibits G, J). Therefore, the mitigation is enhanced by the presence of associated habitats, which increases the biological value of the coastal sage scrub.

B. Lead Agency Form Letter

The Transportation project lead agency form letter, from Don Pope, Caltrans District 11 representative, is attached.

O8-125
cont.

Page 17
Insert form letter from Don Pope

6. General Criteria

A. Increased Mitigation and Enhancement

The Wright's Field MSCP Preserve Phase IV acquisition project in Alpine, CA significantly enhances the mitigation for the Caltrans new I-125 freeway construction between El Cajon, La Mesa and Santee, CA. While separated by ~20 miles both sites share the Diegan coastal sage scrub habitat indigenous to San Diego County. The Wright's Field project significantly enhances CEQA mandated mitigation already in place for this CalTrans project for five reasons.

First, the mitigation ratio for the impact to coastal sage scrub due to the Caltrans project is increased from 2:1 to greater than 3:1 by addition of ~40 acres in Alpine, CA.

Second, the coastal sage scrub to be protected is intimately associated with three other sensitive habitats, significantly increasing its ecotonal value. Because these habitats have evolved to function interactively, the viability of species within them is increased when they are protected together in an integrated whole.

O8-125 cont.

Third, the Phase IV acquistion is a critical component of the MSCP preserve being assembled in eastern San Diego County. In particular, the coastal sage scrub on Wright's Field belongs to a larger connected complex of endangered habitats and corridors that have been identified as a statewide priority in the NCCP, namely native grasslands, riparian, vernal pool wetlands and oak woodlands. These are "Tier I" habitats under the Biological Mitigation Ordinance of San Diego County and the MSCP.



Coastal sage scrub overlapping with native grassland in Wright's Field. The knoll in this view is entirely within the 142 acre Phase IV parcel, and is covered with coastal sage scrub vegetation.

Fourth, Wright's Field functions as an important wildlife corridor between MSCP lands to the west in Harbison canyon, El Capitan Reservoir and the Oakridge preserve in Crest, and the Cleveland National Forest to the south and east. In particular, two drainages from Wright's Field lead west via Chocolate Creek to El Capitan Reservoir. These streambed corridors are a vital link for wildlife movement between habitats. Wildlife access to these streambeds on Wright's Field will be enhanced by the protection of the 142 acre Phase IV parcel, connecting MSCP preserve lands to the Cleveland National Forest.

Fifth, protection of Wright's Field in the MSCP preserve adds a key component to the County trail system planned for the Alpine area (discussed in Section 6(B)).

The proposed acquisition complements and reinforces federal, state, and local policies to preserve unique biological resources, corridors, and sensitive habitats, as well as

historic resources. It is compatible and will not interfere with the operation or safety of any transportation facility, nor will it limit any improvements to these facilities, and it significantly increases the mitigation for the designated I-125 project beyond that required by CEQA.

B. Statewide Project Goals and Local Cash Contributions

I. Statewide Resource Priorities

Habitat Protection

In January 1994, in an on-going effort to protect at-risk natural communities and wildlife species, the U.S. Fish and Wildlife Service, the California Department of Fish and Game, the Department of Forestry and Fire Protection, and The Nature Conservancy, performed an extensive GAP Analysis for the southwestern California region. This report lists 18 at-risk plant communities. Five of these are found on Wright's Field in significant concentration. Forty-two wildlife species in the Southwestern region were identified as being at-risk. Of these species, 11 are found on Wright's Field. The purpose of the analysis was to target and prioritize candidates for preservation before they became further endangered. This process lead to the creation of the Multiple Species Conservation Plan for San Diego County, a habitat conservation plan based on requirements of the Endangered Species Act, and fulfilling goals of the State Natural Communities Conservation Plan.

O8-125 cont.

Wright's Field is comprised primarily of three key habitats targeted for protection under the MSCP, Diegan coastal sage scrub, native grassland, and Engelmann oak woodland (MSCP vegetation communities map, Exhibit F). The U.S. Fish and Wildlife Service and the California Department of Fish and Game stressed their concern that sufficient native grasslands and oak woodlands / oak woodland riparian habitat be included in the MSCP. Subsequently, Wright's Field was included as a pre-approved mitigation area in the MSCP with the support of the Resource Agencies and the County of San Diego in a Board of Supervisors motion passed October 28, 1998.



Spiny redberry bushes (*Rhamnus crocea*) in Wright's Field. These shrubs are the host plant for the *Hermes* copper butterfly, an example of a rare endemic species found only in San Diego County. The butterflies have been observed in the preserve area on several occasions.

A number of experts, agencies, and studies support the high habitat value of Wright's Field. Selected references are included as follows.

"The property has been ranked as having very high and high biological value in the Habitat Evaluation Model performed by Ogden Environmental for the Multiple Species Conservation Planning (MSCP) effort. … The size of the grassland and the presence of numerous sensitive species occurring within this habitat on site provide

evidence that the site is of regional and cumulative significance." – California Department of Fish and Game.

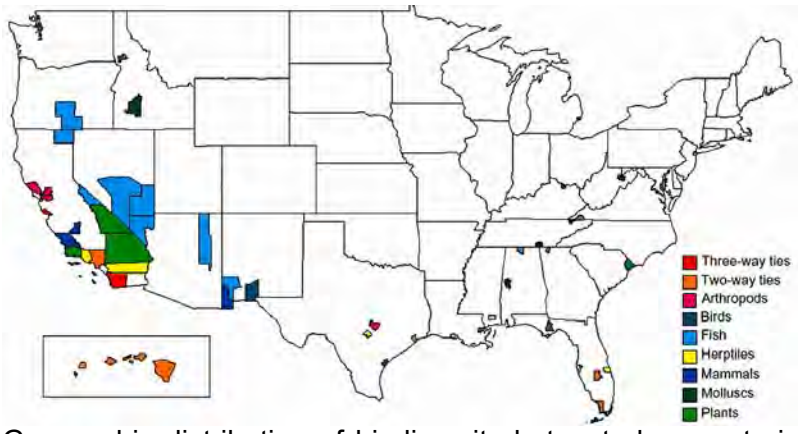
Representatives from the US Fish and Wildlife Service and the California Department of Fish and Game concur with biologists that the site is "one of the largest and highest quality examples of southern California grassland remaining in San Diego County." - Nancy Gilbert, U.S. Fish & Wildlife Service. "The Wright's Field grasslands are one of the most biologically important valley grassland areas I have seen in the state." - Dr. Jason Hamilton. "Statewide it would certainly rank as one of the significant remaining grasslands." - Dr. Jon Keeley.

In an independent UC Santa Barbara GAP Analysis valley needle grassland was ranked as the second most at-risk plant community, following valley oak woodland. Both occur in the Wright's Field MSCP preserve area. At the same time, Engelmann oak woodlands have the smallest range of any California tree oak habitat and are an "at-risk" plant community according to this GAP Analysis. "Engelmann oak is probably the most imperiled of all tree oaks in California" (Oaks of California, Cachuma Press, p. 23). Engelmann oak woodland habitat is presently restricted to a small range, virtually all of which is in San Diego County.

O8-125 cont.

Dr. Ted Case, a noted conservation biologist at UCSD, who has visited Wright's Field, has commented, "The site is characterized by a large expanse of Engelmann oak woodland, a habitat recognized as rare in California ('Sliding Toward Extinction: The State of California's Natural Heritage', 1987). I encourage you to preserve and protect this habitat and the many valuable biological resources that it harbors."

Data for the geographic distribution of endangered species in the United States were used to locate 'hot spots' of threatened biodiversity (A. P. Dobson *et al.*, *Science*, vol. 275, pp. 550-553, 1997). Hotspots were found where 'anthropogenic activities' coincided with regions possessing large numbers of endemic species. By this criterion, San Diego County is a biodiversity hotspot in the United States. This study concluded that 'conserving endangered plant species maximizes the incidental protection of all other species'.



Geographic distribution of biodiversity hotspots by county in the United States (this figure taken from a 1997 Science paper referenced in the text). The data show that San Diego County is a key region for threatened species nationwide.

It is not an exaggeration that the protection of natural resources in Wright's Field through the MSCP is important at the county, regional, state, and national levels.

Wetlands Protection and Acquisition

The predominant soil type on Wright's Field, according to USDA soil survey topographic maps, is heavy Bosanko stony clay, which absorbs and retains moisture for long periods, and does not percolate. As a result, Wright's Field contains vernal pool wetlands habitat. Approximately 10 acres within the Phase IV acquisition area contain mima mounds and depressions associated with vernal pool habitat. Exhibit G includes a picture of the mima mounds, and Exhibit J indicates the vernal pool area with respect to the parcel boundaries. The following wetland associated and indicator species have been observed in Wright's Field, except for the *Quino* checkerspot butterfly, but the host plant for this butterfly occurs extensively.

O8-125 cont.

- *Crassula aquatica,* a vernal pool indicator plant species.
- *Scaphiopus hammondi* (western spadefoot toad), a vernal pool indicator species, which is present by the thousands, observed as tadpoles in the pools, and toads living within cracks in the heavy clay soil.
- *Acanthomintha ilicifolia (*San Diego thornmint), a state and federally listed endangered plant that occurs in three high density populations in the Phase II+III area.
- *Plantago erecta*, the host plant for the *Quino* checkerspot butterfly. These plants occur in dense patches throughout the grassland.



A vernal pool in the Phase IV acquisition area of Wright's Field. All of the native grassland is underlain by heavy clay soil. Large numbers of spadefoot toads are observed in these pools.

- *Euphydryas editha quino* (*Quino* checkerspot butterfly), a recently listed federal endangered species included in the MSCP. While not yet observed in Wright's Field, the extensive occurrence of the host plant, favorable habitat, and proximity to known populations to the east (Campo) and south (Baja), indicate that the butterfly was present historically. Hence, if not actually present, the preserve provides an ideal site for a *Quino* recovery program.

The presence of vernal pool habitat with heavy clay soils, and the availability of water in riparian habitat (included in the Phase II+III area), are vital for wildlife, and augment the value of the preserve as a corridor. Mountain lion, southern mule deer, bobcat, coyote, ringtail cat, gray fox, black-tailed jackrabbit and desert cottontail, have been observed or tracked on Wright's Field (additional species pictures and lists are included in Section 7(A) and Exhibit A).

Recreational Access

Wright's Field lies near the heart of the community of Alpine (Exhibit F). Its central location and relatively flat, open topography make it ideal for passive recreational uses. As is apparent from the aerial photograph (Exhibit J), a number of preexisting trails pass through Wright's Field. These trails are an important asset, allowing hiking, jogging, and horseback riding, and they link different segments of the community. Students of the Joan McQueen Middle School also use them. The Back Country Land Trust, and the County of San Diego Department of Parks and Recreation, are committed to maintaining and improving trails in Wright's Field for passive recreation and interpretive nature hikes.



Docents on the trail to learn about natural resources in Wright's Field.

O8-125 cont.

Alpine is a rapidly growing community of over 15,000 residents. At present there is no publicly accessible trail system within the 108 square mile planning area linking Alpine to the Cleveland National Forest to the east, and to open space and trails to the west in the communities of Blossom Valley, Crest and Lakeside. In an effort to create an integrated trail system throughout the County, and provide an important recreational outlet for the community, the County of San Diego Department of Parks and Recreation is working closely with the Parks and Recreation Committee of the Alpine Planning Group, and in partnership with the Back Country Land Trust, to design and implement a trail system for the Alpine area. Members of the land trust serve on the Committee. This project has the support of the Alpine Chamber of Commerce, the Alpine School District, and the San Diego Trails Council.

The plan envisions Wright's Field as a nexus for the trail system in Alpine. Acquisition of the Phase I, II and III land in Wright's Field represents a significant step toward creation of a permanent trail system, and is already a tremendous asset to the community. However, it is equally clear that for a functioning network of trails to be created that the Phase IV parcel must be acquired.

II. Local Cash Contributions

The fair market value of the 142 acre Phase IV area (Exhibit J) is $2,124,000 under the current option agreement (Exhibits B, C). As discussed in Sections 3(A) and 3(B), in the three phases of this EEM project to date, $1,657,000 has been committed as matching funds. These funds have come for the County of San Diego ($1,445,000), and from the Alpine School District as mitigation for the new Joan McQueen Middle School ($212,000)

Findel Ranch

In 2002, the County of San Diego purchased 30 acres of the Findel Ranch for $470,000 through the newly enacted Environmental Subdivision Ordinance, and transferred title of the land to the Back Country Land Trust. These 30 acres represent a very important

addition to the MSCP preserve; they are contiguous, contain high quality native grassland and Engelmann oak woodland, and link the preserve area to additional Engelmann oak woodland to the south (Exhibits F, J). The purchase of Findel Ranch demonstrates the County's commitment to the MSCP. This purchase is a part of the County's total $1,445,000 commitment to creation of the Wright's Field preserve.

The Wright's Field MSCP preserve project has been in progress since 1998 with the leadership of District 2 County Supervisor Dianne Jacob. The project has entailed a strong partnership between the County of San Diego and the Back Country Land Trust, and has involved the participation of the Alpine School District (in Phase I) and the efforts of the Conservation Fund (in Phase I and Findel Ranch). Over the course of this project, significant contributions and volunteer efforts, directed by the Back County Land Trust, have facilitated the acquisition process. At the same time, the land trust provides for management of the preserve. These volunteer contributions are difficult to quantify. However, because of the on-going commitment of the land trust to maintain the MSCP preserve in perpetuity, and provide an educational and recreational resource within it, these contributions will continue, and increase over the years.

O8-125 cont.



In this view to the south from within the MSCP preserve, Findel Ranch is beyond the grassland at the base the hill in the distance. The 30 acre Findel Ranch was purchased by the County of San Diego for $470,000 in 2002. This hillside is covered with Engelmann oak woodland and is protected by an open space easement (Exhibit J).

C. Project Readiness

The Phase IV parcel is currently under option contract for purchase from the property owner by the Back Country Land Trust. The same property owner was involved in the sale of the Phase II+III land to the County and the Back Country Land Trust. The option contract stipulates a two year period from the close of escrow of the Phase II+III purchase, which was in September 2003. The property owner received $1,800,000 in that transaction for 120 acres, or $15,000 an acre, based on appraisals and mutual agreement. The estimated cost of the 142 acre Phase IV area (Exhibit J) at this fair market value is $2,124,000. The County and the Back Country Land Trust are working to secure the balance of the necessary funding within the option period, which ends in July 2005. The requested Phase IV EEMP funding would be expended by that time.

The $300,000 request in this application is a critical component of the total acquisition cost. The Wright's Field MSCP project would not be possible without the support of the EEMP grants for Phases I, II and III. The Phase IV funds, matched by the County's purchase of Findel Ranch, will allow additional County, State and Federal habitat, wildlife, watershed, and open space protection funds to be secured.

The Back Country Land Trust will hold title to the entire MSCP preserve area (372 acres with inclusion of Phase IV), and manage the preserve lands under the guidelines of the MSCP. The project is consistent with state, regional, and local plans (Exhibit A). The related Caltrans I-125 transportation project has been funded, mitigated, and is complete. The Phase IV acquisition will not require environmental permits, approvals, or clearances as a resource lands acquisition.

7. Project Category Criteria (Resource Lands)

A. Important Resource Values

Biological Resources

One cannot overstate the important resource values associated with the overall project that spans five habitats and 18 sensitive, threatened, and/or endangered species. These resources include high quality California native grassland, Diegan coastal sage scrub, Engelmann oak woodland, as well as vernal pool wetland, riparian and chamise chaparral habitats. The Phase IV parcel consists of approximately ~70 acres of native grassland including ~10 acres of mima mound and vernal pool habitat, ~40 acres of Diegan coastal sage scrub, and ~30 acres of Engelmann oak woodland (Exhibits F, J). These undisturbed habitat areas occur in natural association, providing the entire 142 acre parcel with exceptional ecotonal value.

O8-125 cont.

At the October 1995 Land Trust Alliance Rally, Dr. Reed Noss reported from his GAP analysis that grasslands and oak savannahs rated in the category suffering the second greatest loss of habitat nationally, coastal sage scrub rated in the third most endangered habitat nationally, and California riparian habitat rated in the fourth greatest loss category. All four of these habitats occur in Wright's Field, and three occur in the Phase IV area of the MSCP preserve.



Native bunch grass (*Nassella pulchra*) plants in Wright's Field. The MSCP preserve area includes 160 acres of native grassland where the density of bunch grass coverage is 50% or more (see also Exhibit G)

The native grassland on Wright's Field lies at ~2000 ft. in elevation ~30 miles from the coast. This cismontane location is underlain by a lens of heavy, very rocky clay soils. The combination of soils and local climate means that the grasslands are particularly rich in biodiversity. At the same time the nature of the soil has prevented the grassland from ever being plowed or significantly disturbed; hence it is also particularly pristine.

A research study into the genetic composition and morphological features of *Nassella pulchra* in Wright's Field was conducted by Drs. Kevin Rice and Eric Knapp of UC Davis for the Nature Conservancy using seeds collected from within the MSCP preserve area. In their published report (Dec. 20, 1995; #CARO 050195-PR-K) comparing 13 native

grassland locations throughout California, they found that *Nassella pulchra* plants from Wright's Field are genetically unique in several alleles while also being most similar to the native grasses at the Santa Rosa plateau in Riverside County. In transects conducted by Dr. Jason Hamilton from UC Santa Barbara in 1994 it was found that the size, plant density and basal coverage of bunch grass patches in Wright's Field is comparable to those in well studied native grasslands at Hastings Preserve in Monterey County and Sedgwick Ranch in Santa Barbara County. While these survey data are preliminary, they demonstrate the Statewide significance of the Wright's Field native grassland. A goal of the Back Country Land Trust to promote further scientific study of the grassland.



Burrowing owls have been observed in Wright's Field on a number of occasions. Breeding pairs of another sensitive, grounding nesting bird species, the grasshopper sparrow, also occur on site. (This photograph not taken at Wright's Field.)

Wright's Field provides unique value for wildlife as a corridor for larger mammals including the bobcat, ringtail cat, coyote, deer, and mountain lion. Each of these animals have been observed or tracked. The preserve provides foraging habitat for raptors, including the golden eagle, Northern harrier, red-shouldered hawk, Cooper's hawk, white-tailed kite, American kestrel, great horned owl, barn owl, and red-tailed hawk. In addition, it provides nesting habitat for the grasshopper sparrow, burrowing owl, western meadowlark, and other ground nesting species known to occur on site. Wright's Field is a focus area for the San Diego Natural History Museum breeding bird atlas, and 102 species of birds have been documented in 15 focused surveys by expert birder Claude Edwards. Sensitive species of reptiles observed on Wright's Field include the San Diego coast horned lizard and the granite night lizard.

O8-125 cont.

Wright's Field contains large populations of endangered or sensitive grassland associated species including the San Diego thornmint (ESA, CESA listed), Palmer's grapplinghook, chocolate lily, Cleveland shooting stars, blue-eyed grass, hyacinth, mariposa lily and field brodiaea. The presence of *Plantago erecta* and owl's clover indicates that the federally endangered *Quino* checkerspot butterfly may be present. Another rare invertebrate, the *Hermes* copper butterfly, has been observed in Wright's Field repeatedly, and its host plant, the spiny redberry, is present. Species occurring in Wright's Field relative to MSCP criteria are listed in Exhibit A.



Three high density populations of San Diego thornmint (*Acanthomintha ilicifolia*) occur in the Phase II+III parcel of the MSCP preserve area. Acquisition of the Phase IV parcel is critical to protecting the integrity of the entire preserve.

Watershed Resources

The Wright's Field MSCP preserve area lies in the watershed of three major San Diego County reservoirs. The Phase I, II and III parcels lie primarily in the watershed of El Capitan Reservoir, San Diego's largest drinking water reservoir. Most of the Phase IV area drains into Sweetwater Reservoir. A smaller portion lies in the Loveland Reservoir watershed. Consequently, permanent protection of Wright's Field provides a significant long term benefit to water quality in San Diego County.



Overlapping native grassland and Engelmann oak habitat in Wright's Field. The MSCP preserve area is in the watershed of El Capitan Reservoir, the largest drinking water reservoir in San Diego County.

Historical Resources

The Phase I, II and III areas contain very significant archaeological and historical features that are important to understanding prehistoric and Spanish Colonial uses of the grassland, associated oak woodland, and watercourses. Native American (Kumeyaay) milling sites and artifacts are numerous throughout the preserve, especially in Findel Ranch. An application to place a complex of Spanish rancho features, thought to date from the 1840s, is being prepared for the National Registry of Historic Landmarks, based on extensive research by members of the Back Country Land Trust. The Mission or Spanish era rancho or rancheria features include stone foundations, dams, a cistern, water diversion walls, and an enormous and highly significant stone wall enclosure encompassing 10 acres. Completion of the MSCP preserve will provide essential protection to these unique archaeological and historical resources, and maintain their environmental aspect.

O8-125 cont.

B. Sustainability

Mission

The nature of the MSCP program and the mission of the Back Country Land Trust assure the sustainability of the Wright's Field MSCP preserve. The MSCP is designed to protect habitat lands in perpetuity. The County of San Diego has a strong commitment to the MSCP. The MSCP is a program of the Department of the Planning and Land Use; the Department of Parks and Recreation is working on land acquisition projects for the MSCP. The Back Country Land Trust will hold title, manage, and maintain the preserve area in collaboration with these County Departments. The mission of the Back Country Land Trust is to preserve land in rural areas of San Diego County that contain natural, scenic, and cultural resources for the benefit of the public

and future generations. This commitment entails research, management, and education regarding resources, and the maintenance of trails.

Management

Management of open space lands, especially for habitat value, is a significant commitment in terms of planning, effort, and expense. The Back Country Land Trust is fully prepared to manage MSCP habitat lands in Wright's Field, having participated in land management efforts for over eight years. A comprehensive management plan for Wright's Field incorporates the requirements of the MSCP, and follows guidelines of the Land Trust Alliance and the Center for Natural Lands Management. An endowment fund has recently been established by the land trust with $10,000. The goals of the endowment are based on an in-depth PAR analysis for maintenance and management costs conducted by the Center for Natural Lands Management. The funding for the PAR analysis was made possible by a grant from Bank of America.

The management plan is revised and implemented as each phase of the acquisition of Wright's Field occurs. An advisory board, consisting of people experienced in the multiple aspects of land management, has been assembled, together with a committee of land trust members and local volunteers, to implement the management plan. The volunteers have formed an association, the Friends of the Mesa del Arroz (Wright's Field) preserve. The Civilian Conservation Corps, Americorps, student members of our Youth for Conservation Program, and the San Diego Trails Council, assist in maintaining the property.

O8-125 cont.



Civilian Conservation Corps youth working under the supervision of the California Department of Forestry to remove eucalyptus trees at the entrance to the Wright's Field preserve next to Joan McQueen Middle School. School students subsequently planted Engelmann oaks and other native plants here. The Back Country Land Trust organized these projects.

Management experience, funding, and projects and activities have been discussed in Section 4(B). Further examples of activities include: a project by the Civilian Conservation Corps to remove non-native trees at the entrance of the preserve and in the Phase I area; a major clean-up by Alpine citizens in April 2003 (Earth Day) in the Phase II+III property; erection of 4' wire fence with wooden posts along the western and northern edges of the Phase I parcel; erection of gates and signs at two entries to the Phase I parcel; erection of signs to prevent off-road vehicle entry from the Phase IV parcel (a condition of the option contract); on-going compilation of a comprehensive plant list in collaboration with Dr. Jon Rebman of the San Diego Natural History Museum; on-going compliation of a bird species list based on periodic surveys since 1994 by expert birder Claude Edwards. These types of management activities will enable the Back Country Land Trust to

maintain and protect Wright's Field in perpetuity, in accord with area-specific management directives of the MSCP.

C. Other Benefits and Community Participation

This resource lands project provides public benefits at the local, regional, and statewide levels. At the same time the community activities associated with the Wright's Field preserve provide a model for management of other MSCP preserve areas.

Wright's Field is directly adjacent to the new Joan McQueen Middle School (Exhibit J). This creates a unique opportunity to educate future generations about environmental stewardship and community service. The preserve provides an outdoor laboratory where students can study firsthand about biological and historical resources, and participate in learning projects. The Back Country Land Trust is providing curricula based on preserve resources to teachers at the new school, and working with them closely in the development of educational activities. Two member of the land trust Board are members of the Alpine School Board.

O8-125 cont.



A class project with students of Joan McQueen Middle School in Wright's Field to identify native and non-native species. A study of grassland ecology has been incorporated into the biology curriculum. Members of the Back Country Land Trust are teachers at the school.

This EEM project provides public access via trails to promote environmental awareness. A trail network is providing recreational opportunities for walkers, joggers, and horseback riders, as discussed in Section 6(B)(I). As discussed in Section 4(B), docent lead nature walks are conducted with Alpine and regional organizations, and the land trust sponsors public outreach events to promote environmental education and appreciation of the preserve. And as discussed above, management activities directly benefit youth based organizations. Scenic value is maintained in the rural country town of Alpine in accordance with the goals of its Community Plan. Additionally, creation of the MSCP preserve protects cultural resources from degradation.

Citizen involvement and local agency input has occured throughout the planning and acquisition phases. The Back Country Land Trust has worked closely with the Alpine School District, the Sheriff's Department, the Parks and Recreation Committee of the Alpine Planning Group, and the County Department of Parks and Recreation, in the interest of meeting common educational and recreational needs while protecting resources. Because of this input, the management plan addresses the needs of the community while protecting resources of regional and statewide significance. We will continue to gather input and involve local citizens in the management of the preserve.

8. Exhibits

A. Statement of Project Consistency with Plans
B. Project Cost Estimate
C. Project Budget
D. Project Completion Schedule
E. Project Expenditure Plan (N/A)
F. Project Location Map (MSCP Habitats Map)
G. Project Site Photos
H. Project Design (N/A)
I. Acquisition Schedule
J. Acquisition Map (Parcels, Acres, and Phases)
K. Tree Planting Certification (N/A)
L. Planting Description (N/A)
M. Supporting documents
N. Letters of Endorsement

Exhibit A - Statement of Project Consistency with Plans

O8-125 cont.

Multiple Species Conservation Plan

Wright's Field is an essential regional component of the MSCP for species and habitat protection, and as a wildlife corridor. The project is included by the County of San Diego as a Pre-Approved Mitigation Area within the MSCP (Exhibits F, J).

Table 3-5 of the MSCP lists 85 target species for protection under the plan. Of these, at least 12 are known occur in Wright's Field, or have been observed on the site.

- San Diego horned lizard
- Orange-throated whiptail (observed at Findel Ranch)
- Hermes copper butterfly (host plant abundant)
- Northern harrier
- Cooper's hawk
- Golden eagle (nesting sites in the vicinity)
- Burrowing owl (observed on numerous occasions)
- Southwestern willow flycatcher (observed once)
- Western bluebird
- Mountain lion (tracks)
- Southern mule deer (tracks)
- San Diego thornmint (3 high density populations)

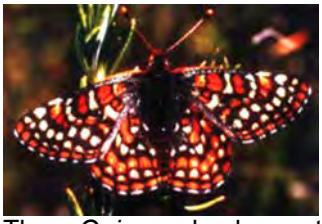

San Diego horned lizard in the Wright's Field MSCP preserve.

Two sensitive species observed in the Wright's Field preserve area but not included in the MSCP target list are:

- Spadefoot toad (large numbers in the vernal pools)
- Grasshopper sparrow (breeding pairs documented)

Several species, included in MSCP Table 3-5, could occur due to the presence of their habitats, especially vernal pool habitat, or may not have been recorded due to limited surveys. The presence of suitable habitat for these species suggests the value of Wright's Field for recovery programs.

- Thread-leaved Brodiaea - other species in the genus present
- Orcutt's Brodiaea - habitat present
- Dunn's Mariposa lily - other Calochortus species present
- Orcutt's spineflower - species in the genus present
- San Diego button-celery - vernal pool habitat present
- *Hemizonia floribunda* - other species in the genus present
- San Diego goldenstar - grassland associated species
- *Navarretia fossalis* - sp. *hamata* present
- Calif. Orcutt grass - vernal pool habitat present
- San Diego mesa mint - vernal pool habitat present
- Otay mesa mint - vernal pool habitat present
- *Quino* checkerspot butterfly - host plant present
- San Diego fairy shrimp - vernal pool habitat present
- Riverside fairy shrimp - vernal pool habitat present
- California gnatcatcher - present in coastal sage scrub several miles to the southwest



The *Quino* checkerspot butterfly is an endangered species whose habitat and host plant occur in Wright's Field.

O8-125 cont.



Brodiaea jolonesis is abundant throughout the native grassland in Wright's Field.



Calochortus splendens (Mariposa lily) is common in the Wright's Field MSCP preserve area.



Large patches of *Plantago erecta* (small white flower heads), the host plant of the *Quino* checkerspot butterfly, occur in Wrights' Field.

Wright's Field provides an important corridor between designated MSCP areas in Harbison Canyon and El Capitan reservoir to the west and north, and the Cleveland National Forest (CNF) to the east and south. The importance of this linkage has been emphasized by the CDFG and USFWS.

In a 3/11/94 CDFG letter concerning Wright's Field it is stated that the "site may act as a stepping stone of habitat for mammals and birds as they move from the Sweetwater River area towards El Capitan Reservoir and the CNF, or *vice versa*. ... Connectivity to the Loveland Reservoir and public lands to the south may be an important link in the eastern part of the MSCP."

In a 3/7/94 USFWS letter regarding Wright's Field it is stated that the "area maintains a healthy ecological diversity indicated by the presence of large mammalian predators. Connectivity ... from nearby natural areas appears to occur through riparian drainages linking the ... site to El Capitan Reservoir to the northwest and through open land to the south ... that is adjacent to National Forest lands. Maintaining this connectivity between Forest Service land and areas to the north ... may be important to the eastern portion of the MSCP."

The riparian drainages to the west are apparent in MSCP Habitats Map (Exhibit F).

O8-125 cont.

Further, the MSCP plan states on page 4-28 (5/15/97): "Harbison Canyon is a key corridor, and the only location in the vicinity ... where wildlife can cross under 1-8. The Harbison Canyon / Chocolate Canyon drainage is a natural open space connection to the City of San Diego Watershed lands surrounding El Capitan Reservoir to the north." Chocolate Creek is the riparian drainage that connects Wright's Field to the El Capitan Reservoir.



Animal tracks and paths in Wright's Field, which provides an important wildlife corridor between MSCP lands and the Cleveland National Forest.

San Diego County General Plan

The EEM project is consistent with the San Diego County General Plan. The Wright's Field area is specifically mentioned as a particular resource on page X-K-1 of Part X, Conservation Element, of the San Diego County General Plan under Resource Conservation Areas for Alpine. '3. Oak-Riparian Woodland in Drainages Between Alpine Boulevard and South Grade -- These woodlands provide seasonal habitat for birds and movement corridors for native mammals, with the area significant also for the presence of *Fritillaria biflora* (chocolate lily), a rare plant, and an oak woodland area.' A large number of chocolate lilies occur in the MSCP preserve area. (The County's General Plan is currently undergoing its 'GP2020' update.)



Chocolate lilies (*Fritillaria biflora*) and native bunch grasses in Wright's Field.

Alpine Community Plan

This EEM project is also consistent with the Alpine Community Plan because it directly addresses the following elements:

Conservation Element: p. 30 'Encourage the protection and conservation of unique resources in the Alpine Planning Area. Utilize all measures to preserve rare, threatened, or endangered plant life. Protect the rare Engelmann oak wherever possible.' p. 31 'Preserve riparian woodland as an important component of habitat for wildlife, and as a necessary corridor of movement between different ecosystems, essential to the viability of wildlife populations.'

Open Space Element: p. 34 'Encourage the development and preservation of a system of open space for wildlife corridors linking residential areas to permanent open space in the Cleveland National Forest, and nearby lakes and wildlife preservation areas… Encourage preservation of riparian habitat in corridors that connect larger habitats… Provide recreational opportunities through the preservation of open space areas… Explore all funding sources for acquisition, upkeep and protection of open space / recreation preserves.'

O8-125 cont.

Recreational Element: p. 38 'Encourage the acquisition and development of park lands which will protect outstanding scenic and riparian areas, cultural, historical and biological resources.'



The annual Back Country Land Trust native plant sale is very popular in Alpine. This is one of a variety of events that educate people about the value of the Wright's Field preserve.

San Diego County wildfires

Wright's Field did not burn in the catastrophic San Diego County Cedar Fire, October 26-28, 2003, that burned north, east and west of Alpine. The preserve area also did not burn in the 10,000 acre Viejas fire January 4, 2001, that occurred east and south of Alpine. It did, however, burn completely in the 1970 Laguna fire, as seen in aerial photographs. To our knowledge, there has been on average one small fire in the preserve area per year over the past 12 years. These fires are usually 3-10 acres in size and are quickly extinguished by local fire departments and the CDF. All but one, which was started by a lightening strike in the grassland in August, has been started by people's careless behavior. We expect this problem to diminish as management controls become more strictly enforced, especially now that the entire perimeter of the preserve is being posted (new signs around the Phase IV parcel are scheduled to be installed in December, 2003).

We are aware of the complexity the issues relating to fire, habitat, and wild lands. At present, members of the Back Country Land Trust are evaluating these issues, and a geography professor and expert in fire ecology has recently joined the Board. The

MSCP defensible space criteria have been, or are being, implemented in the specific locales where the preserve boundary is directly adjacent to private properties with homes. The land trust is working with the Alpine Fire Department on this issue. An alternative to controlled burns for fuel reduction as well as removal of non-native plant species is steam treatment, as employed by the Soil Erosion and Restoration Group at San Diego State University. A proposal is pending by SERG and the Back Country Land Trust to carry out experimental steam treatment in a 10 acre disturbed portion of the Phase I area. This project would be supplemented by $8,000 in mitigation funds set aside by the Alpine School District. If successful, this treatment may reduce excess fuel accumulation without the potential danger of conducting controlled burns.

Exhibit B – Project Cost Estimate

Total Project Cost	$2,124,000

Exhibit C – Project Budget

O8-125 cont.

Resource Lands Acquisition Cost		
Parcel C[1]	APN 404-170-04	40.00 acres
Parcel B[1]	APN 404-170-05	101.62 acres
Total Project Size		141.62 acres
Price per Acre[2]		$15,000
Total Project Cost[3]		$2,124,000
EEMP Phase IV Request		$300,000
Matching Funds[4]		($470,000)
Balance[5]		$1,824,000

(1) Parcels 'B' and 'C' comprise the total Phase IV area depicted in Exhibit J.
(2) Minimum price set in the option contract between the property owner and the Back Country Land Trust.
(3) Additional expenses in completing the purchase of the Phase IV parcels, such as appraisal, surveys, title reports, title insurance, and escrow fees, will be the obligation of the Back Country Land Trust and/or the County of San Diego.
(4) In 2002 the County of San Diego purchased 30 acres of Findel Ranch for $470,000 as a valuable addition to the MSCP preserve (Exhibits F, J). Under the Environmental Subdivision Ordinance, title was transferred to the Back Country Land Trust.
(5) The balance of the acquisition cost is being sought by the Back Country Land Trust and the County of San Diego from established State and Federal habitat, wildlife, watershed, and open space protection sources. To date the ~$2.9M cost of establishing 230 acres of the preserve has been provided by the EEM Program and the County of San Diego, with mitigation by the Alpine School District. The Back Country Land Trust may initiate a pledge campaign for major fund raising for land acquisition. There are many supporters of the land trust and the Wright's Field preserve in Alpine. The land trust could also participate in the possible formation of a local tax assessment district that would fund active parks and open space protection.

O8-125 cont.

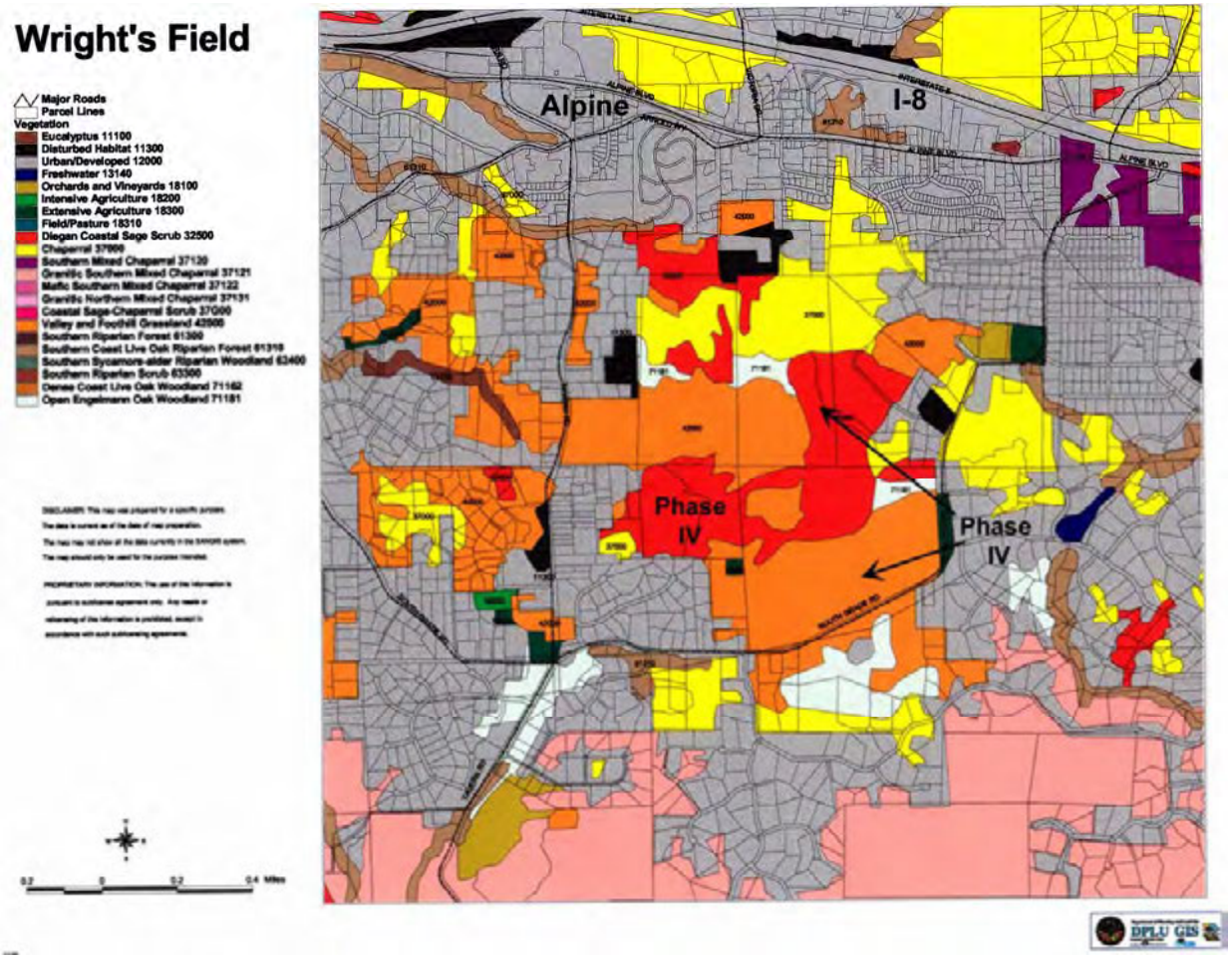
Exhibit D – Project Completion Schedule

Creation of the Wright's Field MSCP preserve has been on-going since 1998, and Phases I, II and III are complete (Exhibit J; Section 3(A)). The option contract between the Phase IV property owner and the Back Country Land Trust extends until ~7/1/05. Following Phase IV, the remaining parcels to be acquired are ~40 acres in the northeast portion of the MSCP pre-approved mitigation area (Exhibits F, J). This area contains a steep ridge, numerous boulder outcrops, and Engelmann oak woodland, and the threat of possible development is not as imminent as for the grassland area of the preserve.

Exhibit E – Project Expenditure Plan

N/A

Exhibit F – Project Location Map (MSCP Habitats Map)



O8-125 cont.

County of San Diego MSCP habitats map for Wright's Field and the Alpine, CA area. Three areas of the 142 acre Phase IV parcel are indicated, which include coastal sage scrub (red), native grassland (orange) and Engelmann oak woodland (white). Parcel lines within Wright's Field have changed since this map was made. Please refer to Exhibit J for the current boundaries with respect to Phases I, II, III and IV. Interstate 8 and central Alpine are to the north of the MSCP preserve area.

Exhibit G – Project Site Photos

Additional photographs of habitat lands in the Wright's Field MSCP Preserve area.

O8-125 cont.



Coastal sage scrub in the Phase IV parcel.



The Wright's Field MSCP preserve area contains 160 acres of native grassland where the coverage of *Nassella pulchra* is ~50% or greater, as seen in this view in the Phase I parcel.



Mima mounds indicative of vernal pool habitat within the Wright's Field MSCP preserve area. All of the native grassland is underlain by heavy clay soil (Bosanko stony clay). This view to the west includes land in the Phase IV parcel and land recently acquired for the preserve.

O8-125
cont.

Exhibit H – Project Design

N/A

Exhibit I - Acquisition Schedule

The option contract between the Phase IV property owner and the Back Country Land Trust extends until ~7/1/05. A request for EEM funds will follow CTC guidelines. Board of Supervisors approvals of matching funds, and funding from other sources, will depend on identification of those sources.

Exhibit J – Acquisition Map (Parcels, Acres, and Phases)

O8-125 cont.

Acquisition Map description

Parcels, acreages, and phases in the Wright's Field MSCP preserve project are superposed on the aerial photograph on the next page. Yellow lines indicate parcels. The 230 acres of Phase I, II and III parcels, and Findel Ranch, are owned and managed by the Back Country Land Trust in partnership with the County of San Diego Department of Parks and Recreation. The Phase IV parcel surrounds the already acquired portions of the preserve to the east, south and west. The unusual shape of this parcel is the result of a condition by the property owner at the time of the sale of the 120 acres in the Phase II + III purchase.

The preserve lands include the integration of native grassland ('*NG*', uniform green), coastal sage scrub ('*CSS*', darker green), and Engelmann oak woodland ('*EOW*', green and mottled red). Vernal pool habitat occurs near the center of the Phase II+III parcel, and within the Phase IV parcel to the west, indicated by '*VP*'. Habitats are depicted in the MSCP habitat and location map (Exhibit F). Future additions to the preserve in the pre-approved mitigation area of the MSCP include ~40 acres of smaller parcels to the north and east of the Phase IV area. About 20 acres of Engelmann oak woodland is protected in an open space easement south of Findel Ranch.

The square-shaped western portion of the Phase IV area is Parcel 'C' (APN 404-170-04; 40.00 acres). The larger eastern portion of the Phase IV area is Parcel 'B' (APN 404-170-05; 101.62 acres). The new Joan McQueen Middle School is directly west of the Phase I mitigation parcel. This Dept. of Public Works photograph was taken in the summer of 2000.

O8-125
cont.

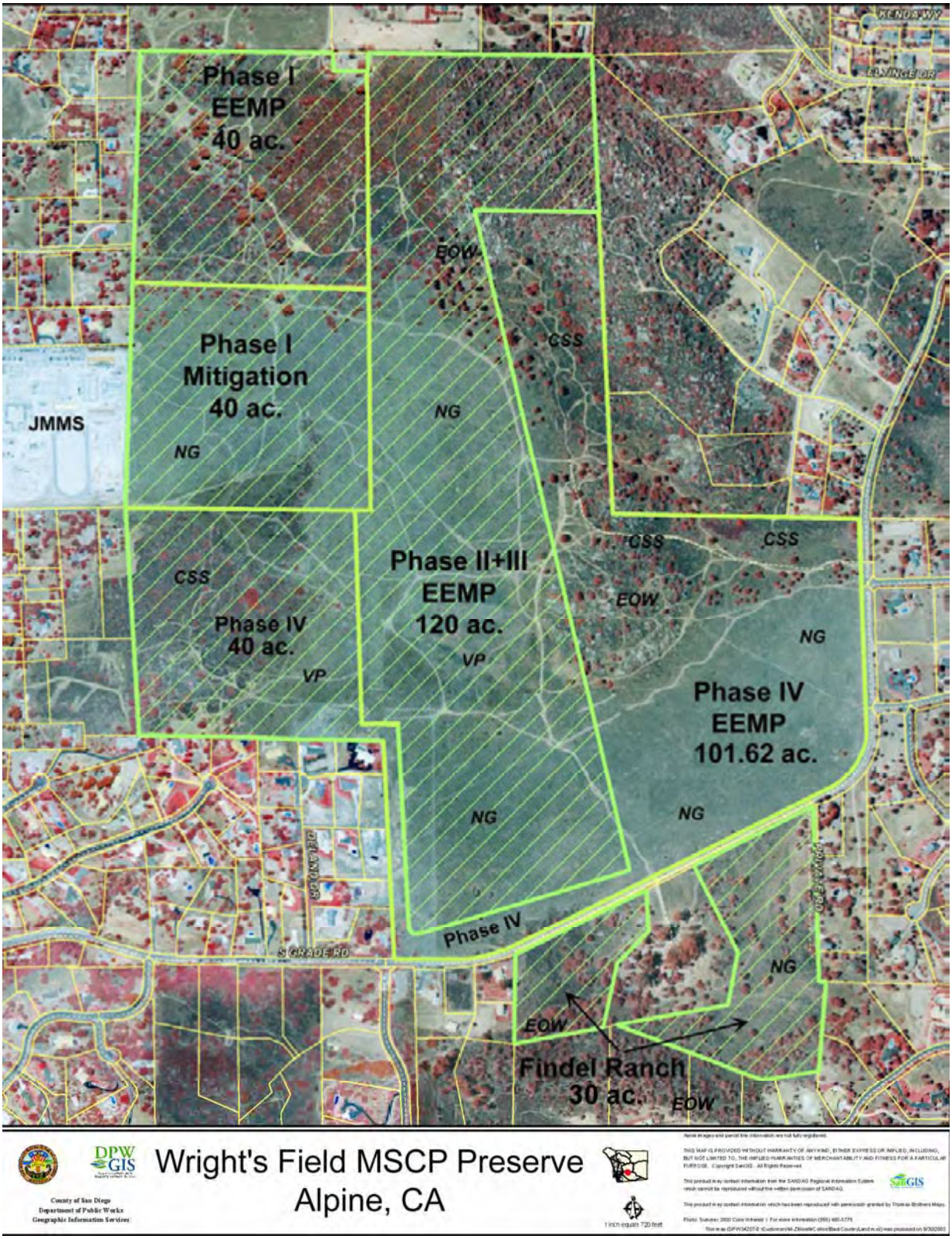


Exhibit J

Exhibit K – Tree Planting Certification

N/A

Exhibit L – Planting Description

N/A

Exhibit M – Supporting Documents

O8-125 cont.

Board of Supervisor resolutions, Agreements to Disclose Restrictive Covenants, and Conservation Easements, involving the CTC, County of San Deigo Department of Parks and Recreation, Alpine School District, and Back Country Land Trust, are on file for Phases I, II and III, and Findel Ranch. An ADRC for the Phase IV property will be submitted at the time of acquisition.

Exhibit N – Letters of Endorsement

1. Letter from San Diego County District 2 Supervisor, Dianne Jacob

2. Letter from US Fish and Wildlife Service

Exhibit I

STATEMENT OF PROCEEDINGS
COUNTY OF SAN DIEGO BOARD OF SUPERVISORS
REGULAR MEETING
MEETING AGENDA
WEDNESDAY, JANUARY 13, 2021, 9:00 AM
BOARD OF SUPERVISORS NORTH CHAMBER
1600 PACIFIC HIGHWAY, SAN DIEGO, CALIFORNIA

Order of Business

A. REGULAR SESSION: Meeting was called to order at 9:00 a.m.

PRESENT: Supervisors Nathan Fletcher, Chair; Nora Vargas, Vice-Chair; Joel Anderson; Terra Lawson-Remer; Jim Desmond; also, Andrew Potter, Clerk of the Board of Supervisors.

(Please note, California Governor Gavin Newsom issued Executive Order N-29-20 on March 17, 2020, relating to the convening of public meetings in response to the COVID-19 pandemic. Pursuant to the Executive Order, and to maintain the orderly conduct of the meeting, all members of the Board of Supervisors attended the meeting via teleconference and participated in the meeting to the same extent as if they were present.)

B. Closed Session Report

O8-126

C. Non-Agenda Public Communication: Opportunity for members of the public to speak to the Board on any subject matter within the Board's jurisdiction but not an item on today's agenda.

D. Approval of the Statement of Proceedings/Minutes for the meeting of December 9, 2020.

ACTION:
ON MOTION of Supervisor Fletcher, seconded by Supervisor Lawson-Remer, the Board of Supervisors approved the Statement of Proceedings/Minutes for the meeting of December 9, 2020.

AYES: Vargas, Anderson, Lawson-Remer, Fletcher, Desmond

E. Formation of Consent Calendar

F. Discussion Items

NOTICE: THE BOARD OF SUPERVISORS MAY TAKE ANY ACTION WITH RESPECT TO THE ITEMS INCLUDED ON THIS AGENDA. RECOMMENDATIONS MADE BY COUNTY STAFF DO NOT LIMIT ACTIONS THAT THE BOARD OF SUPERVISORS MAY TAKE. MEMBERS OF THE PUBLIC SHOULD NOT RELY UPON THE RECOMMENDATIONS IN THE BOARD LETTER AS DETERMINATIVE OF THE ACTION THE BOARD OF SUPERVISORS MAY TAKE ON A PARTICULAR MATTER.

Board of Supervisors' Agenda Items

Agenda #	Subject
1.	NOTICED PUBLIC HEARING: EL MONTE RIVER VALLEY - APPROVE ACQUISITION OF APPROXIMATELY 98 ACRES OF LAND IN LAKESIDE FROM HELIX WATER DISTRICT FOR ACTIVE RECREATION AND TRAIL CONNECTIVITY [FUNDING SOURCES: AVAILABLE PRIOR YEAR GENERAL FUND FUND BALANCE AND DISTRICT TWO NEIGHBORHOOD REINVESTMENT PROGRAM FUNDS]
2.	TRAFFIC ADVISORY COMMITTEE (01/13/2021 - ADOPT RECOMMENDATIONS; 01/27/2021 - SECOND READING OF ORDINANCE)
3.	ADOPT A RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE CALIFORNIA NATURAL RESOURCES AGENCY URBAN GREENING GRANT PROGRAM [FUNDING SOURCE: DEPARTMENT OF PARKS AND RECREATION GENERAL PURPOSE REVENUE]
4.	ADOPT A RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE PARK PROGRAM GRANT PROGRAM [FUNDING SOURCE: DEPARTMENT OF PARKS AND RECREATION GENERAL PURPOSE REVENUE]
5.	FRAMEWORK FOR OUR FUTURE: ACTIONS TO ACHIEVE BOLD CLIMATE ACTION AT THE COUNTY OF SAN DIEGO
6.	NON-AGENDA PUBLIC COMMUNICATION

O8-126 cont.

BUSINESS IMPACT STATEMENT
N/A

ACTION:
ON MOTION of Supervisor Desmond, seconded by Supervisor Vargas, the Board of Supervisors took action as recommended, adopting Resolution No. 21-009 entitled: RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN DIEGO APPROVING THE APPLICATION FOR STATEWIDE PARK DEVELOPMENT AND COMMUNITY REVITALIZATION PROGRAM GRANT FUNDS.

AYES: Vargas, Anderson, Lawson-Remer, Fletcher, Desmond

5. SUBJECT: FRAMEWORK FOR OUR FUTURE: ACTIONS TO ACHIEVE BOLD CLIMATE ACTION AT THE COUNTY OF SAN DIEGO (DISTRICTS: ALL)

OVERVIEW
We need to take bold steps to address climate change in San Diego County. Climate change is already impacting our communities, and disproportionately affects those who have contributed the least to our collective problem, furthering climate injustice.

San Diego County needs to do our part. The 2011 General Plan included the development of a Climate Action Plan as mitigation for greenhouse gas (GHG) emissions associated with the build-out of the General Plan. Now, almost a decade later, the County still lacks a Climate Action Plan and other regional strategies to address climate justice, climate resilience, mitigation, and adaptation. County staff have begun the environmental review to create a new Climate Action Plan, but this board letter serves to identify and prioritize those climate action objectives we expect.

O8-126 cont.

To achieve bold climate action, we are asking the Chief Administrative Officer to develop a Climate Action Plan that meets and exceeds state mandates and guides our region toward Zero Carbon. The Climate Action Plan will be comprehensive and legally enforceable, use updated data and modeling, and will not rely on the purchase of carbon offsets to meet emission reduction targets. It will be shaped by community input and center environmental justice.

This will just be the first of many actions that support a Framework for Our Future to tackle climate change in San Diego County.

RECOMMENDATION(S)
CHAIR NATHAN FLETCHER & SUPERVISOR TERRA LAWSON-REMER
Direct the Chief Administrative Officer to:

1. Develop a Climate Action Plan for the County of San Diego that is comprehensive and legally enforceable, does not rely on the purchase of carbon offsets to meet emission reduction targets, uses updated data and modeling, emphasizing environmental justice and equity, is shaped by community input, and will achieve at a minimum Senate Bill 32 greenhouse gas emissions reductions of 40% below the 1990 level by 2030 and establish actions to meet a goal of net zero carbon emissions by 2045 (in line with Executive Order B-55-18).

2. Conduct stakeholder engagement, hold public hearings, and undertake environmental review.

3. Report back to the Board bi-monthly with progress.

FISCAL IMPACT
There is no fiscal impact associated with these recommendations.

BUSINESS IMPACT STATEMENT
N/A

ACTION:
ON MOTION of Supervisor Fletcher, seconded by Supervisor Vargas, the Board of Supervisors took action as recommended, directing the Chief Administrative Officer to:

1. Develop a Climate Action Plan for the County of San Diego that is comprehensive and legally enforceable, does not rely on the purchase of carbon offsets to meet emission reduction targets, uses updated data and modeling, sets clear goals and measurable metrics that shows how we are ensuring environmental justice and equity, is shaped by community input, and will meet and exceed Senate Bill 32 greenhouse gas emissions reductions of 40% below the 1990 level by 2030 and establish actions to meet a goal of net zero carbon emissions by 2035-2045 (in line with Executive Order B-55-18).

O8-126 cont.

2. Conduct stakeholder engagement, hold public hearings, and undertake environmental review.

3. Report back to the Board bi-monthly with progress.

AYES: Vargas, Anderson, Lawson-Remer, Fletcher, Desmond

6. SUBJECT: NON-AGENDA PUBLIC COMMUNICATION (DISTRICTS: ALL)

OVERVIEW
Kathleen Lippitt provided comments to the Board regarding smoke free housing.

Jadon James provided comments to the Board regarding racism.

ACTION:
Heard, Referred to the Chief Administrative Officer.

Exhibit J

Alpine Revitalization Steering Committee –January 24, 2019

COMMITTEE: Parks and Recreation

Activity Level	Item #	Project	Action	Lead Staff	Funding Source	Status
A	**108**	Creation of Parks and Recreation Master Plan for Alpine	Community members to draft "Parks Master Plan for Alpine" to identify current inventory of parks and prioritize future development needs and desires. Once drafted, Parks Master Plan will be heavily circulated for input of various sectors of community.	George Barnett (619) 659-0349 Work would be intended as joint effort with the ACPG Parks Subcommittee.	N/A	Work not yet started as efforts focused on finding suitable land for active sports.
	108a	30-acre park	1) Find & secure a parkland site. 2) Canvas stakeholders as to active park facilities wishes. 3) Work with County on design concepts. Awaiting contact from County Parks.	George Barnett, Chair (619) 659-0345 County Staff: Bill Saumier; Judy Tjiong-Pietrzak	Land donations. Fund raising & grant applications. Facilites donations. (professional sports franchises) Prop H bond funds & State matching funds, if joint development with GUHSD, County &/or Alpine.	No large sites in Alpine have been identified through over a decade of searching. Recommend removing this item from the matrix. Refer to item #103 above. The County has identified approximately 98 acres of vacant land available for purchase in Alpine. The property will be acquired to develop a portion as an active park and to conserve a substantial portion of the property as open space. Second hearing is set for February 13, 2019.

COMMITTEE: Parks and Recreation

Activity Level	*Item #*	*Project*	*Action*	*Lead Staff*	*Funding Source*	*Status*
	108c	Improve Joan MacQueen Middle School sports facilities.	Action completed.	George Barnett, Chair (619) 659-0345	Alpine PLDO funds. Neighborhood Reinvestment Program grant application, and multiple donation sources.	Alpine Education Foundation and the ACPG Parks & Recs Subcommittee jointly developed a comprehensive master plan to upgrade the dirt playing fields to mostly artificial turf. The plan was endorsed by the ACPG. Alpine Union School District has assumed a lead agency role in executing this project. PRD's view of this project is unknown as meetings have apparently been held in the community without ACPG or Revitalization participation. Recommend removing this item from the matrix to the list of completed projects.
	108d	Conversion of 3.24-acre property formerly donated to the County for a Sheriff's substation. Add to the area of interest Tom Dyke's adjoining ~7-acre industrial parcel.	No action foreseen for the near term.	George Barnett, Chair (619) 659-0345		PRD advise that a letter of interest has now been sent to the property owner, but there has been no reply. The property owner first offered an interest to negotiate over a decade ago and had not been contacted until about a month or so ago. Unofficial information is that the property remains under long term leash for the ongoing 5-year SDGE "wood to steel" project and that potential industrial buyers have expressed a purchase interest. Recommend removing this item since DPR has identified another property for purchase.

Alpine Revitalization Steering Committee –January 24, 2019

COMMITTEE: Parks and Recreation

Activity Level	*Item #*	*Project*	*Action*	*Lead Staff*	*Funding Source*	*Status*
A	***109***	**Parks and Trail-**Increase active and passive parks and ensures protection of Wright's Field. Establish a trail system between parks and neighborhoods to encourage pedestrian and alternative modes of transportation.	1) APG and Parks Sub-committee continue to work with the County on park site.	The effort would be partnered with ACPG Parks. Trails and Conservation Subcommittee Chair, Travis Lyon & Jim Easterling.	Community Development Block Grants Developer Fees	See # 103 Action deferred as all resources directed at finding an active sports site of decent size.
	109a	Trails – staging area	Need further consultation with APG Trails, APG Parks and Parks & Recreation (Passive) Committees to determine requirements and responsibilities for this project.		To be Determined.	Plan staging areas or trail markings at select locations in Alpine. No action on this item. See item 109 above.

O8-127
cont.

SHUTE, MIHALY & WEINBERGER LLP

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JOSEPH D. PETTA
Attorney
Petta@smwlaw.com

May 18, 2022

Via Electronic Mail Only

Ms. Anna Prowant
Land Use/Environmental Planner III
San Diego County
Department of Parks and Recreation
5500 Overland Avenue, Suite 410
San Diego, CA 92123
E-Mail: CountyParksCEQA@sdcounty.ca.gov

Re: Comments re Environmental Impact Report for the Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant:

O9-1 On behalf of the Cleveland National Forest Foundation ("CNFF") we submit these comments on the proposed Alpine Park Project ("Project") and the associated Environmental Impact Report ("EIR"). For the reasons set forth below, the County has failed to demonstrate a need for the Project.

O9-2 The Project is oversized, incompatible with the rural character of Alpine, would substantially increase overall vehicle miles travelled ("VMT"), and would convert open space in an area with substantial sensitive biological resources to an active recreational facility.

O9-3 The project proposes construction of a sports complex immediately adjacent to Wrights Field, a 230-acre nature reserve. The Project, which would develop 25 acres of various recreational uses, would include parking spaces for up to 275 vehicles. A sports complex of this size in a rural setting would not only serve Alpine area residents, but would attract people from distant areas as well, resulting in increased VMT and corresponding increases in greenhouse gas emissions.

O9-4 Importantly, the Project is fundamentally inconsistent with SANDAG's Regional Plan and Sustainable Communities Strategy ("SCS"), which includes among its strategies to "focus housing and job growth in the urbanized areas where there is existing and planned transportation" and to "protect the environment and help ensure the success of smart growth land

O9-4 cont. use policies by *preserving sensitive habitat, open space, cultural resources, and farmland*."[1] The preeminent goal and performance target of SANDAG's Regional Plan, as mandated by SB 375, is to reduce per-capita CO2 emissions from cars and light-duty trucks to meet the California Air Resources Board's 2020 and 2035 reduction targets for the region. Id.

O9-5 In addition, the July 2020 Regional House Needs Allocation ("RHNA") Plan reduced the housing allocation for the 2021-2029 planning cycle in the County's unincorporated areas by 15,000 units compared to the allocation in the previous cycle. The units were transferred from the rural unincorporated areas to already urbanized areas that have established infrastructure, transit corridors, and jobs for the express reasons of making housing and transportation more affordable and to reduce VMT and greenhouse gas emissions. This means that compliance with SANDAG's Regional Plan and the RHNA would limit development in rural lands in and adjacent to forest lands, such as Alpine.

O9-6 The Alpine Park Project was purportedly planned to accommodate population growth and demographic changes anticipated in the area. However, the most recent Regional Plan, indicates otherwise. SANDAG adopted the 2021 Regional Plan[2] and certified the associated EIR,[3] both of which incorporate the Series 14 Regional Growth Forecast which SANDAG adopted in October 2019.[4] The Regional Plan shows a drastic reduction in the projected growth in the County's unincorporated areas.

Specifically, whereas SANDAG's Series 13 housing forecast calculated an increase of 51,123 housing units in the unincorporated county between 2012 and 2050,[5] SANDAG's current Series 14 housing forecast *reduces* this projected growth to an increase of just *7,419 housing units* in all unincorporated areas countywide during a similar timeframe (2021 Regional Plan, Appendix F at p. F-13). This reduction in population growth in the county's unincorporated areas consequently means the Project is not necessary to accommodate growth, because the projected growth rate for the Alpine area is now substantially reduced.

---

[1] SANDAG 2015 Regional Plan at 26 (emphasis added), available at https://sdforward.com/pdfs/Final_PDFs/Chapter2_A_Strategy_for_Sustainability.pdf (last accessed January 14, 2022).
[2] Available at https://sdforward.com/mobility-planning/2021-regional-plan, last visited January 12, 2022.
[3] Available at https://sdforward.com/mobility-planning/eir/, last visited January 12, 2022.
[4] Available at https://sdforward.com/docs/default-source/final-2021-regional-plan/appendix-f---regional-growth-forecast-and-scs-land-use-pattern.pdf?sfvrsn=8fc1fd65_2, last visited January 12, 2022.
[5] SANDAG Series 13 Regional Growth Forecast at p. 8, available at https://www.sdforward.com/pdfs/Final_PDFs/AppendixJ.pdf, last visited January 12, 2022.

O9-7 In brief, in order to be consistent with SANDAG's 2021 Regional Plan and Series 14 forecast and RHNA, the County will have to *reduce* Alpine's housing allocation from the current General Plan, which will result in significantly less population growth in the Alpine area. Based on the foregoing, there no reasonable argument supporting the need for a park project of the proposed size.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



Joseph "Seph" Petta

1508249.1

PRESERVE ALPINE'S HERITAGE

ONCE GONE GONE FOREVER

Saturday, February 18, 2023

Anna Prowant
County of San Diego
Park and Recreation Department
5500 Overland Avenue, Suite 410
San Diego, CA 92123
countyParksCEQA@sdcounty.ca.gov

Reference: Alpine County Park Project ("Project") and Draft Environmental Impact Report (DEIR")

Dear Ms. Prowant,

I am the President/CEO of Preserve Alpine's Heritage ("PAH"), a California Nonprofit Benefit Corporation, tax exempt under Section 501 (c) 3 of the Internal Revenue Code.

This letter, and the below mentioned Exhibits, including their respective attachments and exhibits concern, the Recirculated Sections of the DEIR dated December 16, 2022, as modified on January 30, 2023 ("RS"). We request responses to the concerns and comments our letter raises.

O10-1 First, I would like to thank the County for extending the time to comment on the RS. There was some confusion when the original draft of the RS was distributed. Your modification on January 30, 2023, and extra time to respond, were welcomed.

Exhibit 1 and its attachments, which are incorporated herein, is PAH's comment letter on the original DEIR submitted by our attorneys, Chatten-Brown, Carstens & Minter LLP, dated November 15, 2021. We do not believe the RS resolves the concerns raised in that letter in the sections covered in the RS.

Exhibit 2, which is incorporated herein, is a letter dated May 18, 2022, from Shute Mihaly & Weinberger LLP, attorneys for the Cleveland National Forest Foundation ("CNFF") to the County concerning the original DEIR. We do not believe the RS resolves the concerns raised in that letter in the sections covered in the RS.

DEIR and RS fail to comply with CEQA

O10-2 Exhibit 1 points out CEQA's requirements that the County cannot eliminate an Alternative to the Project unless it fails to meet "*most* of the basic project objectives" or is infeasible. PAH has repeatedly raised an alternative for a nature-based passive park. We have suggested the passive park be smaller than the Project but significant size. With proper planning and design, the passive park could include picnic areas, including tables and chairs, a natural amphitheater or other meeting place, play areas for children, and, of course, trails for hiking and riding. It could also have exhibits that provide education and background on the nature preserve on the adjacent County property and Wright's Field.

O10-3 This alternative was not considered in the original DEIR. The RS adds a Passive Park Alternative (6.1). Section 6.4.2.5 describes this Alternative as a .23-acre passive park parking lot. Evidently the rest of the 24.77-acres of the "park" would be the same as it is now and be preserved as a passive park. PAH has monitored the comments about the Project for quite some time, reviewed all the comment letters to the original DEIR and the various petitions and other correspondence concerning the Project and is unaware of anyone that suggested this alternative. There has been comments from some opposed to a park that said it would be nice though to have parking on the County's property to get the cars off South Grade Road for safety reasons, but that sounds more like the No Project Alternative which was eliminated because it "does not achieve any of the other objectives related to creating a community

O10-3 cont. gathering place, enhancing the quality of life and public health of the community, or accommodation a variety of active and passive recreational uses. (6.5.1.2).

O10-4 Of course, a .23-acre parking lot would not provide these objectives. So why did the County include Alternative 5 and name it a passive park when it wasn't a park at all? It was Alternative 1 with a parking lot, with Alternative 1 already eliminated. If the park was consistent with what PAH and others commended for a passive park, those objectives would be met as well as most of the others. It seems the County added this only to eliminate a "passive park" alternative. As stated in Exhibit 1 "omission of a reasonable range of alternatives including (PAH's) Passive Park Alternative not only violated CEQA, but it also does the public and decision makers a disservice.

Need

O10-5 As Exhibit 2 points out, "the most recent Regional Plan shows a drastic reduction in the projected growth in the County's unincorporated areas…This reduction in population growth in the County's unincorporated areas consequently means the Project is not necessary to accommodate growth because the projected growth rate for the Alpine area is now substantially reduced. Yet in several sections of the RS it states "according to the County Parks Masterplan, population density is projected to increase by 61 percent in the central Alpine CPA by 2040." (see discussions of Objective 7 in Alternative Analysis) The basis of need for a park is questionable given the new San Diego Association of Governments' Regional Plan that was adopted prior to the distribution of the DEIR. The population density used to support the Project was based on the prior plan that showed a drastic increase in population in Alpine. There was no mention of this change in the DEIR or RS or the announcement of either document.

Conclusion

O10-6 We believe that the DEIR and RS have not addressed the issues raised in Exhibits 1 and 2 and the issues raised in this letter. The EIR is legally inadequate and not in the best interest of the residents or Alpine. The Project is inconsistent with the applicable regional plans and policies. For these reasons PAH requests denial of the Project as proposed but stand willing to work with the County on a true passive park that meets the objectives outlined in the EIR. Thank you for entertaining our comments.

Sincerely,



Jody Root
President/CEO
Preserve Alpine's Heritage

Exhibit 1

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San Diego Office
Phone: (619) 940-4522

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November 15, 2021

Via e-mail

Anna Prowant (*countyParksCEQA@sdcounty.ca.gov*)
County of San Diego
Parks and Recreation Department
5500 Overland Avenue, Suite 410
San Diego, CA 92123

Re: Alpine County Park Project and Draft Environmental Impact Report

Dear Ms. Prowant,

The law firm of Chatten-Brown, Carstens, & Minteer represents Preserve Alpine's Heritage in connection with the Alpine County Park Project ("Project") and its draft Environmental Impact Report ("DEIR"). Memoranda from biological expert Robert Hamilton (**Exhibit A**) and traffic expert Tom Brohard (**Exhibit C**) are hereby attached and incorporated into this comment letter, and we request responses to the concerns they raise. These comments, and all attachments, should be made part of the administrative record for the Project.

Preserve Alpine's Heritage supports the addition of a passive community park at this location and urges the County of San Diego Parks and Recreation Department ("DPR") to consider alternative, less environmentally harmful locations for a regional sports park. The DEIR continuously mischaracterizes the Project as a community park, misleading the public and downplaying its environmental impacts.[1]

The Project as proposed would result in significant impacts to biological resources, transportation and safety, greenhouse gas, energy, air quality, wildfire, water supply and

[1] See DEIR, p. ES-2, 3-1, 5-6, 6-2; DEIR Vol. II, pp. 666, 724-742, 750, 763, p. 887, 895, 897. In light of DPR's recent characterization of the Project as a "Regional Park" (**Exhibit D**, p. 1), and considering the scale and amenities included, the Project should be described and analyzed as a regional sports park throughout the DEIR.

wastewater, visual resources and noise, and cumulative impacts that the EIR fails to adequately disclose, analyze, and mitigate. The DEIR must be revised and recirculated to comply fully with the California Environmental Quality Act's ("CEQA") mandate of the full disclosure of all significant environmental impacts and the application of all feasible mitigation for those impacts. (Pub. Res. Code Section 21002, 21002.1, 21081(a).)

I. Introduction

The Project site consists of 100 acres on undeveloped land, adjacent to Wright's Field Ecological Preserve ("Wright's Field"). (DEIR, p. 2-1.) Wright's Field, managed by Backcountry Land Trust ("BCLT"), is part of the County's Multiple Species Conservation Plan ("MSCP"). (*Ibid*.) The Project would develop approximately 25 acres into an active park, proposing new structures including athletic courts, turf fields, a bike park, an all-wheel park, two equestrian corrals and paved staging area, receptacles for waste and equestrian manure, permanent RV staging area, administrative and restroom buildings, dog parks, BBQ pits, a playground and exercise equipment, and a large parking lot. (DEIR, pp. ES-1, 3-2 to 3-3.) The Project identifies the inclusion of 5,000 square feet of a community garden yet does not report further information on the location or design. (*Ibid*.) Around 22 acres of grading would be required. (DEIR, p. 3-5.)

The Project will either use on-site septic or will connect existing sewer lines. (DEIR, pp. 3-3 to 3-4.) The Project states that stormwater retention basins will be sited throughout the Park, however the Concept design (Figure 3.2) only displays one basin located near the parking lot. The remaining 70 acres around the active park would remain open space. (DEIR, p. 3-5.) DPR proposes to implement a Habitat Conservation Plan. (*Ibid*.)

II. The Project's Draft EIR Fails to Comply with CEQA

A. The EIR Fails to Consider a Reasonable Range of Alternatives

The "core of an EIR is the mitigation and alternatives sections." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.) An adequate alternatives analysis is crucial to CEQA's substantive mandate to substantial lessen or avoid significant environmental damage where feasible. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 403, 405 [requiring more than conclusory statements about the lack of alternative locations].) The EIR "shall

describe a range of reasonable alternatives to the project, or to the location . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." (CEQA Guidelines ["Guidelines"] Section 15126.6, subd. (a).) As the DEIR states, DPR does not have to consider "every conceivable alternative," but, CEQA requires the inclusion of alternatives "necessary to permit a reasoned choice." (*Ibid.*; Guidelines Section 15126.6, subd. (f).)

CEQA requires discussion of alternatives, even where they "would impede to some degree the attainment of the project objectives." (Guidelines Section 15126.6, subd. (b).) DPR may eliminate an alternative from detailed consideration only where it fails to meet "*most* of the basic project objectives" or is infeasible. (Guidelines section 15126.6, subd. (c), emphasis added.) DPR has failed to demonstrate these conditions preclude analysis of an alternative location, multiple alternative locations ("mini-parks"), a passive park, or a multi-prong approach.

Preserve Alpine's Heritage reiterates its requested inclusion and analysis of a passive park on this site combined with improvements to existing off-site amenities and/or placement of the environmentally destructive sports park amenities at more appropriate locations (a "Multi-Prong Approach Alternative.") This alternative would present a feasible approach to meet all or most Project objectives. The potential for Joint Exercise of Powers Agreements (JEPA) agreements, such as DPR's recent JEPA-related request for Park Lands Dedication Ordinance (PLDO) funds to improve the nearby Joan MacQueen facilities, supports the feasibility of such an alternative.[2] Therefore, the DEIR must include a Multi-Prong Approach Alternative.[3]

Further, in dismissing certain alternatives, DPR failed to "explain the reasons" underlying its determination. (Guidelines Section 15126.6, subd. (c).) Instead, DPR merely quotes the objectives themselves without any explanation for why the requested alternatives below were not included in the alternatives analysis.

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[2]https://sdcounty.legistar1.com/daystar.legistar6.sdk.ws/View.ashx?M=F&GovernmentGUID=SDCT&LogicalFileName=ce653fb9-54f1-4b6b-b945-c672dbfacccc.docx&From=Granicus.

[3] Such an approach would be more consistent with the Alpine Community Plan Recreation Objectives 5, 6, and 9 than the Project as proposed. (https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/CP/Alpine_CP.pdf, page 37.).

The DEIR failed to present a reasonable range of alternatives, especially considering the letters received from the public and state agencies requesting the inclusion of such alternatives. Given that one of the Project objectives is to "provide for long-term natural and cultural resource management consistent with the goals and objectives" of the Multiple Species Conservation Program ("MSCP") (DEIR, p. ES-2), it is unreasonable to refuse to consider a passive park, multi-prong approach, or alternative location. (See *Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, 547 [finding the failure to include a Smart Growth alternative unreasonable given the Project objective to reduce VMT].)

The DEIR also includes an impermissibly narrow project objective that hinges on the park being at the location itself. (DEIR, p. 6-2, ["Provide for long-term . . . resource management. . . for the preserve portion of *the property*].) The inclusion of a project objective that only applies to this project site improperly excludes the full consideration of alternative project locations.

1. The EIR Fails to Consider Alternative Locations

Due to the presence of highly sensitive habitats (clay soils, native grasslands) and species on the proposed site, the California Department of Fish and Wildlife ("CDFW") specifically requested the consideration of alternative locations—number one on its list of comments submitted in response to the Project EIR Notice of Preparation. (CDFW Letter, p. 3; DEIR Vol. II, p. 15.) CDFW noted the ability for an alternative location to meet community needs and simultaneously prevent impacts to the large block of habitat in the conservation area. (*Ibid*.) The site's location on sensitive geological resources, identified as a potentially significant impact, further warrants inclusion of this alternative. (DEIR, p. ES-16.)

Yet, the DEIR does not even consider inclusion of a singular Alternative Location Alternative, and summarily dismisses the inclusion of an Alternative Locations ("mini-parks") Alternative in one paragraph. (DEIR, p. 6-4.) The DEIR also fails to demonstrate it actually considered, or is actively seeking, other locations, including those that would not result in the same harmful impacts. No evidence is provided regarding the rejection of these alternatives for further consideration. (DEIR, pp. 6-4 to 6-5.) The County's refusal to disclose the alternative locations that were supposedly considered but rejected on the basis of "confidentiality for the owners of the potential properties" is improper and

prevents the public and decision makers from evaluating the propriety of rejecting these alternative locations for failure to "meet many of the project objectives" (DEIR, p. 6-5.) Alternatives are not required to meet all project objectives—in reality it "is virtually a given that the alternatives to a project will not attain all of the project's objectives." (*Watsonville Pilots Ass'n v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1087.)

One commenter suggested two specific alternative locations in a scoping letter, but these were not evaluated. (DEIR Vol. II, pp. 217-218.) In its discussion of Recreation impacts, the DEIR notes that the County's Parks Master Plan found Alpine to have "much capacity" for park acquisition, and identified 70 vacant parcels totaling 219 acres that "may be suitable for park development" if acquired. (DEIR, pp. 4.16-3 to 4.) The DEIR must consider these sites.[4] The DEIR should also analyze the feasibility of improving existing Alpine facilities (**Exhibit E**) and other available sites for new amenities (**Exhibit F**). That DPR does not currently own an alternate parcel is an insufficient reason to reject the Project's feasibility on that parcel. (See *Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1461–1462.) Further, the brief dismissal of this alternative made no reference to the potential for joint use sites tailored to meet Project objectives, only referring to property "owners" in dismissing this analysis as infeasible. (*Ibid*.) Other JEPAs are noted in the DEIR. (DEIR, p. 4.15-4.) The DEIR must consider the potential properties described above, and submitted to the record, in its alternatives analysis.

The DEIR improperly dismisses inclusion of the Alternate Locations Alternative on the grounds it "would not meet many of the project objectives, including creating a place where all Alpine residents can gather and connect as a community," and "also would not enable long-term natural and cultural resources management." (DEIR, p. 6-5.) The DEIR fails to detail why these objectives are not met and to consider the remaining objectives in deciding not to include these alternatives. As noted above, alternatives do not have to meet *every single* project objective. Additionally, no evidence supports DPR's assertion that an alternative location, including a smaller sized park with picnic tables, could not provide a place for the community to gather. Nor does DEIR demonstrate how the Alternate Location Alternative would prevent long-term resources management, as claimed. Election of an alternative location for the active sports park, while maintaining preservation of this site via a passive park, would actually serve to

[4] www.sdparks.org/content/dam/sdparks/en/pdf/Development/Parks%20Master%20Plan.pdf.

better manage cultural and natural resources.[5] The DEIR's claims lack any actual discussion or analysis, and only serve to deprive the public and decisionmakers of a meaningful consideration of alternatives in contravention of CEQA's purpose.

Robert Hamilton further details in his attached comments why the DEIR's rejection of an alternative location lacked adequate cause. (Exhibit A, p. 18.)

Preserve Alpine's Heritage urges DPR to include an actual Alternate Location Alternative, separate and apart from a "mini-parks" alternative, and to include both alternatives in the analysis. This is in addition to the inclusion of the Multi-Prong Approach Alternative.

2. Passive Park Alternative

Members of the public also called for the inclusion of the Passive Park Alternative. (California Native Plant Society, DEIR Vol. II p. 22, 25; Preserve Alpine's Heritage, DEIR Vol. II, p. 159; Comments, DEIR Vol. II, pp. 163, 164, 171, 187, 210, 216.)[6] Instead, the EIR similarly dismisses the inclusion of a Passive Park Alternative (in what is the closest to a passive park, the Equestrian Staging and Trails Only Alternative) in a two-sentence statement that lacks any analysis or supporting evidence. (DEIR, p. 6-5.)[7]

The DEIR claims the Passive Park Alternative would not meet Objectives 1, 2, and 5 "because it would not provide a place where all Alpine residents can gather as a community, it would not provide a variety of active and passive recreational uses or an

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[5] If the "No Project" Alternative still meets the objective to provide for long-term resource management consistent with the MSCP, it is unclear how an alternate location would fail to do so where the Project site is already in the County's possession, adjacent to a land trust capable of managing the land. (DEIR, p. 6-10.)

[6] CDFW also requested inclusion of feasible alternatives to Project design features that avoid or minimize impacts to sensitive biological resources. (CDFW Letter, p. 7.) A passive park and multi-prong approach alternative would both accomplish this.

[7] Adding salt to the wound, the EIR instead includes an increased Project alternative that doubles the size of the active park—to the detriment of the preserve—and increases the intensity of park's operations and impacts. (DEIR, p. 6-5.)

open space preserve, and it would not enhance the quality of life in Alpine by providing exceptional park and recreational opportunities." This explanation is both deficient and inaccurate. Further, Alpine residents would not be precluded from gathering on the site—a Passive Park could still include picnic tables and other spaces. These claimed objectives also do not square with DPR's plans to designate the Project as a regional park. (Exhibit D.)

DPR refused to include any alternative (besides the legally-required No Project alternative) that was not a large active sports park. The DEIR only considers three alternatives that all include an active sports park of at least 20 acres. (DEIR, p. 6-1.) Many of the Project objectives are predicated on a large active sports park itself—Objectives 1, 2 and 3, which are then singularly used to dismiss any alternative that is not this active park at this location. (DEIR, p. 6-2.) An agency may not use artificially narrow definitions to avoid an adequate alternatives analysis. (*North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647, 654.) Omission of a reasonable range of alternatives, including the Passive Parks Alternative, not only violates CEQA—it does the public and decisionmakers a disservice. Therefore, Preserve Alpine's Heritage respectfully requests the inclusion of a Passive Park Alternative that includes picnic tables and trails.

3. Deficient Analysis of the No Project Alternative

The DEIR fails to adequately analyze selection of the No Project Alternative. If an agency finds an alternative infeasible, its analysis must explain in "meaningful detail the reasons and facts supporting that conclusion." (*Marin Mun. Water Dist. v. KG Land California Corp*. (1991) 235 Cal.App.3d 1652, 1664.)

In dismissing the "No Project" Alternative, the DEIR claims 0 acres will be kept for open space or conservation acreage. (DEIR, p. 6-4.) Yet, the DEIR notes the site already consists of undeveloped, vegetated rural land (DEIR, p. 6-6), which would be preserved under the No Project alternative. The DEIR states that under the No Project alternative, no Habitat Conservation Plan would be prepared, and onsite restoration would not occur. (DEIR, p. 6-7.) Based on this, the DEIR concludes there would not be much biological benefits through the No Project alternative. (DEIR, p. 6-10.) To claim there would be no biological benefits from the avoidance of destroying 25 acres of sensitive habitat and adding 500 daily visitors and the associated noise and foot-traffic impacts is disingenuous.

The DEIR continues to claim that the No Project Alternative would result in increased recreation impacts because it would fail to provide new recreational facilities to meet demand, despite elsewhere noting the site already provides existing trails (DEIR, p. 4.16-6) and ignoring the County's ability to still maintain and improve Alpine's trail system and other nearby existing facilities under a No Project Alternative. In turn, the County contends that this would lead to "substantial deterioration" via increased use of other existing parks and facilities. (DEIR, p. 6-9.) Yet, in its discussion of the proposed Project's recreation impacts, the DEIR ignores discussion of increased traffic to Wright's Field and potential deterioration of those recreational facilities. (DEIR, p. 4.16-5.) The Project as proposed would close existing, informal trails. (DEIR, p. 1-1.) This closure combined with increased visitors would lead to substantial deterioration of the remaining trails on the Preserve and Wright's Field.

Finally, the DEIR summarily states that the No Project Alternative would fail to meet many of the Project objectives, without providing any details, facts, or explanations to support its conclusions. (DEIR, p. 6-10.) The DEIR then incredulously concludes, without providing analysis or evidence, that the doubled-in-size Alternative 2 Sportsplex, with increased operations and added stadium lighting, "would meet *all* of the project objectives," despite its increased impacts and failure to introduce any further mitigation measures. (DEIR, pp. 6-11 to 15, emphasis added.)

B. The EIR Fails to Adequately Analyze and Mitigate the Project's Impacts

1. Biological Resources

The Project site contains extensive vegetation communities, which include sensitive native grasslands, rare plants and Engelmann oak, as well as other onsite sensitive species. (CDFW Letter, p. 4.) The endangered Quino Checkerspot Butterfly, and associated host plants, occupy the site. Native perennial grasslands are considered special status vegetation types, and the MSCP prioritizes their protection.[8] The Project will result in the destruction of 64% of native grasslands onsite (DEIR, Table 14.4-1) and will impact the remaining open space and the adjacent Wright's Field via increased visitors and the associated indirect impacts.

[8]https://sdmmp.com/upload/SDMMP_Repository/0/MP316_Franklin_2006_MSCPcommunities_priorities.pdf.

Robert Hamilton surveyed the site property and reviewed the DEIR's analysis to biological impacts. Mr. Hamilton's qualifications and CV are attached in **Exhibit B**. For the reasons listed below, he concluded that the Project's environmental analysis and claimed mitigation measures are inadequate. (Exhibit A, pp. 23-24.) Therefore, the DEIR fails to comply with CEQA.

Mr. Hamilton's report raises several specific concerns over the DEIR's inadequate analysis, disclosure, and mitigation of the Project's impacts on biological resources. Please specifically address each of Mr. Hamilton's concerns as described extensively in Exhibit A, which is attached to this letter. These concerns include:

- The mis-mapped vegetation polygons (pp. 1-4), and the consequences of this for impacts and mitigation.
- The failure to adequately analyze, disclose, and mitigate impacts to the Western Spadefoot Toad, including Edge Effects. (pp. 4-8)
- The failure to adequately analyze, disclose, and mitigate impacts to protected bat species. (pp. 8-11)
- The failure to adequately analyze, disclose, and mitigate impacts to the federally-listed Quino Checkerspot Butterfly. (pp. 11-12)
- Concerns with the proposed Engelmann Oak mitigation measure (p. 13)
- The DEIR's unsupported wildlife movement findings. (p. 13-15)
- The Project's undermining of the MSCP. (pp. 15-18)
- The DEIR's rejection of the alternative location alternative with inadequate cause. (pp. 18-20)
- Inconsistencies with DPR's MSCP conformance statement. (pp. 20-23)

Preserve Alpine's Heritage presents the additional comments and concerns with the DEIR's analysis and alleged mitigation of the Project's biological impacts.

i. Impacts to On-Site Preserve and Wright's Field

The County participates in the Natural Community Conservation Planning ("NCCP") program though implementation of its approved MSCP Subarea Plan ("SAP"). The Project would be located adjacent to Wright's Field, MSCP Preserve Land. Wright's Field describes itself as the "heart of Alpine" and provides a home to multiple special

status species.[9] The Project itself is located on Pre-Approved Mitigation Area ("PAMA") land, an area with the highest biological value where preservation is encouraged.[10] PAMAs are rare, and their loss and damage jeopardizes the MSCP plan.

Despite CDFW's requests for a thorough analysis,[11] the DEIR skims over impacts on sensitive communities and preserved land via increased foot traffic. In particular, the EIR failed to meaningfully discuss or mitigate the Project's spillover impacts on designated preserve lands, and the species it provides a home to, from lighting, noise, foot traffic, and other increased human activity.[12] Mr. Hamilton's report further details his concerns over the Project's edge effects on the Western Spadefoot Toad. (Exhibit A, pp. 6-7.)

The DEIR improperly assumes that species not directly located on the Project's active park will not be affected. (DEIR, p. 4.4-16.) In discussing the noise impacts of the larger Sportsplex Alternative, the DEIR admits to impacts on sensitive receptors within the adjacent biological open space areas from increased operations yet fails to adequately disclose and mitigate these impacts on the surrounding biological resources from the Project as proposed. (DEIR, p. 6-13.) The distinction between the two is not detailed or based in objective, science-based reasoning.

In 2009, the County commented on a proposed high school development ("2009 Project") that would destroy similar areas at the same location. (**Exhibit G**, p. 2.) The County concluded there would be "significant and **not mitigable impacts** to biological impacts" and direct implications to the County's MSCP. (*Ibid.*, emphasis added.) The

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[9] https://backcountrylandtrust.org/wrights-field/.

[10] https://www.sandiegocounty.gov/pds/mscp/docs/NCPlan_FAQs.pdf.

[11] CDFW emphasized in its scoping letter: "Due to the proximity of the Project site to the Alpine Park Preserve and BCLT's Wright's Field Preserve, it is essential to understand how the open space and biological diversity within it may be impacted by Project activities. CDFW recommends providing a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts." (CDFW Letter, p. 6.)

[12] DPR also failed to meaningfully respond or consider the literature provided by Preserve Santee about the impacts of increased recreation and trail usage on the surrounding preserve. (DEIR Vol. II, p. 26.) The Project concept design shows the bike park on the edge of the Project, and the DEIR failed to consider whether some bicyclists will ride out on other elements of the Preserve and conserved lands.

County described Wright's Field Preserve as "an integral part" of its MSCP, asserting that "*any* loss of native grassland habitat will impact the overall function and viability of the grassland including the lands . . . already preserved with significant expense to the County and community." (*Ibid*.) The County asserted that "in-kind mitigation is probably not be [sic] feasible." (*Ibid.*) The Project will directly destroy 22.3 acres of grasslands. (DEIR, p. 4.4-28.) Further, the County asserted that the development of "core wildlife area within a PAMA" conflicted with the MSCP Subarea Plan. (Exhibit G, p. 3.) The 2009 Project may not have the exact same design as the Project, however the Project will result in similar impacts to the site and adjacent reserve, warrants further scrutiny into the County's changed stance on this.

Mr. Hamilton's letter further raises concerns over the County's contradictions and inconsistencies. (Exhibit A, pp. 16, 24.)

The County also previously commented on the 2009 Project's indirect effects associated with lighting, noise, and ground moisture changes from irrigation runoff and impervious surfaces. (Exhibit G, p. 2.) Yet the DEIR fails to adequately address indirect impacts on the preserve land, despite the addition of 500 daily visitors, added lighting, and operational noise—including from a PA sound system. (DEIR, pp. 1-1, ES-21.)

Finally, DPR defers mitigation through its reliance on APM-1 and MM-BIO-6. The CDFW noted in its Scoping Letter that a Resource Management Plan (RMP) *should be completed* for the 73-acre Preserve before any trails are opened to the public, and asserts "discussion is needed on the impacts of the designated trails . . . and the cumulative impacts that will result from an increase in human activity." (CDFW Letter, p. 4.) Onsite habitat restoration or enhancement should be discussed *in detail*. (*Id*., p. 7.) The DEIR completely avoids any discussion of the RMP, instead improperly deferring its creation to a later date.

ii. Quino Checkerspot Butterfly

The Project's inclusion in the County's MSCP did not provide take coverage for the Quino checkerspot butterfly ("QCB"), a federally-endangered species found on site. (DEIR, p. 4.4-22; CDFW Letter, p. 5.) CDFW requested that the DEIR address indirect impacts to this species beyond simply avoiding the occupied area. (CDFW Letter, p. 5.) Yet, the DEIR failed to do so and assumes that the on-site QCB and host-plants on the preserve area will not be impacted by increased foot traffic. (DEIR, p. 4.4-22.) The DEIR

fails to adequately disclose the Project's direct and indirect impacts on the QCB. The DEIR must consider edge effects on the preserve and conserved spaces that contain QCB and the effect of reduced habitat patch size on population viability at the site.

The DEIR proposes to mitigate impacts to the QCB through later securing an Incidental Take Permit, and subsequent approval of a Habitat Conservation Plan ("HCP"). (DEIR, p. 4.4-22.) This mitigation violates CEQA through improper deferral of mitigation. The DEIR provides no information or performance standards for the HCP. "An EIR may not defer the formulation of mitigation measures to a future time." (*Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 280.) Specific details may only be developed after project approval where including them in the DEIR is infeasible and the County commits itself to mitigation via specific performance standards and identifies actions to achieve those performance standards. (Guidelines Section 1.5126.4; *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 793.) Recent County projects that involved QCB-occupied territory had prepared such plans *before* project approval, which undercuts any claim that including them in the DEIR is infeasible.

Mr. Hamilton's letter details further concerns with the proposed mitigation measure. (Exhibit A, pp. 11-12.)

When DPR releases its proposed HCP, Preserve Alpine's Heritage requests to be notified of where and when it can publicly comment.

iii. Impacts on Special Status Species

The DEIR fails to analyze the Project's impacts on the Western Spadefoot Toad, despite noting the presence of spadefoot eggs in the Biological Report. (DEIR Vol. II, p. 464.) CDFW specifically requested consideration of this sensitive amphibian, among others. (CDFW Letter, p. 4.) Wright's Field features nearby vernal pools that support the spadefoot, among other sensitive species. (*Id*. at p. 5.) The Western Spadefoot Toad is a California Species of Special Concern ("SSC") and is up for listing on the U.S. Endangered Species Act ("ESA"). (Exhibit A, pp. 4-5.) Failure to analyze this impact is a major omission, as detailed in Mr. Hamilton's comments.

The DEIR also fails to consider impacts on the Crotch's Bumblebee (California S1S2 rank species and being considered for listing in California); Grasshopper Sparrow

(California SSC and S3 rank species); Ferruginous Hawk (California Watch List species, California S3S4 rank species, and federal Bird of Conservation Concern); Northern Harrier (California SSC and S3 rank species); White-tailed Kite (California Fully Protected and S3S4 rank species); and the Oregon Vesper Sparrow (California SSC, S3 rank species, and being considered for listing on the ESA). These species will be most impacted by the loss of native grassland on the Project site.

The DEIR also downplays impacts to on-site Engelmann Oak. Extensive declines in Engelmann Oak have occurred over the last 50 years—main threats to the species include grazing, development, poor regeneration of the species, and climate change.[13] While the Project re-designed the equestrian center around the oak trees, the DEIR does not demonstrate the oaks will survive. The proposed mitigation is insufficient given the increased traffic to the area, surrounding development, harsh environment, and time for trees to reach full maturity. The value of oak communities are not met by simply leaving the individual trees standing, without ensuring their survival and the function of the vegetation community around them.[14]

Mr. Hamilton's report raises separate specific concerns with the project's Engelmann Oak mitigation measure as proposed. (Exhibit A, p. 13.) In particular, the oak plantings must be certified pathogen free. (*Ibid*.)

The DEIR also fails to fully mitigate impacts to *permanent* habitat loss for raptors, as the sole mitigation measure (MM-BIO-4) only addresses temporary disturbance during construction. Moreover, the DEIR addresses foraging habitat of Cooper's and Red-shouldered Hawks yet fails to address the grassland obligate raptors mentioned above: Ferruginous Hawk, Northern Harrier, and White-tailed Kite.

iv. Wildlife Corridor Impacts

The DEIR fails to analyze, disclose, and mitigate the Project's impacts to nearby wildlife corridors, instead choosing to simply label the onsite Biological Sensitive Area ("BSA) and adjacent Wright's Field as an "island" of habitat with limited connectivity. (DEIR, p. 4.4-30). The entire impact discussion consists of two sentences. (*Ibid*.)

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[13] https://biodiversityla.org/species/iconic/engelmann-oak/.

[14] Further, oak woodlands in the MSP Roadmap Area (MSPA) support 16 MSP plant and animal species. https://sdmmp.com/veg_community_profile.php?taxaid=SDMMP_vegcom_10.

Mr. Hamilton's report details the impropriety of this conclusion. (Exhibit A, pp. 13-15.)

This greatly contrasts with the County's previous descriptions of Wright's Field and the Project's open space in previous applications for funding. A 2003 application, prepared by BCLT and DPR, describing Wright's Field and the surrounding areas as "wildlife corridors."[15] (**Exhibit H,** pp. 7, 11, 18, 29, 31, 32.) Destruction of wildlife corridors results in biological impacts and conflicts with Alpine's Community Plan. (*Id*. at p. 32.)

Further, the DEIR admits that Alternative 3, the reconfigured project, would potentially obstruct a wildlife corridor that extends south of the project site and connects with open space land south of South Grade Road. (DEIR, 6-16.) The Project will similarly affect the open space land and Wright's Field, bringing a sizeable increase in vehicular, pedestrian, and bicycle traffic along the surrounding roads and the Project site itself that can similarly impact the wildlife corridor noted in Alternative 3.

The DEIR needs to address this discrepancy and adequately analyze, disclose, and mitigate impacts to onsite and surrounding wildlife corridors.

v. Additional Concerns

Preserve Alpine's Heritage requests that the DEIR analyze impacts to the biological resources (on the site and nearby Wright's Field) from conversion of land to an impervious surface and the increased runoff (DEIR, p. 4.7-13), especially given the use of turf fields and hazardous materials such as pesticides (DEIR, p. 4.9-12) and the site's low permeability. (DEIR, p. 4.7-19.) The DEIR only notes that a stormwater retention basin is "proposed" as part of Project design to manage and treat runoff, yet does not provide information on the location or design of the retention basin. (DEIR, p. 4.7-13.)

[15] The County's 2009 Letter similarly commented: "The County has made a significant investment in preserving the biology in the area and the development of a high school on the site would impede the connectivity of the **wildlife corridors in the area** and significantly reduce the sensitive habitats found on-site." (Exhibit G, p. 8.)

2. Transportation & Safety Impacts

The Project will be located along South Grade Road, creating dangers to passersby, nearby residents and Project visitors. Preserve Alpine's Heritage is concerned about the increased risk to pedestrians, drivers, bicyclists, skateboarders, and all others who use the road. Despite the fact that Preserve Alpine's Heritage raised these safety concerns in their scoping letters (DEIR Vol. II, p. 158), the DEIR utterly fails to disclose, analyze, or even mention this risk and concludes no hazards will be created by the Project design. There is no mention of previous collision-related fatalities along South Grade Road.

Traffic expert Tom Brohard reviewed the Project design, DEIR, and supporting appendices. His findings and qualifications are detailed in Exhibit C. Mr. Brohard found the DEIR traffic safety analysis wholly inadequate, commenting, "in my over 50-years of traffic engineering and transportation planning experience, I believe that this is one of the worst [TIS] whose unsupported conclusions and recommendations were then carried forward into the [DEIR]."

As concluded and described by Mr. Brohard, the Project will create risks of increased collisions—a significant impact that requires disclosure and mitigation under CEQA—through its location and design. (Exhibit C.) The DEIR even ignores its own Transportation Impact Study ("TIS"), which recommends the all-way stop design at the primary entrance *because* of the high pedestrian volumes the Project is anticipate to generate, and the history of collisions. The TIS further warns that the stopping sight distance is not met for the location of the all-way stop. (DEIR Vol. II, pp. 900, 940.) As detailed in Mr. Brohard's comments, the addition of the all-stop intersection actually increases the risk of collision. (Exhibit C, p. 4.)

Mr. Brohard notes the extreme risks to bicyclists along South Grade Road, which will be increased by the Project. (*Id.*, p. 3.). Yet, the Project's attractions will bring more bicyclists—and the DEIR notes the inclusion of bike parking—potentially from the nearby schools (DEIR, p. 4.8-19.) The DEIR claims that the Project's operation would not include incompatible uses, such as farm equipment, that could create safety hazards due to increased congestion and faster moving vehicles encountering slower moving vehicles along South Grade Road. (DEIR, p. 4.17-12.) Yet as Mr. Brohard's comments emphasize, the Project will do just that, due to the existing road conditions, Project design, and expected horse trailers that will utilize the primary entrance. (Exhibit C, p. 4.)

These real concerns were not taken seriously in the DEIR. Further, the Project's potential to create overflow parking on the shoulder and neighboring streets only increases these risks. The TIS states parking is prohibited along both sides of the roadway (DEIR Vol. II, p. 918), yet the DEIR notes signs can be used as needed to prevent potential overflow parking that may occur on South Grade Road. (DEIR, p. ES-2.) If the Project charges for parking, this risk is only increased, as more cars will park on the shoulder and on the neighboring streets. Potentially aware of these safety concerns, the TIS lists "Appendix I FHWA Uncontrolled Crosswalk Excerpt" in its Table of Contents, yet this information is missing from the Report. (DEIR Vol. II, p. 903.)

Instead of addressing these legitimate risks during the public review process, the DEIR impermissibly defers analysis and mitigation to a later date, stating that the Department of Public Works (DPW) will review the Project for safety and sight distance. (DEIR, p. 4.17-12.) This would occur outside of the CEQA process and prevent the public and decisionmakers from understanding the true safety impacts of the Project (especially in deciding between alternatives.) This fails to mitigate the safety concerns raised by Mr. Brohard. (Exhibit C, p 3.) It is essential to understand the Project's safety impacts, and the feasibility of whether they can be mitigated, now. There also may be costs and further environmental impacts associated with future mitigation (for example, widening of the road, adding turn lanes), which must be addressed concurrently with the Project.

3. Greenhouse Gas, Energy, and Air Quality Impacts

The DEIR presents a theme of shortcuts in analyzing the Project's impacts, especially from its operational Greenhouse Gas (GHG) and emissions. The Project alleges it will not create impacts because it will be community-serving and does not induce further growth, yet avoids any discussion of its recent application for Proposition 68 Regional Park Program grant funding, approved by the Board of Supervisors on October 20, 2021. Contrary to the DEIR's assertions, DPR stated that the Project will "attract visitors county-wide." (Exhibit D, p. 4.)[16]

[16] The DPR's September 23, 2020, bike course survey indicated that 49.2 percent of participants lived outside of the Alpine Community. (https://www.sdparks.org/content/dam/sdparks/en/pdf/Development/ATTACHMENT%20C%20September%2023,%202020%20Third%20Outreach%20Meeting%20Results.pdf.)

i. Greenhouse Gases & Vehicle Miles Traveled (VMT)

The County recently affirmed its commitment to reduce its GHG emissions to address climate change, including through a Board of Supervisors directive to meet and exceed state GHG reduction mandates to guide the region to Zero Carbon, and to develop a legally-compliant Climate Action Plan. (**Exhibit I**.) The DEIR admits that the 2017 Scoping Plan relies on VMT reductions to achieve its goals, and the California Air Resources Board needs to lower VMT per capita by 14.3% from existing conditions to meet transportation assumptions and 2050 state climate goals. (DEIR, p. 4.6-5.)

Despite the state and County's focus on VMT reductions, the DEIR avoids a meaningful discussion or analysis of the Project's potential GHG impacts, allowing itself to avoid incorporation of feasible mitigation measures. The DEIR claims that in the absence of a numerical threshold for the project's region, the significance threshold can be determined by evaluating compliance with state, regional, or local GHG emission reduction plans. (DEIR, p. 4.8-15.)[17] The DEIR thus analyzes whether the Project would align with the SB 32 target, "such as CARB's 2017 Scoping Plan." (*Ibid.*)

The DEIR admits potentially significant impacts due to construction-related emissions that would not comply with the 2017 Scoping Plan, and claims mitigation through M-GHG-1. (DEIR, p. 4.8-17.) Yet, M-GHG-1 fails to adequately mitigate construction emissions and does not ensure the few practices that it purports to achieve. M-GHG-1 does not quantify the reductions it aims to achieve, and the three referenced construction BMPs are vague, unenforceable, and insufficient. (DEIR, p. 4.8-19.)[18]

Further, the DEIR's finding of no significant GHG impacts, despite its failure to include any operational mitigation measures, lacks sufficient evidence and fails to disclose actual Project GHG impacts. In analyzing potential GHG impacts from operational emissions (502 MTCO2e annual emissions from area, electricity, mobile, waste, and water), the DEIR first describes several statewide programs in the 2017 Scoping Plan "that require no action at the project level and would benefit project-related

[17] In its transportation VMT impact analysis, Guidelines 15064.3 allows VMT to be analyzed qualitatively where existing models or methods "**are not available**". (DEIR, p. 4.17-6.) Existing models are available, evidenced by the DEIR's own VMT calculations. (DEIR Vol. II, p. 323.)
[18] For example, one BMP states: "[u]tilize alternative fueled equipment and vehicles, **such as** renewable diesel, renewable natural gas, compressed natural gas, or electric." (DEIR, p. 4.8-20.)

emission sources." (DEIR, p. 4.8-18.) It appears that the Project first relies on outside GHG reduction efforts to find no GHG impacts, despite the fact that its avoidance of an actual GHG analysis hinders state reduction goals.

The DEIR points to the County's decision to rescind its Transportation Study Guidelines ("TSG") on September 15, 2021, (DEIR, p. 4.17-8.) and relies on the lack of a County TSG numerical threshold as reasoning to avoid a quantitative GHG analysis and improperly claim less than significant impacts via a "VMT screening analysis." (DEIR, pp. 4.8-15, 19.)

The DEIR states the Project will create 480 daily trips (383 MTCO2e per year), resulting in an annual VMT of 1,024,920.[19] (DEIR Vol. II, p. 323.) As a preliminary matter, these calculations appear to be erroneous. The GHG calculations use an "urban" classification despite the Projects admitted rural setting. (DEIR Vol. II, pp. 256, 320.) Further, it appears that the annual VMT projections would yield an assumed 5.85-mile distance per trip.[20] This contradicts the Project's distance from the town center and plans for a Regional Park to serve county-wide visitors. (Exhibit D, p. 4.) The Project ignores any analysis or mitigation through its improper screening criteria.

The VMT Analysis (DEIR Vol. II, p. 869) conducted by Chen Ryan is based on an inapplicable category from the since-rescinded County Transportation and Study Guidelines (TSG.) (*Ibid.*) Chen Ryan concluded that the project falls under a "local serving public facilities and other uses [local parks and trailheads]" category. (*Ibid*.) Yet, the Appendix Study admits "this category is not in the OPR technical advisory screening criteria." OPR allows for a local serving *retail* land screening exemption on the premise it redistributes trips into the "**urban fabric.**" (DEIR Vol. II, p. 893; DEIR, p. 4.7-11.) This is inapplicable to a regional sports park. Further, the VMT study admits a "small project" exemption, projects creating less than 110 trips, would not apply to the Project. (DEIR Vol. II, pp. 889, 893.) The DEIR even claims that the Sportsplex Alternative, doubled in size and capable of hosting tournaments, would be presumed to have less than significant VMT impacts under this theory. (DEIR, p. 6-14.)

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[19] The DEIR's "[e]stimation of emissions is for information purposes only." (DEIR, p. 4.8-16) The DEIR also improperly assumes a 30-year Project life. (DEIR, p. 4.8-19-20.)

[20] This number was calculated by dividing the reported VMT (1, 024, 920) by the ADT (480 trips) multiplied by 365 days a year.

Ultimately, the DEIR provides a roundabout, self-serving "analysis" and conclusion of no GHG impacts. (DEIR, p. 4.8-19 [claiming that because the Project is assumed to have less than significant impacts, "mobile-source GHG emissions would not conflict with SB 743," therefore because reducing GHGs from passenger vehicles is a SB 743 objective, operation would not conflict with a 2030 target].)

The DEIR also fails to quantify the release of GHG emissions from the loss of open space land that provides carbon capture.[21] The DEIR notes CARB's 2017 goal that "natural lands become carbon sinks to provide additional emissions reductions and flexibility in meeting the target," yet the DEIR fails to disclose or mitigate GHG emissions from loss of 25 acres of grasslands. (DEIR, p 4.8-17.) The DEIR also discloses the creation of area source emissions from 180 days of landscaping each year yet does nothing to mitigate these impacts. (DEIR, p. 4.8-13.)[22]

The DEIR's failure to adequately analyze and disclose the Project's GHG impacts misses the opportunity to adopt on-site and in-County GHG mitigation measures, interfering with the County's recently-adopted climate goals, as well as state and regional climate goals.

ii. Energy Impacts

Because energy, GHG impacts, and VMT are interrelated, the DEIR Energy Impacts discussion also improperly avoids any numerical analysis, also pointing to the County's decision to rescind its SB 743 threshold. (DEIR, p. 4.6-11.) Yet "Appendix F of the CEQA Guidelines requires that projects assess the energy impacts of a project when a fair argument can be made that the project will have significant environmental impact." *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 206.

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[21] See https://www.kqed.org/science/1927097/to-fight-climate-change-grasslands-may-be-a-safer-bet-than-forests [describing the value of grasslands for carbon capture]; https://iopscience.iop.org/article/10.1088/1748-9326/aacb39.

[22] The California Air Resources Board provides recommendations on how to mitigate landscaping emissions. (https://ww2.arb.ca.gov/our-work/programs/zero-emission-landscaping-equipment.)

The DEIR fails to demonstrate avoidance of wasteful or inefficient energy use. (DEIR, p. 4.6-12.) First, it is unclear, and unlikely, that these are accurate representations of mobile source consumption if the DEIR continues to characterize the Project as a local-serving park, despite DPR's designation of the park as a "County-wide regional park." (Exhibit D.) The DEIR fails to provide the underlying assumptions for these figures. Further, the DEIR fails to disclose the energy impacts associated with the increased VMT to visit the park, as well as the energy required to ensure adequate water supply and wastewater treatment.

The Project avoids a full analysis of the Project's energy impacts by delaying analysis of the water supply (which may require further infrastructure) and wastewater treatment—resulting in the improper piecemealing of the Project's impacts. Relatedly, were the energy impacts associated with the potential sewer extensions (construction and operations) included in this analysis?

The DEIR also fails to meaningfully analyze the project's consistency with energy plans. The Project claims consistency with CARB's 2017 Scoping Plan, merely because CARB's programs would reduce project-related energy use with no action required at the project level. (DEIR, p. 4.6-15.) The DEIR notes the use of gasoline from visitors, but finds "[e]nergy requirements for fuel use associated with vehicles used for maintenance would go down over time due to improved motor vehicle fuel economy standards. The project does not include any features that would result in excessive long-term operational fuel consumption []. Therefore, fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary."[23] (DEIR, p. 4.6-14.)

Preserve Alpine's Heritage would like to commend the DPR on the inclusion of photovoltaic (PVs) and the abstention from use of natural gas. However, the DEIR's deficient analysis results in an inaccurate finding of insignificant impacts and prevents the incorporation of feasible mitigation. The DEIR again cuts corners and avoids

[23] The DEIR also claims consistency with the SANDAG Regional Plan because the Project would not result in any population growth. (DEIR, pp. 4.6-11 to 12.) Yet, the SANDAG 2021 Regional Plan references the importance of preservation through MSCP lands. (https://sdforward.com/docs/default-source/2021-regional-plan/appendix-aa---regional-habitat-conservation-vision.pdf?sfvrsn=bb44fd65_2.) Approval of a Project that threatens MSCP Preserve land and impacts PAMA land is contrary to SANDAG's plans.

meaningful analysis of the Project's impacts from its energy-intensive amenities and creation of mobile source energy consumption as a regional park.

iii. Air Quality Impacts

In finding insignificant air quality impacts, the DEIR similarly ignores the Project's plans to draw regional visitors. The Project DEIR admits it would generate criteria pollutants (via construction & operational emissions) of which the County is in nonattainment (DEIR, pp. 4.3-12, 15). Much of these emissions will come from mobile sources and fuel from landscaping.

As part of determining potentially significant impacts, the DEIR asked whether the Project will conflict with an applicable air quality plan, and found consistency on the grounds that the development is consistent with anticipated growth in the applicable land use plans, because the applicable zoning allows "Community Recreation" uses subject to a Major Use Permit.[24] (DEIR, p. 4.3-20) This does not allow the DEIR to simply assume no conflict and avoid incorporating mitigation measures to reduce emissions from mobile sources and landscaping fuel.[25] (DEIR, p. 4.3-21.) Further, this finding obscures the fact the Park will "attract visitors county-wide." (Exhibit D, p. 4.) The recent Alpine Community Plan Update notes the potential addition of the Project to increase acreage for *local parks*, but explicitly indicates there are no planned Regional Parks in Alpine. (Draft Alpine Community Plan Update, pp. 71-72.)[26] Therefore, the addition of a Regional Park to Alpine was not considered in the General Plan.

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[24] The County states that a Major Use Permit is intended to provide for accommodation of land uses that include potential adverse effects on surroundings, requiring an environmental initial study and further potential environmental requirements. (https://www.sandiegocounty.gov/pds/zoning/formfields/PDS-313.pdf.) Before granting a use permit, the granting authority must make favorable findings about the Project's harmony with adjacent property, availability of public facilities and utilities, the capacity of surrounding streets, suitability of the site for the type and intensity of use, and that requirements with CEQA have been met. (*Ibid*.) The Permit requires letters to be submitted by the districts that will provide sewer service (p. 3), and water service (p. 4), which are lacking here. Therefore, the DEIR improperly used the fact that a community park *could* be allowed via such a permit as its threshold in finding no impacts. (DEIR, p. 4.3-20.)

[25] See https://ww2.arb.ca.gov/our-work/programs/zero-emission-landscaping-equipment.

[26] https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf.

Finally, Preserve Alpine's Heritage requests further clarification on two items. The DEIR lists a Potentially Significant impact from objectionable odors due to the equestrian manure, which it plans to mitigate through a Manure Management Plan that will cover the manure only by a lid or tarp. (MM-AQ-1; DEIR, p. 4.3-25.) Preserve Alpine's Heritage requests analysis and proper mitigation of the potential environmental impacts of stored manure during rain events via overflow and runoff onto surrounding landscape, especially considering the location and sloping of the equestrian staging area. Additionally, the DEIR admits that during operations, the onsite sewer treatment system may "have the potential to generate objectional odors." (DEIR, p. 4.3-25) but does not provide any mitigation. The DEIR must fully disclose and mitigate potential odor impacts from the on-site septic.

4. Wildfire

The Project is located in a Very High Fire Hazard Severity Zone (VHFHSZ), was directly affected by wildfire in 2018, and is situated in historical major wildlife corridors. (DEIR, pp. 4.9-2 to 3.) Nonetheless, the DEIR claims no increased wildfire risks. (DEIR, p. 4.9-20.) The DEIR improperly bases this conclusion on the existence of outside ordinances and regulations, a Fire and Emergency Operation Assessment (FEOA) prepared by Rohde and Associates that was not included in the DEIR, and incorporation of voluntary measures to avoid declaration of a significant impact. Instead of independently acknowledging the Project's significant impacts to wildfire risks and subsequently discussing mitigating measures to address such impacts, the mitigation measures are characterized in the DEIR as being part of the project. (*Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 656.)

The DEIR states it incorporates information from the FEOA, but does not include the FEOA in the DEIR body, or even attach it as an appendix. (DEIR, pp. 4.9-2; viii [listing the included appendices].) This prevents the public from fully understanding the magnitude of the Project's impacts on wildfire risks. While the DEIR cites the November 2020 FEOA in its references, it does not even provide an URL to access. (DEIR, p. 9-15.) The public is also precluded from analyzing whether the Project is in fact adequately incorporating the FEOA's recommendations.

Exclusion of the FEOA report also prevents analysis of whether certain recommendations would have environmental impacts on their own—especially given the

sensitive and important biological resources on-site (for example, mechanical treatment, treatment by goat grazing, modification zones, etc.)

In finding there are no significant wildfire impacts, the DEIR claims, "County DPR will also implement the recommendations provided in the FEOA prepared by Rohde and Associates," and proceeds to list vague, general recommendations. (DEIR, p. 4.9-22.) No information is provided on the validity of the Project's claims that it will serve as a "Temporary Safe Refuge Area," or ensure safe ingress and egress. (*Ibid*.) Most importantly, **nothing in the DEIR mandates these recommendations.** The FEOA must be incorporated into the DEIR and re-circulated for public review.

The DEIR also implies that its designation as VHFHSZ actually improves fire safety, as "in response to this designation" the surrounding fire districts maintain fire prevention regulations. Yet, compliance with applicable fire codes does not obviate the need to analyze existing significant impacts prior to mitigation measures. The Project's location in a VHFHSZ necessitates a full discussion and disclosure of the Project's wildfire risks, as well as inclusion of the FEOA in the DEIR for accurate analysis and adequate mitigation.

A "sufficient discussion of significant impacts requires not merely a determination of whether an impact is significant, but some effort to explain the nature and magnitude of the impact." (*Sierra Club v. Cty. of Fresno* (2018) 6 Cal. 5th 502, 519.) The DEIR only briefly lists the site-specific risks and admits that adding people will increase ignition risk (DEIR, 4.9-3), yet does not adequately disclose or analyze the *magnitude* of the Project's risks given its location and presence of grasslands onsite and on Wright's Fields. Nor does the DEIR disclose how the Project's amenities—especially BBQs—add to this risk. Preserve Alpine's Heritage requests the removal of BBQ pits from the Project design. Simply "banning/taping" them off during Red Flag days (which is also not included as an enforceable mitigation measure) is insufficient. (DEIR, p. 4.9-21.) Further, onsite fire hydrants and water storage tanks should be included in Project design.

The DEIR relies on assurances that an FEOA's recommendations will be implemented—without even including the FEOA in the DEIR, to claim no significant impacts. The DEIR admits construction can cause fires, yet concludes no wildfire impacts due to implementation of BMPs to mitigate, without even including the BMPs as enforceable mitigation measures. (*Ibid*.)

The DEIR also finds no evacuation impacts, despite the addition of 500 daily visitors on a two-lane, winding road. This conclusion is premised on the TIS finding that the Project would not affect roadway circulation. Yet, the TIS did not appear to analyze freeway mainline segments—major evacuation routes for regional access. (DEIR Vol. II, p. 898; DEIR, p. 4.17-1.) Further, DPR has designated this to be a Regional Park—did the evacuation analysis consider the effect of regional visitors on evacuation times?

The DEIR does not provide adequate analysis of evacuation impacts, only pointing to existing regional plans and its own future plans to prepare a Site Evacuation Plan. This defers analysis and mitigation of evacuation impacts to a later date. Further, the plan will only address evacuation within the boundaries of the Project site. (DEIR, pp. 4.17-14, 4.20-10.) The Project must consider the evacuation impacts on surrounding residents, and not simply rely on a to-be determined evacuation plan that does not extend beyond the boundaries of the Project.

Finally, the Project claims there will be adequate response times based on the FEOA and Operational Area Emergency Operations Plan. (DEIR, p. 4.20-10.) The DEIR defers analysis of the impacts (via approval by the County Fire Marshall) to after the public review. (DEIR, pp. 4.20-11, 5-31.) Because the FEOA study is not included in the DEIR, the claim of adequate response times cannot be fully analyzed. The public needs to review the underlying assumptions for the FEOA's conclusions (for example, did the FEOS assume all emergency responders are available immediately and not delayed in route to the park?)

Now is the time to review and mitigate potential impacts to response times, evacuation, and ignition risks. The DEIR demonstrates a theme of obscuring full analysis and disclosure of the Project's impacts, relying on outside plans and regulations in finding no impacts, improperly subsuming mitigation measures in the Project (as non-binding "recommendations"), and deferring analysis until after Project approval.

5. Utilities Impacts: Water Supply & Waste Water

While the DEIR admits significant utilities impacts, it avoids full disclosure and mitigation, and relies on improperly deferred mitigation. (DEIR, p. 4.19-14.) The DEIR also improperly piecemeals the Project's water supply and wastewater treatment. An agency improperly "piecemeals" a project when they break it into segments and fail to analyze the whole project in one environmental document, violating CEQA's

requirement that a "project" include the "whole of an action." (CEQA Guidelines Section 15378, subd. (a).) When a project contemplates future expansion—such as further water infrastructure—the lead agency is required to review all phases of the project before it is undertaken. (*Nat. Res. Def. Council, Inc. v. City of Los Angeles* (2002) 103 Cal. App. 4th 268, 284, *citing Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 396.)

i. Water Supply

An adequate and reliable water supply is crucial to the Project's longevity and operation of the Project, especially as California recently declared a drought in several counties—including San Diego.[27] The DEIR reports anticipated demand of 16.4 million gallons/year. (DEIR, p. 4.1912.) The service boundary of the district water supplier, Padre Dam Municipal Water District (PDMWD), imports its entire potable water supply through San Diego County Water Authority and does not expect to meet demand through 2040 under dry year conditions. (DEIR, p. 4.19-2.) The DEIR shows that during normal conditions, supply will exactly equal demand in coming years. (*Ibid*., Table 4.19-1)

The DEIR acknowledges a potentially significant impact to require new or expanded water facilities, "potentially requiring the relocation or construction of new or expanded water facilities" that could result in physical impacts. (DEIR, p. 4.19-14.) The DEIR claims mitigation under MM-UTIL-1, which simply requires it to complete a Water Study: "[P]rior to issuance of building permit," DPR "shall coordinate" with PDMWD to assess capacity of existing infrastructure that would serve the site, and if insufficient capacity exists, "shall implement the necessary improvements prior to the operation of the project, as determined by PDMWD." If the Project would result in need for new or expanded facilities, DPR shall analyze potential environmental effects of improvements in accordance with CEQA. (DEIR, p. 4.9-16.) This is classic piecemealing: segmenting the Project to avoid review in its entirety. Related water

[27] https://timesofsandiego.com/politics/2021/10/19/newsom-extends-drought-emergency-across-state-to-include-southern-california/. Increasing droughts from climate change absolutely should not preclude the provision of parks and recreational opportunities, including to Alpine residents. However, the realities we face from climate change require careful consideration and assurances of adequate water supply, as well as the need and viability for certain amenities and scale given a specific location and/or existing facilities. A park that fails due to insufficient resources does little for a community.

infrastructure requirements must be reviewed in conjunction with the Project—otherwise the Project's impacts are obscured and minimized.

The DEIR also acknowledges a potentially significant impact, insufficient long-term water supplies, to serve project during operation. The Project purportedly "mitigates" this by requiring confirmation of water supply prior to the issuance of building permits. (DEIR, p. 4.19-18.)

The California Supreme Court found a similar approach of delaying discussion of locating a water source (and associated impacts) to violate CEQA in *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 430–431. CEQA's "informational purposes are not satisfied by an EIR that simply ignores or assumes a solution to the problem of supplying water to a proposed land use project. Decisionmakers must, under the law, be presented with sufficient facts to 'evaluate the pros and cons of supplying the amount of water that the [project] will need.' Nor can the DEIR mitigate by withholding issuance of building permits absent location of adequate water supply: the DEIR must address the project and assume it will be built." (*Id*. at p. 429.) The Project's water supply (and potential associated impacts) must be disclosed now, so that decisionmakers may make an informed decision on whether to approve the Project.

ii. Wastewater

For utilities, the Project proposes to either connect to the existing sewer system or include a septic system to serve the restroom facilities, administration facility/ranger station, and volunteer pad. The DEIR delays analysis of wastewater treatment, another example of improper piecemealing. The DEIR expects the Project to create 3.1 million wastewater gallons per year, nearly all from landscape. (DEIR, p. 4.9-11.) The DEIR should fully analyze and disclose the impacts of the proposed wastewater treatment, especially given the history of site-specific challenges associated with each option.

To make matters worse, the DEIR admits concerns with the soils supporting the use of septic tanks. The Project is underlain by Bosanko stony clay, rated as "severe" for septic tank effluent disposal due to its low permeability (DEIR, p. 4.7-19.) The Project might include an Onsite Wastewater Treatment System (OSWS) that must conform to Regional Water Quality Control Board standards. Yet, the DEIR improperly defers this analysis as well, simply noting that the County Department of Environmental Health will

review the design layout. The site would be evaluated "for a determination of the suitability of onsite soils for the proposed septic system." This is improper deferral of disclosure, analysis, and mitigation of the Project's impacts, especially given the soil's known poor rating for on-site septic, and should be analyzed in the DEIR. The DEIR should be re-circulated to disclose the above concerns.

6. Visual Resources & Noise Impacts

The Project will markedly change the character and atmosphere of the site and Wright's Field. The rural site displays natural grasslands amidst a backdrop of mountains. Much of the project site is in a Resource Conservation Area (DEIR, p. 4.1-2) and Alpine is a designated Dark Sky Town. The DEIR admits the Project will substantially degrade rural views, and would transform rural, undeveloped land to a complex Regional Park. (DEIR, p. 4.1-14.)

The DEIR claims to mitigate this impact by inclusion of "native vegetation" along project boundaries. (*Ibid*.) Yet, the Project plans for building heights of 15-19 feet. (DEIR, pp. 3-2 to 3-3.) The mitigation measure does little to mitigate the immense change to the site's aesthetic views and rural character. Visual simulations display tall trees (Figure 4.1-3), yet the mitigation measure only vaguely requires "native vegetation." (DEIR, p. 4.1-14.) Further, the DEIR admits the Alternative 2 would result in significant and unavoidable impacts on the visual quality and character of the site due to conversion of the site from undeveloped rural character to a developed site. It is unclear what distinguishes Alternative 2 from the Project besides an increase in size, as Alternative 2 plans to utilize much of the same features. (DEIR, p. 6-2.) Realistically, the mere requirement of native vegetation around the Project site, without any details or design, fails to mitigate substantial impacts to the rural views. Further, the DEIR claims mitigation of impacted nighttime views by turning lights off an hour after closing, and the DEIR reports the Park will close at dusk (p. 1-1), yet the noise mitigation requires quiet hours after 10 pm. (p. ES-21.)

The DEIR also claims to mitigate noise by enforcement of regulations, yet carves out a large exception for use of the PA speaker. (DEIR, p. ES-21) It also contradicts earlier assertions that the park will close by sunset (p. 1-1) in starting quiet hours by 10 pm. (ES-21.)

7. Cumulative Impacts

The Project's cumulative impacts should be considered in conjunction with the ongoing Alpine Community Plan Update ("CPU"). The DEIR Cumulative Impacts section notes the Alpine CPU, but lacks any description of the Alpine CPU or meaningful analysis. (DEIR, p. 5-2.) The cumulative impacts analysis is further deficient for the reasons detailed above in this letter.

C. DPR Improperly Pre-Committed to a Large, Regional, Active Sports Complex at this Location in Violation of CEQA

Under *Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, an agency may not commit to a project before environmental review. Yet, there have been statements and reports made indicating that DPR has already decided to construct a large, regional, active sports park at this location.[28] The inadequate environmental review and omission of alternatives indicate this as well.

III. Approval of the Project Would Violate State Planning and Zoning Law

Development decisions must be consistent with applicable General and Community Plans. (Government Code Section 65000 et seq.) Further, CEQA considers land use plan inconsistencies an impact that requires disclosure and analysis. For the reasons detailed above, the Project conflicts with conservation, sustainability, and development policies in the County Plan, the Alpine Community Plan, the Trail Network Plan, and the MSCP Subarea Plan.[29] Mr. Hamilton's letter further details how the Project undermines the MSCP Sub Area Plan. (Exhibit A, p. 15.)

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[28] See Alpine Steering Committee minutes received through a Public Records Act request, **Exhibit J**; https://thealpinesun.com/you-are-getting-this-park-whether-you-like-it-or-not/; https://www.sdparks.org/content/dam/sdparks/en/pdf/Development/2019%2002%2027%20(01)%20Alpine%20Park%20Acquisition%20-%2098%20Acres.pdf ["The County intends to build an active park on this site"]; Exhibit D [application for Regional Park Program].

[29] Including, but not limited to: General Plan policies LU 2, LU-2.4, LU-5.3, LU-6, LU-6.10, COS-1, COS-2, COS-4.

IV. Conclusion

In sum, the EIR is legally inadequate and cannot provide a basis for Project approval. Further, the Project is inconsistent with applicable regional policies. For these reasons, Preserve Alpine's Heritage requests denial of the Project as proposed. Thank you for your consideration of these comments.

Sincerely,



Katie Pettit
Josh Chatten-Brown

Exhibit A

HAMILTON BIOLOGICAL

November 15, 2021

Kathryn Pettit
Chatten-Brown, Carstens & Minteer
2200 Pacific Coast Highway, Suite 318
Hermosa Beach, CA 90254

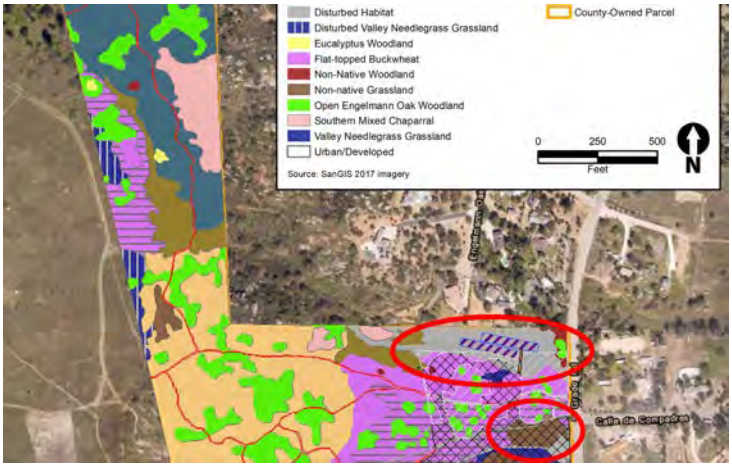
SUBJECT: REVIEW OF BIOLOGICAL RESOURCE ISSUES
ALPINE COUNTY PARK PROJECT DRAFT EIR
COUNTY OF SAN DIEGO

Dear Ms. Pettit,

At your request, Hamilton Biological, Inc., has reviewed a DEIR prepared by the County of San Diego Department of Parks and Recreation (the "County") for the Alpine County Park project (the "proposed project" or "project"). As part of my review, I visited the project site and the adjacent Wright's Field Preserve on November 8, 2021.

MIS-MAPPED VEGETATION POLYGONS

My visit to the project site took place on November 8, at a time of year when the species composition of grasslands is difficult to accurately evaluate. Although the fall timing of the visit precluded a complete review of the DEIR's vegetation mapping, I did identify two areas of MSCP Tier I and Tier II communities that were erroneously mapped as Tier III and IV communities. Please refer to the marked-up excerpt from Figure 3 (Vegetation Communities) provided below, followed by Photos 1 and 2 that show the two areas in question.



Excerpt from Figure 3 in the DEIR's Biological Resources Technical Report (Vegetation Communities). The red ellipses show areas mis-mapped as "Disturbed Habitat" (gray polygon in upper ellipse) and as "Non-native Grassland" (brown polygon in lower ellipse).

Page 1-14 of the DEIR's Biological Technical Report describes "Disturbed Habitat" as follows:

> Disturbed habitat supports either no vegetation or a cover of nonnative weedy species that are adapted to a regime of frequent human disturbance. Many of the characteristic species of this habitat are also indicator species of annual grasslands, although disturbed areas tend to be dominated more by forbs than grasses. Characteristic species may include tumblewood [*stet*] (*Salsola tragus*), tocalote (*Centaurea melitensis*), Italian thistle (*Carduus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), and African crown daisy (*Glebionis coronaria*).
>
> Disturbed habitat within the BSA consists of dirt roads and multi-use trails. A large stand of disturbed habitat was mapped in the northern portion of the BSA where vegetation has been cleared for safety reasons to minimize wildfire risk, as part of the County's fuel modification efforts.
>
> Disturbed areas consist of mostly bare ground or disturbance-adapted species and occur throughout the BSA. Disturbed habitat is not considered a sensitive vegetation community.

Photo 1, below, shows the "large stand of disturbed habitat" that the County has cleared for residential fire protection, where leach fields could be installed as part of the proposed project.



Photo 1. Facing east toward South Grade Road, showing the 0.4-acre area of "Disturbed Habitat" that lies within a residential brush-clearance zone that the DEIR proposes for potential leach fields. Since the vegetation in this areas is predominantly native, and includes only scattered "nonnative weedy species," it should be mapped as disturbed coastal sage scrub. *Photo: Robert A. Hamilton, 11-8-21.*

Contrary to the DEIR's definition of "Disturbed Habitat," the area shown in Photo 1 supports mainly native shrub species, especially Deerweed (*Acmispon glaber*), Broom Baccharis (*Baccharis sarothroides*), California Sagebrush (*Artemisia californica*), California Buckwheat (*Eriogonum fasciculatum*), Saw-toothed Goldenbush (*Hazardia squarrosa* var. *grindelioides*), and California Matchweed (*Gutierrezia californica*). The spaces between these shrubs consists mainly of bare ground and not "a cover of nonnative weedy species that are adapted to a regime of frequent human disturbance." Therefore, the area does not fit the DEIR's description of "Disturbed Habitat;" instead, it fits the definition of disturbed coastal sage scrub.

Page 1-15 of the DEIR's Biological Technical Report describes Valley Needlegrass Grassland as follows:

> Valley needlegrass grassland is a mid-height (to 2 feet) grassland dominated by perennial, tussock-forming purple needle grass (*Stipa pulchra*). Native and introduced annuals occur between the perennials. A 5- to 10-percent cover threshold of native species indicates it is native grassland.

Photo 2, below, shows an area of native Valley Needlegrass Grassland, approximately 0.15 acre in size, mis-mapped as Non-native Grassland in the DEIR.



Photo 2. Facing southeast toward South Grade Road, showing approximately 0.15 acre of native Valley Needlegrass Grassland that the project biologists mis-mapped as Non-native Grassland. Each of the tufts of grass is native needlegrass (*Stipa* sp.), providing substantially more than the 5- to 10-percent cover that defines this native grassland community. The polygon's location could be readily ascertained in the field, and in this photo, by its relation to the expansive disturbed area in the background. *Photo: Robert A. Hamilton, 11-8-21.*

I request that the project biologists field check all of the vegetation mapping presented in the DEIR and determine whether any additional corrections may be needed. At minimum, the EIR's impact analysis and mitigation measures should be revised to reflect the 0.4-acre polygon of disturbed coastal sage scrub (MSCP Tier II) mis-mapped as Disturbed Habitat (Tier IV) in the DEIR and the 0.15-acre polygon of Valley Needlegrass Grassland (Tier I) mis-mapped as Non-native Grassland (Tier III).

DEIR FAILS TO ANALYZE IMPACTS TO THE WESTERN SPADEFOOT

The Western Spadefoot (*Spea hammondii*), is a California Species of Special Concern. It is estimated that this grassland-associated toad has been extirpated from 80 percent of its range in southern California due to agricultural expansion and urban development (US Fish and Wildlife Service 2005; Stebbins and McGinnis 2012; Baumberger et al. 2019).

On July 11, 2012, a petition to federally list the Western Spadefoot was submitted to the US Fish and Wildlife Service (USFWS), and on June 9, 2015, a 90-day finding was issued stating that the petitioned action may be warranted. The USFWS has been evaluating the petition since 2015, and could issue its decision to either list or not list the Western Spadefoot as threatened or endangered at any time.

On February 8, 2019, ICF biologists documented Western Spadefoot eggs on the project site. As reported in ICF's *2018-2019 Wet and Dry Season Fairy Shrimp Surveys* report (an appendix to the DEIR), the eggs were observed in seasonal pool "AP-007." Given that ICF found this species on the project site, and given that CDFW's NOP comment letter twice mentioned that Western Spadefoots are known to be present on and around the project site, it is of concern that the DEIR (a) failed to discuss the spadefoot's status and distribution on the project site; (b) identified no potential impacts to this special-status species; and (c) identified no mitigation for potentially significant impacts of the proposed project on the Western Spadefoot.

Western Spadefoot Life History and Ecological Requirements

A recently published telemetry study of Western Spadefoots in southern California provides important current information on the species' life history and ecological requirements (Halstead et al. 2021), following on earlier telemetry studies in the same region (Baumberger 2013, Baumberger et al. 2019).

Movements of Adult Spadefoots Between Breeding Pools and Aestivation Sites

Western Spadefoots spend large parts of the year aestivating underground, often well away from their breeding ponds. As observed by Halstead et al. (2021:1385):

> The distance that western spadefoots move from breeding pools is a key metric for western spadefoot conservation. Distance from the breeding pool indicates how much terrestrial habitat around a breeding pool might be used by western spadefoots, and provides a direct link to the effective reserve sizes needed to preserve western spadefoot populations.

. . .

> The need for core terrestrial habitats around amphibian breeding sites is documented (Semlitsch 1998, Semlitsch and Jensen 2001, Semlitsch and Bodie 2003, Harper et al. 2008, Searcy et al. 2013), as are the negative consequences of roads separating adult habitat from breeding pools (Becker et al. 2007, Brehme et al. 2018). Ensuring that enough terrestrial habitat exists to provide the life cycle needs for western spadefoots is best measured by the predictive distribution of distance from breeding pools. The 95th percentile of the posterior predictive distribution for western spadefoot asymptotic distance from the breeding pool was 486 m at Crystal Cove. This predicted value encompassed the maximum distance from the breeding pool of all but 1 of the spadefoots at the site.

Baumberger et al. (2019:6) found:

> The maximum distance the spadefoots were found from the pools ranged from 16 to 262 m (Table 1, S1 Table), with a mean maximum distance of 69 m ± 61.48. The spadefoots used a mean of 13 burrows (SD ± 8.5), and the mean distance between burrow locations was 18 m (SD ± 24.2). They used 4–31 unique burrow sites (mean 11 ± 7.8) during the study. Nine of the 15 spadefoots (60%) reused one or more burrows at least once after moving to a different burrow. Outside of their aestivation period, the spadefoots shifted their burrow location an average of every 8 ± 7 days, and 147 of 194 (~76%) movements between burrows were ≤ 25 m.

In order to mitigate potential adverse effects associated with development edge upon Western Spadefoots, and to accommodate the movement of the toads between breeding ponds and upland aestivation sites, the USGS (Rochester et al. 2017) recommended that the City of Santee protect an **undeveloped buffer measuring 300 to 400 meters** around Western Spadefoot breeding ponds. This range is consistent with conservation recommendations for the Western Spadefoot contained in the *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (US Fish and Wildlife Service 2005:II-231):

> Based on calculations from upland habitat use data analyzed by Semlitsch and Brodie (2003), a minimum conservation area to preserve the ecological processes required for the conservation of amphibians may fall within a distance of approximately 368 meters (1,207 feet) from suitable breeding wetlands.

Note that even the larger recommended buffer distance of 400 meters falls far short of the 602-meter movement of an adult spadefoot recorded in coastal Orange County (Halstead et al. 2021), and does not encompass the 486-meter distance that represents "the 95th percentile of the posterior predictive distribution for western spadefoot asymptotic distance from the breeding pool" in coastal Orange County. Figures 1 and 2, on the following page, show what buffer distances of 300 and 400 meters would look like on the project site.





Figure 1 (left) and Figure 2 (right). The yellow circle in Figure 1 represents a 300-m buffer around Western Spadefoot breeding pool AP-007, and the yellow circle in Figure 1 represents a 400-m buffer. These are the minimum and maximum undeveloped buffer distances that the USGS recommended around spadefoot breeding ponds in Santee, San Diego County (Rochester et al. 2017). *Aerial Source: Google Earth Pro.*

"Edge Effects" of Development Near Spadefoot Habitats

The potential for long-term persistence of Western Spadefoots in a given area relates to the level of nearby urban development, which may be thought of as the accumulation of edge effects and other urban impacts. Rochester et al. (2017) discussed several classes of potential adverse effects upon Western Spadefoots that can result from nearby developed areas. Several relevant edge effects potentially associated with the proposed Alpine Regional Park project are discussed in the following paragraphs.

Altered watershed dynamics resulting from increased impermeable surfaces within the developed areas can result in a more rapid transfer of rain into the aquatic system within the conserved area rather than the gradual accumulation of water as it seeps into the ground and makes its way through the system naturally. Runoff may also contain a higher contaminant load from vehicles, pet waste, and landscape activities. Altered hydrology can lead to increased sediment transport into the aquatic system, covering egg masses with silt. Spadefoot breeding sites are not typically within flowing drainages, and may not be impacted directly, but contaminants can be carried through the food chain and increased flows can alter the available habitats.

Introduced Argentine Ants (*Linepithema humile*) frequently extend from the urban edge into the first 200 meters of undeveloped habitat, and where streams and creeks extend into the habitat, Argentine ants may also follow. Argentine Ants have been documented to alter both the native ant community and the overall invertebrate community, and Western Spadefoots feed mostly on insects. If Argentine Ants disrupt the local invertebrate community, this could impact availability of suitable prey for the Western Spadefoot. Additionally, small Western Spadefoot metamorphs could be vulnerable to attack by the omnivorous Argentine Ant.

Increased outdoor activity in areas adjacent to the new active park, including hiking and mountain-biking, as well as increased presence of dogs, both on- and off-leash. These uses can prevent Western Spadefoots from using otherwise suitable breeding ponds, can increase sedimentation through disturbance of pools, and can decrease the longevity of seasonal pools (e.g., due to the action of bike tires crossing through pools). Mountain bikes can also cause direct mortality of Western Spadefoot tadpoles by passing through pools and pushing water and tadpoles out of the pool.

Impact Analysis for Western Spadefoot

Grading for Alpine Regional Park would cause direct mortality of aestivating Western Spadefoots, and would permanently remove approximately 23 acres of grasslands and other open habitats that Western Spadefoots use as breeding and aestivation habitats. Edge effects associated with ongoing operation of the park would impact Western Spadefoots in preserved habitats on the project site and in the adjacent Wright's Field Preserve. The proposed loss and degradation of 23 acres of occupied breeding and aestivation habitats represent significant impacts to the Western Spadefoot.

The Western Spadefoot is not a "covered" species under the MSCP, and therefore the project's significant impacts to this species would not occur within a regional framework designed to conserve populations of this species. Thus, the project's impacts to this species are also significant in a cumulative sense.

Mitigation for Significant Impacts to the Western Spadefoot

Given that spadefoot populations require extensive buffering from development edges to remain viable, and no such buffering has been provided for in the project design, the preservation of undeveloped portions DEIR provides no legitimate mitigation for the project's impacts to the Western Spadefoot. In fact, direct and indirect impacts associated with implementation of the Alpine Regional Park project seem likely to result in the extirpation of Western Spadefoots from the adjacent Wright's Field Preserve.

Because the Western Spadefoot is not a covered species under the MSCP, the Alpine Regional Park DEIR cannot rely upon the MSCP's habitat tier mitigation ratios to reduce the project's impacts to Western Spadefoots to below the level of significance.

Because the County and the EIR preparer failed to so much as mention the Western Spadefoot in the DEIR, despite the species' known presence on the project site, the DEIR's CEQA analysis is grossly deficient. Furthermore, because the spadefoot is not an MSCP covered species, the tier-based compensatory mitigation strategy laid out in the DEIR fails to address the project's significant impacts to this species. It is unclear how these fundamental omissions can be adequately addressed in the FEIR.

The County is encouraged to identify a project alternative that would achieve the most important project objectives without significantly impacting the Western Spadefoot.

BAT IMPACTS AND MITIGATION

Page 1 of the bat survey report, included as a technical appendix to the DEIR, states:

> Drew Stokes, San Diego Natural History Museum biologist, conducted active and passive bat surveys within a 92.6-acre parcel (survey area) owned by the County of San Diego.

On November 12, 2021, I spoke with Drew Stokes about his surveys, and about the potential effects of the proposed project on bats, especially the Pallid Bat. Mr. Stokes stated that he conducted his surveys as a general inventory of the bats that occur on the site, not for the purpose of evaluating the effects of establishing an active park on 23 acres in the southeastern part of the project site. Figure 1 from the DEIR's Biological Resources Technical Report, reproduced below, shows that no Anabat detection stations were established in the southern third of the project site, in the native grasslands proposed for removal for the proposed project.

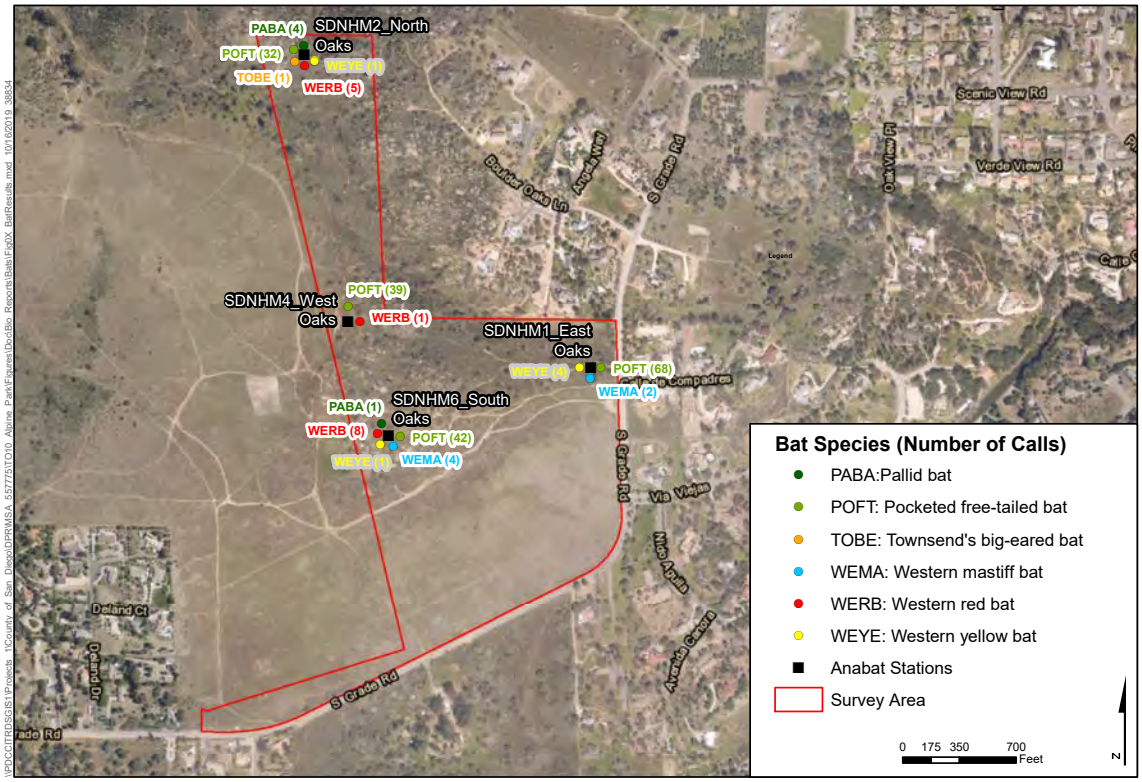


Figure 1
Biological Resources Technical Report
Alpine Park Project

Reproduction of Figure 1 from the Biological Resources Technical Report. Since no Anabat detection stations were established in the southern part of the project site, where the main area of native grasslands are proposed for removal, the project biologists lack baseline data needed to evaluate the project's impacts to bats.

In a bat study designed to evaluate the proposed park project, Anabat sampling would have taken place within the main grassland area proposed for impacts. During our conversation Mr. Stokes suggested that sampling of the grasslands and other habitats on the project site for large arthropods, which form the main prey items of Pallid Bats, also would have been useful for determining the value of the grasslands and other habitats for Pallid Bats. No such sampling was conducted, however.

Mr. Stokes found that the project site supports a remarkably high diversity of bats, with his focused surveys recording 15 of the 22 species of bat known from San Diego County. Page 3 of the DEIR's bat survey report states:

> The oak woodland and grassland habitats found on the Alpine Park preserve are likely serving as high quality foraging (and perhaps roosting) habitats for a high diversity of bats including several California species of special concern.

Figure 1 from the bat report, reproduced on the previous page of this letter, shows that the greatest numbers of bat detections were recorded at the two southernmost Anabat stations (the area closest to proposed impacts). Although no Anabat sampling was conducted in the southern third of the project site, Mr. Stokes stated that he expects that the site's native grasslands represent important habitat for bats — especially the Pallid Bats, which is known to forage on the ground in grasslands. Whatever the case, the DEIR does identify potentially significant impacts to the Pallid Bat resulting from the loss of approximately 22 acres of prime foraging habitat located near the last two Pallid Bat roost sites known in San Diego County, as well as fragmentation of the habitat that would not be preserved. The DEIR's treatment of the Pallid Bat warrants scrutiny.

Analysis of Pallid Bat Issues

The *Management and Monitoring Strategic Plan for Conserved Lands in Western San Diego County: A Strategic Habitat Conservation Roadmap* (San Diego Management and Monitoring Program and The Nature Conservancy 2017) — also referred to as the MSP Roadmap — is a comprehensive, landscape-scale adaptive management and monitoring framework for prioritized species and vegetation communities in the MSP Roadmap Area (MSPA), which "encompasses the plan areas for the MSCP, MHCP, proposed NCP, and lands immediately to the east of these plan areas up to the watershed divide." By establishing biological goals and measurable objectives across the region, the MSP Roadmap provides for a coordinated effort among multiple key organizations in western San Diego County in the implementation of adaptive management and monitoring actions using the same approach. The MSP Roadmap categorizes and prioritizes plant and animal species, vegetation communities, and threats/stressors, identifies geographic locations for management and monitoring actions, provides specific timelines for implementation, and establishes a process for coordination and implementation. Under the MSP Roadmap, "Category SL" includes "species whose persistence in the MSPA is at high risk of loss without immediate management action above and beyond that of daily maintenance activities."

Among the seven special-status bat species detected on the Alpine Regional Park project site, the DEIR focuses most of its attention on the Pallid Bat (*Antrozous pallidus*). As explained in the Pallid Bat species account in the MSP Roadmap (San Diego Management and Monitoring Program and The Nature Conservancy 2017):

> Pallid bats should be managed as a Species Management Focus Category SL Species due to high risk of loss from Conserved Lands in the MSPA and because managing vegetation alone will not ensure its persistence (see Vol. 1, Table 2-4). The pallid bat is at a high risk of loss from the MSPA as it is sensitive to urban development and has been lost from large areas of the MSPA where it occurred in the 1930s and 1940s (Miner and Stokes 2005; Stokes et al. 2005). It is currently known only in very small numbers in 4 MUs, and is at high risk of multiple threats (see Vol. 3, App. 1, Species Profiles).
>
> The pallid bat has declined in the MSPA because of habitat loss and fragmentation, especially oak savannahs, native grassland, and open scrub vegetation communities, and because of extermination or disturbance of bat colonies (Miner and Stokes 2005; Stokes et al. 2005). The pallid bat is especially sensitive to urbanization and is extirpated from areas with more than rural development. Bats require multiple roosts with different temperature ranges to accommodate changing seasonal climate conditions, and these roosts need to be within nightly commute distances to foraging habitat. Bats are vulnerable to destruction of roosts (e.g., construction of water projects and transportation routes) or catastrophic events at roosts (e.g., fire, human disturbance) that adversely affect a large number of individuals at once. Recreational activities like cave or mine exploration and rock climbing near roosts can adversely affect reproductive success and survival, and can even cause bat colonies to abandon roosts (Miner and Stokes 2005).
>
> Population recovery is slow as bats are relatively long-lived with low productivity. Pallid bats eat large, terrestrial insects, such as Jerusalem crickets and may be impacted by changes to habitat such as invasion of nonnative annual grasses and loss of bare ground (Stokes, pers. comm.). Pesticides can harm bats from ingestion of poisoned prey or by being sprayed inadvertently at day roosts (Miner and Stokes 2005). A warming and drying climate predicted for the arid southwest could also adversely affect reproduction by reducing surface water available for drinking by lactating bats (Adams and Hayes 2008). A recent study in an arid region of the west showed that lactating female bats visited water to drink 13 times more often than nonreproductive females. Modeling predicts that bat occurrences could decline with increasing aridity and warming forecast for the future.

Although the DEIR identifies potentially significant impacts to the Pallid Bat, the DEIR fails to mention that the Pallid Bat is "at a high risk of loss from the MSPA" due to "habitat loss and fragmentation, especially oak savannahs, native grassland, and open scrub vegetation communities." The DEIR's Pallid Bat mitigation measure, MM-BIO-5, fails to address loss and fragmentation of habitat associated with the proposed project.

The DEIR's impact analysis, provided on page 3-3 of the Biological Resources Technical Report, states:

> There are only two known pallid bat colony sites in San Diego County (Stokes 2018). The individuals observed during focused bat surveys are believed to belong to the maternal colony that roosts in Viejas on a private residence. This species has very specific foraging strategy and utilizes grasslands and open oak woodlands as its main foraging habitat. In addition, this

> species has characteristics that affect its success with increased urbanization. This includes its tendency to fly at low altitude, its inability to fly over prolonged distances, and its specialized foraging strategies. As a result of these factors, loss of approximately 22.3 acres of pallid bat foraging habitat would result in a significant impact on the pallid bat. These significant impacts would be reduced to less-than-significant levels through implementation of MM-BIO-5, which requires the County to construct bat boxes and monitor activities within them for 5 years following installation.

The Summary of Significant Impacts provided on page 4.4-32 of the DEIR states:

> Pallid bat boxes will help attract pallid bats to a permanently protected location in the county (i.e., the open space preserve), where there is a higher chance for long-term reproductive success than in private parcels where long-term persistence of this species is less certain. Potential stress to pallid bat from the loss of foraging habitat on the project site is offset by access to bat boxes providing safe, secure roost sites.

During our conversation, Mr. Stokes stated that he considers the loss and fragmentation of native grasslands associated with the proposed project to be a significant impact that cannot be mitigated to a less-than-significant level. In his opinion, preserving native grasslands off-site would not mitigate this project's impacts, because the off-site habitat would not be located near one of the two Pallid Bat roost sites known in San Diego County.

The provision of bat boxes specified in MM-BIO-5 represents a speculative form of mitigation, at best, because roosting habitat cannot substitute for foraging habitat. Furthermore, the mitigation measure's five-year time-frame is not commensurate with the proposed loss and fragmentation of habitat due to project implementation, which would last in perpetuity. Therefore, the DEIR lacks an adequate foundation to claim that this measure would reduce to a less-than-significant level the project's adverse effects on the Pallid Bat.

Since the project's impacts to the Pallid Bat do not appear to be mitigable to a less-than-significant level, the County should identify a project alternative that would achieve the most important project objectives without significantly impacting the Pallid Bat.

QUINO CHECKERSPOT IMPACTS AND MITIGATION

The DEIR acknowledges that project implementation would remove habitats occupied by the federally listed Quino Checkerspot Butterfly (*Euphydryas editha quino*). To mitigate this impact, MM-BIO-1 requires the County to "seek a US Fish and Wildlife Service Section 10 Incidental Take Permit (ITP) (or Section 7 Consultation if there is a federal nexus)." It is anticipated that the mitigation:

> . . . will be provided in the form on on-site preservation of occupied habitat for Quino checkerspot butterfly within the Alpine Park Preserve, as well as the assurance that no net loss of Quino checkerspot butterfly host plants will occur because of the Project. The County will ensure that there is no net loss of Quino checkerspot butterfly host plants by performing on-

> site enhancement and restoration activities within Quino checkerspot butterfly habitat, including planting dot-seed plantain, removing thatch to support healthy populations of dot-seed plantain, and maintaining and monitoring these enhancement areas for a minimum of 5 years.

The DEIR does not commit to any performance standards demonstrating a positive response of the local Quino Checkerspot population to proposed habitat restoration and enhancement efforts. The mitigation approach described in MM-BIO-1 is thoroughly experimental and has not proven successful in conserving Quino Checkerspots when implemented elsewhere. As summarized by Center for Biological Diversity and Endangered Habitats League (2020:22):

> Indeed, based on a review of all available monitoring reports of enhancement/restoration projects to date, no evidence exists that restoration efforts on such disturbed lands will be effective in sustaining Quino occupancy (AECOM 2010, 2013, 2015, 2016, 2017; Osborne 2013, 2014, 2015, 2016, 2017; Caltrans 2018; RECON Environmental, Inc. 2018, 2019; San Diego Habitat Conservancy 2019; HELIX Environmental Planning, Inc. 2019). These efforts involve weeding, host plant seeding, and a case of larvae reintroduction (which is not proposed here). The reports document no sustained increase of carrying capacity beyond baseline levels or the establishment of self-sustaining Quino populations where none existed before. The proposed management measures therefore have no track record of efficacy.

Considering that each of these failed efforts to increase Quino Checkerspot populations through habitat restoration was conducted in compliance with an Incidental Take Permit or Section 7 consultation with the US Fish and Wildlife Service, the public can have no reasonable expectation that restoring/enhancing habitat on the project site, under an Incidental Take Permit for the Alpine Regional Park project site as specified in MM-BIO-1, will satisfy the project's CEQA requirement to reduce the project's impacts to a less-than-significant level.

In order for MM-BIO-1 to mitigate the project's impacts on the Quino Checkerspot to a less-than-significant level, MM-BIO-1 must specify that the Incidental Take Permit issued by the US Fish and Wildlife Service shall require the County to demonstrate the continued presence of the Quino Checkerspot on the project site at the end of the five-year restoration program. If Quino Checkerspots can no longer be found on the site in a normal flight-year at the end of the five-year restoration period, MM-BIO-1 must specify a contingency measure to insure against the project significantly impacting the Quino Checkerspot, such as purchase of a specific off-site parcel that will contribute meaningfully to the species' long-term conservation. Otherwise, the available evidence indicates that implementing MM-BIO-1 is unlikely to reduce the project's impacts to a less-than-significant level.

The County could also identify a project alternative that would achieve the most important project objectives without impacting the Quino Checkerspot.

ENGELMANN OAK PLANTINGS MUST BE CERTIFIED PATHOGEN FREE

Phytophthora soil pathogens are known to cause Sudden Oak Death Syndrome and other severe plant diseases. A recent study by Sims and Garbelotto (2021) showed that the planting of native oaks and other native plant species in habitat restoration efforts has repeatedly, if inadvertently, introduced *Phytophthora* soil pathogens into stands of intact oak woodlands and other natural communities near habitat restoration sites, with disastrous results. As stated by those authors, "The inadvertent introduction of *Phytophthora* species in restoration sites and their spread into adjacent natural ecosystems will surely have long-term environmental and economic impacts." Since such plantings are specified in MM-BIO-3, this represents a potentially significant impact of the project not identified in the DEIR.

To avoid potentially significant impacts associated with the possible introduction of *Phytophthora* soil pathogens to the site's preserved Engelmann Oaks, MM-BIO-3 should specifically require that the soil and roots of any and all native plants installed as part of this project be tested and certified to be free of *Phytophthora* prior to planting. To attain this outcome, MM-BIO-3 must specify that all container plants shall be obtained from a native plant nursery that employs Best Management Practices specifically designed to reduce the incidence of *Phytophthora* to undetectable levels (see Sims et al. 2018).

UNSUPPORTED WILDLIFE MOVEMENT FINDINGS

Page 4.4-31 of the DEIR finds that the proposed project "would not result in substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedance of the use of native wildlife nursery sites. Impacts would be less than significant."

Since no study of wildlife movement was conducted for the DEIR, the above-quoted finding is based upon the following brief, vague, and conclusory quasi-analysis:

> The BSA and the adjacent Wright's Field are surrounded by low-density exurban residential development. As such, the BSA and Wright's Field currently function as an "island" of habitat with limited connectivity to open space and other preserve areas. The project would be constructed at the eastern edge of this island of open space/preserve, leaving a smaller but similarly situated island of habitat to the west of the active park.

Figures 3 and 4 on the next page are exhibits showing the project site in relation to the surrounding landscape, both now and in 2003. These figures do not show that the block of natural open space that includes Wright's Field and the project site functions "as an 'island' of habitat with limited connectivity to open space and other preserve areas." Roads and low-density housing undoubtedly constrain wildlife movement *to some extent*, but the DEIR provides no information on the severity of this constraint. Since no wildlife movement study was conducted for the DEIR, I can say only that the site does not appear to be functionally isolated to the extent claimed in the DEIR.



Figure 3. Aerial image showing that existing residential development appears to be sparse enough to allow a variety of wildlife species to move between the project site and the extensive block of natural habitat in the Sweetwater River watershed to the south and east. *Aerial Source: Google Earth Pro.*

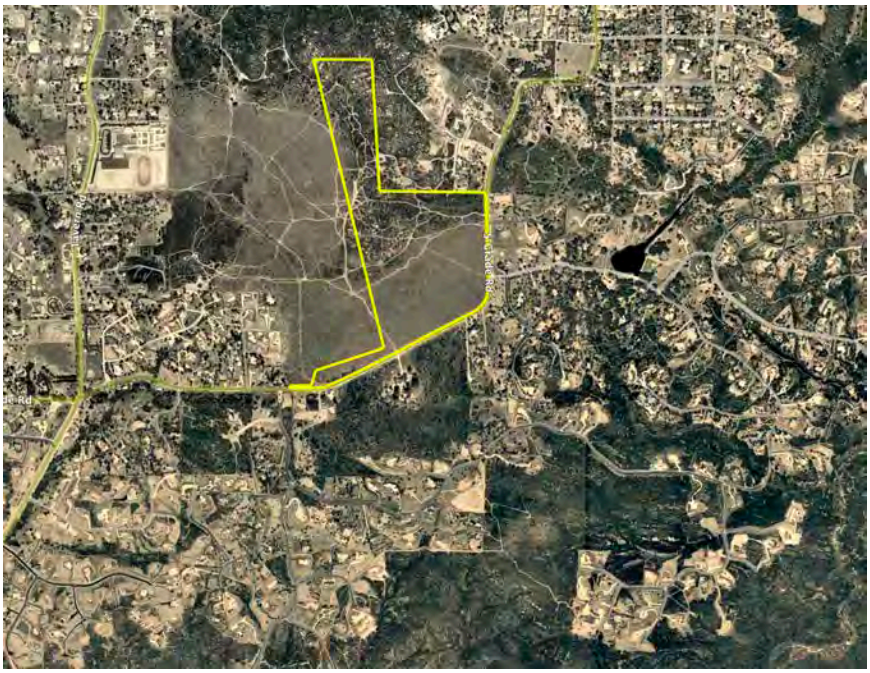


Figure 4. Aerial image taken in July 2003 showing that residential development south and east of the project site has changed very little in the past 18 years. *Aerial Source: Google Earth Pro*

This letter includes an historical aerial exhibit from 2003 (Figure 4 on the previous page) because during December of that year the Back Country Land Trust and the County of San Diego Department of Parks and Recreation submitted to the State of California's Environmental Enhancement and Mitigation (EEM) Program an application for funding of Phase IV of the Wright's Field Multiple Species Conservation Plan (MSCP) Preserve. Page 5 of the funding application states:

> . . . Wright's Field **functions as an important wildlife corridor** between MSCP lands to the west in Harbison canyon, El Capitan Reservoir and the Oakridge preserve in Crest, and the Cleveland National Forest to the south and east. In particular, two drainages from Wright's Field lead west via Chocolate Creek to El Capitan Reservoir. **These streambed corridors are a vital link for wildlife movement between habitats.** Wildlife access to these streambeds on Wright's Field will be enhanced by the protection of the 142 acre Phase IV parcel, **connecting MSCP preserve lands to the Cleveland National Forest**. [emphasis added in bold]

Given that the County previously characterized the Alpine Regional Park project site as part of "an important wildlife corridor" and "a vital link for wildlife movement," and since review of aerial imagery suggests that many wildlife species should still be able to move into and out of the project site to the south and east, the DEIR lacks adequate support for the hyperbolic claim that the site currently functions "as an 'island' of habitat with limited connectivity to open space." In the absence of a credible wildlife movement study demonstrating that the project site no longer fulfills wildlife movement functions, a potentially significant impact to wildlife movement must be identified.

PROPOSED PROJECT UNDERMINES THE MSCP

The California Department of Fish and Wildlife (CDFW) is responsible for administering the State of California's Natural Community Conservation Planning (NCCP) program. The County participates in the NCCP program by implementing its approved Subarea Plan (SAP) for southwestern San Diego County under the Multi-species Conservation Plan (MSCP). The project site lies within an MSCP-designated Biological Resource Core Area (BRCA) and a Pre-Approved Mitigation Area (PAMA) because it satisfies the following conservation criteria:

- Supports high-quality, uncommon habitat that contains biological resources that contribute to the long-term survival of sensitive species.
- Has a very high conservation value.
- Is within a block of habitat at least 500 acres in size.

Citing the presence of numerous special-status species and highly sensitive habitats in a block of habitat designated as PAMA, page 2 of CDFW's NOP comment letter requested that the DEIR "include an alternative location or locations that would meet the needs of the community yet avoid or minimize impacts while not reducing the remaining acreage of the large block of habitat encompassing the Wright's Field conservation area." The same letter stated, "The DEIR should include measures to fully avoid and

otherwise protect Sensitive Natural Communities from Project-related impacts." The County ignored CDFW's requests and moved forward with plans to establish an active regional park on sensitive PAMA lands.

The DEIR acknowledges direct impacts to 13.9 acres of native grassland; 4.3 acres of flat-topped buckwheat stands; and 4.1 acres of annual grasslands. In addition, the DEIR states that grading would extend into the root protection zone of up to 25 sensitive Engelmann Oaks (*Quercus engelmannii*; 0.94 acre). This is a minimum of 23.2 acres of sensitive plant communities proposed for direct impacts within a designated PAMA. The DEIR acknowledges these as potentially significant impacts, but concludes that the impacts would be mitigated to below the level of significance through a combination of on-site preservation and purchase of credits and/or land acquisition.

It is relevant that the current Alpine Regional Park project site was evaluated as a potential location for a high school in a 2009 Draft Program EIR (DPEIR). In the 2009 DPEIR, the current project site was referred to as "Alternative Site B." On page S-5 of the 2009 DPEIR, ICF Jones & Stokes reached the following conclusion:

> Alternative Site B would result in a significant loss of approximately 8.23 acres of native grassland within the MSCP and San Diego County Subarea Plan through development of a core wildlife area within a Pre-Approved Mitigation Area (PAMA). **With implementation of the mitigation measures identified in the EIR, the impact associated with Alternative B would remain significant.** Development of a substantial portion of the PAMA and the resulting loss of approximately 85 percent of the native grassland located within that PAMA would result in a significant, cumulative impact on the MSCP identified significant loss of approximately 8.23 acres of native grassland within the MSCP and San Diego County Subarea Plan through development of a core wildlife area within a Pre-Approved Mitigation Area (PAMA). [emphasis added in bold]

Thus, even prior to discovery of the federally endangered Quino Checkerspot Butterfly (*Euphydryas editha quino*) in the site's grasslands, the biologists of ICF Jones & Stokes determined that the then-proposed loss of **8.23 acres** of native grassland would represent a "significant, cumulative impact on the MSCP . . . through development of a core wildlife area within a Pre-Approved Mitigation Area (PAMA)."

ICF Jones & Stokes also stated the following on page 3.4-1 of the 2007 DPEIR:

> The protection of land within the PAMA is important for meeting the goals of the County conservation program and is necessary to obtain permits that allow the loss of some habitat areas by fulfilling the requirements of the federal and state regulations.

Page 3.4-20 of the 2009 DPEIR stated, "All impacts on vegetation communities on this site would occur within a PAMA and would, therefore, be inconsistent with the MSCP."

On page 2 of a letter dated February 20, 2009, commenting on the 2009 DPEIR, the County concurred with ICF's analysis:

> Loss of this much grassland habitat would impact the overall function and viability of the grassland including the lands that have already been set aside as preserve with significant expense to the County and community. A significant amount of native grassland, such as at Wright's Field, is a very rare habitat in San Diego County **and any impacts to it would be considered significant**. Since Wright's Field is one of only approximately three remaining areas of significant amounts of intact native grassland in San Diego County, **we agree with the significant and not mitigable finding in the DEIR since in-kind mitigation is probably not be feasible.** [emphasis added in bold]
>
> . . .
>
> It is agreed that Alternative B would result in a direct and cumulative conflict with the San Diego County MSCP Subarea Plan and would remain significant with implementation of the measures identified in the EIR. Any loss of native grassland habitat will impact the overall function and viability of the grassland including the lands that have already been preserved with significant expense to the County and community. Additionally, indirect effects associated with lighting, noise, invasive plants from landscaping, and ground moisture changes from irrigation runoff and impervious surfaces would also negatively affect the surrounding natural and preserved areas. From a biological and regional planning perspective Alternative B remains the least preferable of the three alternative sites.

When the County and ICF Jones & Stokes made these findings and concurring comments in 2009, the endangered Quino Checkerspot Butterfly was considered absent from the site. Although this species' eventual discovery on the site has provided even greater ecological justification for preserving the site's grasslands, the County and ICF now conclude that the loss of 13.9 acres of native grassland within PAMA (a loss 69% greater than that proposed in 2009), along with the project's other significant impacts to sensitive biological resources, should be deemed consistent with the MSCP. What caused the County to change their previous analysis? On what basis did the County conclude that in-kind mitigation was "probably not feasible" in 2009, but definitely feasible in 2021?

In 2009, the County stated, "Any loss of native grassland habitat will impact the overall function and viability of the grassland including the lands that have already been preserved with significant expense to the County and community." The County now concludes that 13.9 acres of native grasslands, and 9.3 acres of other sensitive communities, can be developed within this PAMA, and that the associated significant impacts to sensitive biological resources can be reduced to below significance by preserving part of the project site, putting up bat boxes, managing habitats, and acquiring 11.7 acres of Tier 1 habitats off-site. Furthermore, as discussed in this letter, the mitigation measures identified in the DEIR do not adequately address the project's significant impacts to (a) the Western Spadefoot, a species not covered under the MSCP that the DEIR fails to acknowledge as occurring on the site; (b) the Pallid Bat, a species "at a high risk of loss from the MSPA" due to removal and fragmentation of its foraging habitat; or (c) the

Quino Checkerspot, a federally endangered species notoriously resistant to increasing its numbers in response to habitat restoration efforts.

As previously acknowledged the County and ICF Jones & Stokes, and for additional reasons discussed in this letter, the proposed establishment of an active park within sensitive grassland, coastal sage scrub, and Engelmann Oak woodland habitats designated as PAMA — on land the County characterized in 2003 as an "an important wildlife corridor" and a "vital link for wildlife movement" — would undermine the ability of CDFW and the County to achieve the regional conservation goals of the MSCP program.

ALTERNATE LOCATION ALTERNATIVE REJECTED WITH INADEQUATE CAUSE

As described on Page 6-4 of the DEIR, the Alternate Location Alternative "would relocate the amenities proposed for the park to several 'mini-parks' that would be located throughout Alpine instead of within one consolidated location." In a letter commenting on the NOP, dated April 2, 2021, local resident Anne Falasco Norton wrote:

> In addition, at last week's ACPG meeting I offered an alternative location for many of the Project's activities that are not suitable to the Project's location: Alpine Elementary School (AES) in the heart of Alpine. It is an historical site sitting idle and empty. This site could be the perfect fit with regards to providing the activities in the park (the skateboard and bike parks, the playing fields, the community garden and the dog park) that ought to be clustered within the higher populated area of Alpine. This higher populated area is our village center. If designed properly, AES could become a stalwart example of incorporating historical value with the present needs of our community. AES already has the infrastructure. It has playing fields. It has reasonable off-street parking. It has existing electrical, water and sewage hookups. It addresses the traffic flow. Fields could be lighted without causing light pollution. Situated at the school, in the heart of town, the bike, skate and dog parks would not cause noise pollution. This is the location where these types of activities belong and are best served. This alternative should be analyzed in the EIR.
>
> Another alternative park site in the heart of Alpine is the old Alpine School District's offices which also has similar amenities that are suitable for the active portion of the Project. This alternative should be analyzed in the EIR.

Given the range of environmental impacts associated with the Proposed Project that cannot be mitigated to a less-than-significant level, this type of creative solution is sorely needed. Rather than conducting a legitimate analysis of this alternative, however, page 6-5 of the DEIR dismisses it out of hand:

> This alternative was rejected because it would not meet many of the project objectives, including creating a place where all Alpine residents can gather and connect as a community. This alternative also would not enable long-term natural and cultural resources management. Furthermore, this alternative does not meet the CEQA standard as being a "feasible" alternative given that the County does not own other properties in Alpine, and therefore could not accomplish implementation of a new park at these other potential locations within a reasonable period of time.

On page 3-1 of the DEIR, Project Description, the first Project Objective listed is "To create a place where all Alpine residents can gather and connect as a community." The County cites failure of the Alternate Location Alternative to achieve this Project Objective as the first reason for dismissing this alternative. But would the Proposed Project itself create "a place where all Alpine residents can gather and connect"?

Page 3 of the County's *Multiple Species Conservation Program Conformance Statement*, provided in Volume 2 of the DEIR, states:

> Operation of the proposed project would be expected to serve regional residents and visitors and is anticipated to have an average daily use of 500 people. The sewer system would be designed for peak park use (a maximum of 1,000 people which is only anticipated up to twice a year).

Acknowledgment that the Proposed Project would be "expected to serve regional residents and visitors" contradicts the County's claim that the Proposed Project is focused on "creating a place where all Alpine residents can gather and connect." The Conformance Statement goes on to indicate that the Proposed Project would serve an average of 500 people per day, and a maximum of 1,000 people two days per year. Since the population of Alpine sits at approximately 15,000[1], these daily use figures represent approximately 3 to 7 percent of the population of Alpine. Thus, even if park attendance were limited to only Alpine residents, 93-97% of the population of Alpine would be excluded. Of course, since Alpine Regional Park would be "expected to serve regional residents and visitors," many park users would not be Alpine residents. The approach of creating multiple "mini-parks" appears to be better suited to meeting the local recreation needs of Alpine residents, consistent with the stated Project Objectives, compared with the proposed project's vision of a large, centralized recreation center designed to draw in visitors from the wider region.

The DEIR continues: "This alternative also would not enable long-term natural and cultural resources management." The Proposed Project would be sited within PAMA, and constructing and operating the park would impact the Quino Checkerspot, Western Spadefoot, and Pallid Bat, as well as disrupting local wildlife movement patterns. As discussed in this letter, the mitigation measures identified in the DEIR would not mitigate these impacts to a less-than-significant level. Under the Alternate Location Alternative, there would be no need to establish an on-site resource manager, because the special-status species that currently exist on the site would be able to persist there without the management actions identified in the DEIR.

The DEIR concludes that the Alternate Location Alternative "does not meet the CEQA standard as being a 'feasible' alternative given that the County does not own other properties in Alpine, and therefore could not accomplish implementation of a new park at these other potential locations within a reasonable period of time." The County has

[1] https://worldpopulationreview.com/us-cities/alpine-ca-population

not explained why the project site itself represents a feasible location for a large, active regional park. As reviewed in this letter, the County in 2003 described the project site as part of "an important wildlife corridor" and "a vital link for wildlife movement," but now the County dismisses the site as part of an "island" of open space with only "limited connectivity to open space and other preserve areas." In 2009, the County stringently opposed a high school project that proposed removing a smaller area of native grassland than the County now proposes to remove for Alpine Regional Park. The DEIR does not provide new information indicating that the resource value of the site has declined in the years since the County made these evaluations. In fact, the recent discovery of endangered Quino Checkerspots on the site and Wright's Field only increased the area's importance as a natural habitat.

Ms. Norton's NOP comment letter recommended consideration of two shuttered public facilities: the Alpine Elementary School property and the Alpine School District's offices. Although the closed facilities are not County-owned, public agencies routinely cooperate to arrive at creative solutions to serve the public. The DEIR gives no indication that the County made any effort to work with the Alpine Unified School District to evaluate the feasibility of repurposing one or both of these public facilities to provide recreational opportunities to the residents of Alpine. Until the County makes a good-faith effort to find venues that can fulfill the legitimate objectives of the proposed project with less damage to the environment, the DEIR's alternatives analysis must be considered inadequate.

REVIEW OF MSCP CONFORMANCE STATEMENT

I reviewed the *MSCP Conformance Statement*, dated September 2021 and attributed to the County Department of Parks and Recreation, which is included within Volume 2 of the DEIR.

Page 4 of the Conformance Statement states:

> Implementation of a septic system and associated leach field to accommodate sewage from the proposed restroom facilities could result in up to 0.4 acres of additional permanent impacts on disturbed habitat.

As documented on page 2 of this letter, the proposed septic system/leach field would be established in an area of disturbed coastal sage scrub (MSCP Tier II habitat) and not "Disturbed Habitat" as defined and used in the DEIR (MSCP Tier IV habitat).

Page 6 of the Conformance Statement acknowledges the project's significant impacts to the federally listed Quino Checkerspot Butterfly. Page 10 asserts, "The Section 10 species permitting process would ensure that there is no reduced likelihood of recovery of Quino checkerspot butterfly." As discussed on pages 11–12 of this letter, the DEIR does not commit to a performance standard requiring that the local Quino Checkerspot population show a positive response to the proposed habitat restoration and enhancement

efforts. Previous habitat restoration and enhancement efforts undertaken under federal Incidental Take Permits have failed to result in increased Quino Checkerspot populations. Unless the Incidental Take Permit for this project includes a requirement that Quino Checkerspots be detectable on the project site in a normal flight-year at the end of the five-year restoration period, the available evidence indicates that implementing MM-BIO-1 is unlikely to reduce the project's impacts to a less-than-significant level.

Page 9 of the Conformance Statement states that significant impacts to foraging habitat used by the Pallid Bat "would be reduced to less-than-significant levels through implementation of MM-BIO-5, which requires the County to construct bat boxes and monitor activities within them for 5 years following installation." As discussed on pages 8–11 of this letter, the provision of bat boxes cannot be expected to mitigate for the loss and fragmentation of a large area of prime Pallid Bat foraging habitat located near this species' two remaining roosts known in San Diego County.

The Conformance Statement fails to mention the occurrence of Western Spadefoots on the project site. Although the spadefoot is not a covered species under the MSCP, it is a declining special-status species that would experience significant adverse effects if the proposed project is implemented.

Page 5 of the Conformance Statement: The impact and preservation acreages presented in Table 1 should be adjusted to reflect the mis-mapped areas discussed on pages 1–4 of this letter. It is requested that the project biologists re-check the rest of the project site to determine whether any other areas were mapped incorrectly.

Page 5 of the Conformance Statement states, "The Project area is also directly adjacent to a busy arterial road, South Grade Road, that already limits wildlife movement in the area to the south and east." South Grade Road is a two-lane collector, not an arterial road, and cannot be accurately described as "busy." The DEIR provides no evidence that this road "already limits wildlife movement in the area to the south and east."

Page 12 of the Conformance Statement states:

> The BSA and the adjacent Wright's Field are surrounded by low-density exurban residential development, which result in an "island" of habitat with limited connectivity to open space and other preserve areas.

As discussed previously in this letter, the DEIR presents no wildlife movement study data, or other convincing analysis, to substantiate its claims that wildlife movement through the project site and surrounding areas is greatly limited by existing low-density development. The County itself described the project site as being part of "an important wildlife corridor" and "a vital link for wildlife movement" in 2003, and conditions on the ground have not changed much since that time (see Figures 3 and 4 on page 14 of this letter).

Page 12 of the Conformance Statement continues:

> The conversion of a maximum of 22.3 acres of native habitat to a developed park facility would not constrain wildlife movement, because the park would be located adjacent to existing development on three sides. . . No features would be constructed which would impinge any movement areas, including ridgelines or canyons.

The proposed landscaped berm along South Grade Road, which would be as much as 12 feet higher than the roadway, is a feature that could potentially impinge upon the movement of wildlife into and out of the project site across South Grade Road.

Page 15 of the Conformance Statement states:

> To mitigate for potentially significant impacts on Tier I, Tier II, and Tier III habitats, the County DPR will provide compensatory mitigation consistent with the BMO to reduce significant impacts on sensitive vegetation communities.

The Quino Checkerspot and Western Spadefoot are not covered species under the MSCP. As discussed in this letter, the project's potentially significant impacts to habitats occupied by these species would not be reduced to less-than-significant levels through the DEIR's tier-based compensatory mitigation approach.

Page 16 of the Conformance Statement presents *Findings of Conformance*, which rely upon several unsupported assertions to conclude that the proposed project qualifies as an "essential public project." Contrary to the *Findings of Conformance*, the proposed project conflicts with the following goals of the County's General Plan:

- Maintenance of the County's Rural Character (GOAL LU-2) encouraging conservation and enhancement of the unincorporated County's varied communities, rural setting, and character.

The proposed project would remove approximately 22 acres of sensitive natural communities in order to establish an active regional park in a rural setting.

- Sustainability of the Natural Environment (GOAL COS-2) sustaining ecosystems with long-term viability to maintain natural processes, sensitive lands, and sensitive as well as common species, coupled with sustainable growth and development.

The DEIR does not demonstrate the project's consistency with GOAL COS-2. By removing 22 acres of sensitive natural communities, fragmenting the remaining habitat, and bringing large numbers of people into this sensitive area, project implementation would threaten the long-term (and short-term) viability of populations of at least three special-status species known from the site and adjacent Wright's Field Preserve: the Quino Checkerspot Butterfly, Western Spadefoot Toad, and Pallid Bat.

- Recreational Opportunities in Preserves (GOAL COS-23) promoting the acquisition, monitoring, and management of valuable natural and cultural resources where public recreational opportunities are compatible with the preservation of those resources.

The proposed active park is not compatible with preservation of the site's sensitive natural resources. As reviewed in this letter, the County acknowledged this fundamental incompatibility in its comments on the 2009 DPEIR for the proposed High School No. 12 on this same property, which stated, among other things:

> It is agreed that [the high school project] would result in a direct and cumulative conflict with the San Diego County MSCP Subarea Plan and would remain significant with implementation of the measures identified in the EIR. Any loss of native grassland habitat will impact the overall function and viability of the grassland including the lands that have already been preserved with significant expense to the County and community. Additionally, indirect effects associated with lighting, noise, invasive plants from landscaping, and ground moisture changes from irrigation runoff and impervious surfaces would also negatively affect the surrounding natural and preserved areas.

Page 17 of the Conformance Statement asserts the following:

> All feasible mitigation measures have been incorporated into the Project, and there are no feasible, less environmentally damaging locations, alignments or non-structural alternatives that would meet Project objectives.

As discussed on pages 18–20 of this letter, the DEIR's alternatives analysis provides inadequate justification for failing to evaluate the Alternate Location Alternative, which could potentially achieve the main project objectives with far fewer adverse effects on sensitive natural resources.

SUMMARY AND CONCLUSION

Plant community mapping presented in the DEIR should be field-checked for accuracy and analyses presented in the FEIR should reflect the corrected mapping.

The DEIR fails to evaluate the project's adverse effects to the Western Spadefoot, a special-status species known to be present on the site. The DEIR's tier-based compensatory mitigation strategy fails to address the project's significant impacts to this species. It is unclear how these fundamental omissions can be adequately addressed in the FEIR.

The mitigation measures identified to address potentially significant impacts to two other species, the Quino Checkerspot Butterfly and Pallid Bat, are flawed and inadequate, and do not provide reasonable assurance that their implementation will reduce impacts to these species to a less-than-significant level.

As previously acknowledged by the County, and for additional reasons discussed in this letter, establishing an active park within sensitive grassland, coastal sage scrub, and

Engelmann Oak woodland habitats designated as PAMA, and impinging upon potential wildlife movement linkages, would undermine the ability of CDFW and the County to achieve the regional conservation goals of the MSCP program.

The *MSCP Conformance Statement* provided in Volume 2 recapitulates many of the deficiencies contained in the DEIR, as needed to determine that the project conforms to the requirements of the MSCP. The statement includes *Findings of Conformance* that rely upon several unsupported assertions to conclude that the proposed project qualifies as an "essential public project."

Issuing a DEIR that flatly contradicts the County's own previous evaluations of the project site's high ecological values — without citing any new biological data to justify the new appraisal — erodes the County's credibility and trustworthiness, and reduces public confidence in the integrity of the CEQA process. When the County assures local residents that this active park will never be subject to environmentally damaging night-lighting, or that extending a sewer line to the new park will not lead to future increases in rural housing density because new houses would not be allowed to hook up to the new sewer line, why should these assurances be believed? Once the basic park facilities have been established, the County could change its mind again and determine that incremental increases in impacts would be less than significant. Establishing credibility and trust, and engendering public confidence in the legitimacy of CEQA analyses, are important reasons for the County to refrain from arbitrarily contradicting itself on crucial planning issues.

I appreciate the opportunity to provide these comments on the DEIR and I look forward to the County's responses. If you have questions, please call me at (562) 477-2181 or send e-mail to robb@hamiltonbiological.com.

Sincerely,



Robert A. Hamilton
President, Hamilton Biological, Inc.

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Long Beach, CA 90803
562-477-2181
robb@hamiltonbiological.com

Attached: Literature Cited and Curriculum Vitae

LITERATURE CITED

Adams, R. A., and M. A. Hayes. 2008. Water Availability and Successful Lactation by Bats as Related to Climate Change in Arid Regions of Western North America. Journal of Animal Ecology 77(6):1115–121.

AECOM. 2010. Year 5 Monitoring Report for the State Route 125 South Vernal Pool and Quino Checkerspot Butterfly Habitat Restoration Site (November 2009-October 2010).

AECOM. 2013. Final Sunrise Powerlink Restoration Year 1 Maintenance and Monitoring Report.

AECOM. 2015. Sunrise Powerlink Restoration Year 2 Maintenance and Monitoring Report (2013/2014).

AECOM. 2016. Sunrise Powerlink Restoration Year 3 Maintenance and Monitoring Report (October 2014 through September 2015).

AECOM. 2017. Sunrise Powerlink Restoration Year 5 Maintenance and Monitoring Report (October 2016 through September 2017).

Back Country Land Trust and County of San Diego Department of Parks and Recreation. 2003. Environmental Enhancement and Mitigation Program Application. Document dated December 6, 2003, requesting funding from the State of California for Phase IV of the Wright's Field MSCP Preserve. 40 pp.

Baumberger, K. L., M. V. Eitzel, M. E. Kirby, and M. H. Horn. 2019. Movement and habitat selection of the Western Spadefoot (*Spea hammondii*) in southern California. PLOS ONE 14(10): e0222532. https://doi.org/10.1371/journal.pone.0222532

Becker, C. G., C. R. Fonseca, C. F. B. Haddad, R. F. Batista, and P. I. Prado. 2007. Habitat split and the global decline of amphibians. Science 318:1775–1777.

Brehme, C. S., S. A. Hathaway, and R. N. Fisher. 2018. An objective road risk assessment method for multiple species: ranking 166 reptiles and amphibians in California. Landscape Ecology 33:911–935.

Caltrans. 2018. Year 5 Monitoring Report for the Lonestar Ridge West Restoration Site November 2016-October 2017.

Halstead, B. J., K. L. Baumberger, A. R. Backlin, P. M. Kleeman, M. N., Wong, E. A. Gallegos, J. P. Rose, J.P. and R. N. Fisher. 2021. Conservation implications of spatiotemporal variation in the terrestrial ecology of Western Spadefoots. Journal Wildlife Management 85:1377–1393.

Harper, E. B., T. A. G. Rittenhouse, and R. D. Semlitsch. 2008. Demographic consequences of terrestrial habitat loss for pool-breeding amphibians: predicting extinction risks associated with inadequate size of buffer zones. Conservation Biology 22:1205–1215.

HELIX Environmental Planning, Inc. 2019. Otay Crossings Commerce Park Mitigation Project Year 2 Monitoring Report.

ICF Jones & Stokes. 2009. High School Number 12. Draft Program Environmental Impact Report. Report dated January 2009. Prepared for Grossmont Union High School District, San Diego, CA.

Miner, K. L., and D. C. Stokes. 2005. Bats in the South Coast Ecoregion: Status, Conservation Issues, and Research Needs. USDA Forest Service Gen. Tech. Rep. PSW-GTR-195.

Osborne, K. H. 2013. Year 2013 Quino Checkerspot Butterfly Monitoring for the SDG&E Sunrise Powerlink Habitat Restoration Project, San Diego County.

Osborne, K. H. 2014. Year 2014 Quino Checkerspot Butterfly Monitoring for the SDG&E Sunrise Powerlink Habitat Restoration Project, San Diego County.

Osborne, K. H. 2015. Year 2015 Quino Checkerspot Butterfly Monitoring for the SDG&E Sunrise Powerlink Habitat Restoration Project, San Diego County.

Osborne, K. H. 2016. Year 2016 Quino Checkerspot Butterfly Monitoring for the SDG&E Sunrise Powerlink Habitat Restoration Project, San Diego County.

Osborne, K. H. 2017. Year 2017 Quino Checkerspot Butterfly Monitoring for the SDG&E Sunrise Powerlink Habitat Restoration Project, San Diego County.

RECON Environmental, Inc. 2018. Annual Report for the Otay Ranch Preserve January 1–December 31, 2017.

RECON Environmental, Inc. 2019. Annual Report for the Otay Ranch Preserve January 1–December 31, 2018.

Rochester, C. J., K. L. Baumberger, and R. N. Fisher. 2017. Draft Final Western Spadefoot (*Spea hammondii*): Independent Scientific Advisor Report for the City of Santee MSCP Subarea Plan.

San Diego Habitat Conservancy. 2019. Otay Crossings Commerce Park On-site Biological Open Space Annual Report. PDS2016-RMP-16–004.

San Diego Management and Monitoring Program and The Nature Conservancy. 2017. The Management and Monitoring Strategic Plan for Conserved Lands in Western San Diego County: A Strategic Habitat Conservation Roadmap. Report prepared for San Diego Association of Governments and published online at https://sdmmp.com/mspdoc.php.

Searcy, C. A., E. Gabbai-Saldate, and H. B. Shaffer. 2013. Microhabitat use and migration distance of an endangered grassland amphibian. Biological Conservation 158:80–87.

Semlitsch, R. D. 1998. Biological delineation of terrestrial buffer zones for pond-breeding salamanders. Conservation Biology 12:1113–1119.

Semlitsch, R. D. 2008. Differentiating migration and dispersal processes for pond-breeding amphibians. Journal of Wildlife Management 72:260–267.

Semlitsch, R. D., and J. B. Jensen. 2001. Core habitat, not buffer zone. National Wetlands Newsletter 23:5–6, 11.

Semlitsch, R. D., and J. R. Bodie. 2003. Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. Conservation Biology 17:1219–1228.

Sims, L.L., Tjosvold, S., Chambers, D., and Garbelotto, M. 2018. Control of *Phytophthora* species in plant stock for habitat restoration through best management practices. Plant Pathology 68:196–204.

Sims, L.L., and Garbelotto, M. 2021. *Phytophthora* species repeatedly introduced in Northern California through restoration projects can spread into adjacent sites. Biological Invasions.

Stebbins, R. C., and S. M. McGinnis. 2012. Field guide to amphibians and reptiles of California. California Natural History Guides. Revised Edition. Berkeley: UC Press.

Stokes, D. C., C. S. Brehme, S. A. Hathaway, and R. N. Fisher. 2005. Bat Inventory of the Multiple Species Conservation Program Area in San Diego County, California, 2002–2004. US Geological Survey, Western Ecological Research Center; final report prepared for the County of San Diego and California Department of Fish and Game.

Stokes. D. 2018. Draft final report for focused Pallid Bat (*Antrozous pallidus*) and Townsend's Big-eared Bat (*Corynorhinus townsendii*) surveys in San Diego County, California. Report prepared by the San Diego Natural History Museum for the San Diego Management and Monitoring Program.

US Fish and Wildlife Service. 2005. Recovery plan for vernal pool ecosystems of California and southern Oregon. Portland, OR.

Exhibit B

Robert A. Hamilton

President, Hamilton Biological, Inc.

Expertise

Endangered Species Surveys
General Biological Surveys
CEQA Analysis
Population Monitoring
Vegetation Mapping
Construction Monitoring
Noise Monitoring
Open Space Planning
Natural Lands Management

Education

1988. Bachelor of Science degree in Biological Sciences, University of California, Irvine

Professional Experience

1994 to Present. Independent Biological Consultant, Hamilton Biological, Inc.

1988 to 1994. Biologist, LSA Associates, Inc.

Permits

Federal Permit No. TE-799557 to survey for the Coastal California Gnatcatcher and Southwestern Willow Flycatcher

MOUs with the California Dept. of Fish and Game to survey for Coastal California Gnatcatcher, Southwestern Willow Flycatcher, and Coastal Cactus Wren.

California Scientific Collecting Permit No. SC-001107

Robert A. Hamilton has been providing biological consulting services in southern California since 1988. He spent the formative years of his career at the firm of LSA Associates in Irvine, where he was a staff biologist and project manager. He has worked as an independent and on-call consultant since 1994, incorporating his business as Hamilton Biological, Inc., in 2009. The consultancy specializes in the practical application of environmental policies and regulations to land management and land use decisions in southern California.

A recognized authority on the status, distribution, and identification of birds in California, Mr. Hamilton is the lead author of two standard references describing aspects of the state's avifauna: *The Birds of Orange County: Status & Distribution* and *Rare Birds of California.* Mr. Hamilton has also conducted extensive studies in Baja California, and for seven years edited the Baja California Peninsula regional reports for the journal *North American Birds*. He served ten years on the editorial board of *Western Birds* and regularly publishes in peer-reviewed journals. He is a founding member of the Coastal Cactus Wren Working Group and in 2011 updated the Cactus Wren species account for *The Birds of North America Online*. Mr. Hamilton's expertise includes vegetation mapping. From 2007 to 2010 he worked as an on-call biological analyst for the County of Los Angeles Department of Regional Planning. From 2010 to present he has conducted construction monitoring and focused surveys for special-status bird species on the Tehachapi Renewable Transmission Project (TRTP). He is a former member of the Los Angeles County Significant Ecological Areas Technical Advisory Committee (SEATAC).

Mr. Hamilton conducts general and focused biological surveys of small and large properties as necessary to obtain various local, state, and federal permits, agreements, and clearances. He also conducts landscape-level surveys needed by land managers to monitor songbird populations. Mr. Hamilton holds the federal and state permits and MOUs listed to the left, and he is recognized by federal and state resource agencies as being highly qualified to survey for the Least Bell's Vireo. He also provides nest-monitoring services in compliance with the federal Migratory Bird Treaty Act and California Fish & Game Code Sections 3503, 3503.5 and 3513.

Board Memberships, Advisory Positions, Etc.

Friends of Colorado Lagoon, Board Member (2014–present)

Coastal Cactus Wren Working Group (2008–present)

Los Angeles County Significant Ecological Areas Technical Advisory Committee (SEATAC) (2010–2014)

American Birding Association: Baja Calif. Peninsula Regional Editor, North American Birds (2000–2006)

Western Field Ornithologists: Associate Editor of Western Birds (1999–2008)

California Bird Records Committee (1998–2001)

Nature Reserve of Orange County: Technical Advisory Committee (1996–2001)

California Native Plant Society, Orange County Chapter: Conservation Chair (1992–2003)

Professional Affiliations

American Ornithologists' Union

Cooper Ornithological Society

Institute for Bird Populations

California Native Plant Society

Southern California Academy of Sciences

Western Foundation of Vertebrate Zoology

Mr. Hamilton is an expert photographer, and typically provides photo-documentation and/or video documentation as part of his services.

Drawing upon a robust, multi-disciplinary understanding of the natural history and ecology of his home region, Mr. Hamilton works with private and public land owners, as well as governmental agencies and interested third parties, to apply the local, state, and federal land use policies and regulations applicable to each particular situation. Mr. Hamilton has amassed extensive experience in the preparation and independent review of CEQA documents, from relatively simple Negative Declarations to complex supplemental and recirculated Environmental Impact Reports. In addition to his knowledge of CEQA and its Guidelines, Mr. Hamilton understands how each Lead Agency brings its own interpretive variations to the CEQA review process.

Representative Project Experience

From 2008 to present, Mr. Hamilton has served as the main biological consultant for the Banning Ranch Conservancy, a local citizens' group that successfully defeated efforts to implement a large proposed residential and commercial project on the 400-acre Banning Ranch property in Newport Beach. Mr. Hamilton reviewed, analyzed, and responded to numerous biological reports prepared by the project proponent, and testified at multiple public hearings of the California Coastal Commission. In September 2016, the Commission denied the application for a Coastal Development Permit for the project, citing, in part, Mr. Hamilton's analysis of biological issues. In March 2017, the California Supreme Court issued a unanimous opinion (*Banning Ranch Conservancy v. City of Newport Beach*) holding that the EIR prepared by the City of Newport Beach improperly failed to identify areas of the site that might qualify as "environmentally sensitive habitat areas" under the California Coastal Act. In nullifying the certification of the EIR, the Court found that the City "ignored its obligation to integrate CEQA review with the requirements of the Coastal Act."

Insurance

$3,000,000 professional liability policy (Hanover Insurance Group)

$2,000,000 general liability policy (The Hartford)

$1,000,000 auto liability policy (State Farm)

Other Relevant Experience

Field Ornithologist, San Diego Natural History Museum Scientific Collecting Expedition to Central and Southern Baja California, October/November 1997 and November 2003.

Field Ornithologist, Island Conservation and Ecology Group Expedition to the Tres Marías Islands, Nayarit, Mexico, 23 January to 8 February 2002.

Field Ornithologist, Algalita Marine Research Foundation neustonic plastic research voyages in the Pacific Ocean, 15 August to 4 September 1999 and 14 to 28 July 2000.

Field Assistant, Bird Banding Study, Río Ñambí Reserve, Colombia, January to March 1997.

References

Provided upon request.

From 2012 to 2014, Mr. Hamilton collaborated with Dan Cooper on *A Conservation Analysis for the Santa Monica Mountains "Coastal Zone" in Los Angeles County*, and worked with Mr. Cooper and the County of Los Angeles to secure a certified Local Coastal Program (LCP) for 52,000 acres of unincorporated County lands in the Santa Monica Mountains coastal zone. The work involved synthesizing large volumes of existing baseline information on the biological resources of the study area, evaluating existing land use policies, and developing new policies and guidelines for future development within this large, ecologically sensitive area. A coalition of environmental organizations headed by the Surfrider Foundation selected this project as the "Best 2014 California Coastal Commission Vote" (http://www.surfrider.org/images/uploads/2014CCC_Vote_Chart_FINAL.pdf).

In 2010, under contract to CAA Planning, Mr. Hamilton served as principal author of the *Conservation & Management Plan for Marina del Rey, Los Angeles County, California*. This comprehensive planning document has two overarching goals: (1) to promote the long-term conservation of all native species that exist in, or that may be expected to return to, Marina del Rey, and (2) to diminish the potential for conflicts between wildlife populations and both existing and planned human uses of Marina del Rey (to the benefit of humans and wildlife alike). After peer-review, the Plan was accepted by the Coastal Commission as an appropriate response to the varied challenges posed by colonial waterbirds and other biologically sensitive resources colonizing urban areas once thought to have little resource conservation value.

Contact Information

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Long Beach, CA 90803

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Third Party Review of CEQA Documents

Under contract to cities, conservation groups, homeowners' associations, etc., Mr. Hamilton has reviewed EIRs and other project documentation for the following projects:

- Otay Village 13 (residential, County of San Diego)
- Otay Village 14, Planning Areas 16/19 (residential, County of San Diego)
- Western Snowy Plover Mgmt. Plan (resource management, City of Newport Beach)
- Sanderling Waldorf School (commercial, City of Encinitas)
- Diamond Bar General Plan (open space planning, City of Diamond Bar)
- UC San Diego Long-range Development Plan (institutional, UC Regents)
- El Monte Sand Mining Project (resource extraction, County of San Diego)
- Faria/Southwest Hills Annexation Project (residential, City of Pittsburg)
- Los Cerritos Oil Consolidation/Wetland Restoration Project (resource extraction/habitat restoration, City of Long Beach)
- Safari Highlands Ranch (residential, City of Escondido)
- Newland Sierra (residential, County of San Diego)
- Harmony Grove Village South (residential, County of San Diego)
- Vegetation Treatment Program (statewide fire management plan, California Department of Forestry and Fire Protection)
- Watermark Del Mar Specific Plan (residential, City of Del Mar)
- Newport Banning Ranch (residential/commercial, City of Newport Beach)
- Davidon/Scott Ranch (residential, City of Petaluma)
- Mission Trails Regional Park Master Plan (open space planning, City of San Diego)
- Esperanza Hills (residential, County of Orange)
- Warner Ranch (residential, County of San Diego)
- Dog Beach, Santa Ana River Mouth (open space planning, County of Orange)
- Gordon Mull subdivision (residential, City of Glendora)
- The Ranch at Laguna Beach (resort, City of Laguna Beach)
- Sunset Ridge Park (city park, City of Newport Beach)
- The Ranch Plan (residential/commercial, County of Orange)
- Southern Orange County Transportation Infrastructure Improvement Project (Foothill South Toll Road, County of Orange)
- Gregory Canyon Landfill Rest. Plan (proposed mitigation, County of San Diego)
- Montebello Hills Specific Plan EIR (residential, City of Montebello; 2009 and 2014 circulations)
- Cabrillo Mobile Home Park (illegal wetland filling, City of Huntington Beach)
- Newport Hyatt Regency (timeshare conversion project, City of Newport Beach)
- Lower San Diego Creek "Emergency Repair Project" (flood control, County of Orange)
- Tonner Hills (residential, City of Brea)
- The Bridges at Santa Fe Units 6 and 7 (residential, County of San Diego)
- Villages of La Costa Master Plan (residential/commercial, City of Carlsbad)
- Whispering Hills (residential, City of San Juan Capistrano)
- Santiago Hills II (residential/commercial, City of Orange)
- Rancho Potrero Leadership Academy (youth detention facility, County of Orange)
- Saddle Creek/Saddle Crest (residential, County of Orange)
- Frank G. Bonelli Regional County Park Master Plan (County of Los Angeles)

Selected Presentations

Hamilton, R. A. Birds of Colorado Lagoon. 2018-2019. 60-minute multimedia presentation on the history and avifauna of Colorado Lagoon in southeastern Long Beach, given at Audubon Society chapter meetings.

Hamilton, R. A. Six Legs Good/Invertebral Limit. 2012-2020. 60-to-90-minute multimedia presentation on the identification and photography of dragonflies, damselflies, butterflies, and other invertebrates, given at Audubon Society chapter meetings, Irvine Ranch Conservancy, etc.

Hamilton, R. A., and Cooper, D. S. 2016. Nesting Bird Policies: We Can Do Better. Twenty-minute multimedia presentation at The Wildlife Society Western Section Annual Meeting, February 23, 2016.

Hamilton, R. A. 2012. Identification of Focal Wildlife Species for Restoration, Coyote Creek Watershed Master Plan. Twenty-minute multimedia presentation given at the Southern California Academy of Sciences annual meeting at Occidental College, Eagle Rock, 4 May. Abstract published in the Bulletin of the Southern California Academy of Sciences No. 111(1):39.

Hamilton, R. A., and Cooper, D. S. 2009-2010. Conservation & Management Plan for Marina del Rey. Twenty-minute multimedia presentation given to different governmental agencies and interest groups.

Hamilton, R. A. 2008. Cactus Wren Conservation Issues, Nature Reserve of Orange County. One-hour multimedia presentation for Sea & Sage Audubon Society, Irvine, California, 25 November.

Hamilton, R. A., Miller, W. B., Mitrovich, M. J. 2008. Cactus Wren Study, Nature Reserve of Orange County. Twenty-minute multimedia presentation given at the Nature Reserve of Orange County's Cactus Wren Symposium, Irvine, California, 30 April 2008.

Hamilton, R. A. and K. Messer. 2006. 1999-2004 Results of Annual California Gnatcatcher and Cactus Wren Monitoring in the Nature Reserve of Orange County. Twenty-minute multimedia presentation given at the Partners In Flight meeting: Conservation and Management of Coastal Scrub and Chaparral Birds and Habitats, Starr Ranch Audubon Sanctuary, 21 August 2004; and at the Nature Reserve of Orange County 10th Anniversary Symposium, Irvine, California, 21 November.

Publications

Gómez de Silva, H., Villafaña, M. G. P., Nieto, J. C., Cruzado, J., Cortés, J. C., Hamilton, R. A., Vásquez, S. V., and Nieto, M. A. C. 2017. Review of the avifauna of The Tres Marías Islands, Mexico, including new and noteworthy records. *Western Birds* 47:2–25.

Hamilton, R. A. 2014. Book review: The Sibley Guide to Birds, Second Edition. *Western Birds* 45:154–157.

Cooper, D. S., R. A. Hamilton, and S. D. Lucas. 2012. A population census of the Cactus Wren in coastal Los Angeles County. *Western Birds* 43:151–163.

Hamilton, R. A., J. C. Burger, and S. H. Anon. 2012. Use of artificial nesting structures by Cactus Wrens in Orange County, California. *Western Birds* 43:37–46.

Hamilton, R. A., Proudfoot, G. A., Sherry, D. A., and Johnson, S. 2011. Cactus Wren (*Campylorhyn-chus brunneicapillus*), *in* The Birds of North America Online (A. Poole, ed.). Cornell Lab of Ornithology, Ithaca, NY.

Hamilton, R. A. 2008. Cactus Wrens in central & coastal Orange County: How will a worst-case scenario play out under the NCCP? *Western Tanager* 75:2–7.

Erickson, R. A., R. A. Hamilton, R. Carmona, G. Ruiz-Campos, and Z. A. Henderson. 2008. Value of perennial archiving of data received through the North American Birds regional reporting system: Examples from the Baja California Peninsula. *North American Birds* 62:2–9.

Erickson, R. A., R. A. Hamilton, and S. G. Mlodinow. 2008. Status review of Belding's Yellowthroat *Geothlypis beldingi*, and implications for its conservation. Bird Conservation International 18:219–228.

Hamilton, R. A. 2008. Fulvous Whistling-Duck (*Dendrocygna bicolor*). Pp. 68-73 *in* California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California (Shuford, W. D. and T. Gardali, eds.). Studies of Western Birds 1. Western Field Ornithologists, Camarillo, CA, and California Department of Fish and Game, Sacramento, CA.

California Bird Records Committee (R. A. Hamilton, M. A. Patten, and R. A. Erickson, editors.). 2007. Rare Birds of California. Western Field Ornithologists, Camarillo, CA.

Hamilton, R. A., R. A. Erickson, E. Palacios, and R. Carmona. 2001–2007. *North American Birds* quarterly reports for the Baja California Peninsula Region, Fall 2000 through Winter 2006/2007.

Hamilton, R. A. and P. A. Gaede. 2005. Pink-sided × Gray-headed Juncos. *Western Birds* 36:150–152.

Mlodinow, S. G. and R. A. Hamilton. 2005. Vagrancy of Painted Bunting (*Passerina ciris*) in the United States, Canada, and Bermuda. *North American Birds* 59:172–183.

Erickson, R. A., R. A. Hamilton, S. González-Guzmán, G. Ruiz-Campos. 2002. Primeros registros de anidación del Pato Friso (*Anas strepera*) en México. Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Serie Zoología 73(1):67–71.

Hamilton, R. A. and J. L. Dunn. 2002. Red-naped and Red-breasted sapsuckers. *Western Birds* 33:128–130.

Hamilton, R. A. and S. N. G. Howell. 2002. Gnatcatcher sympatry near San Felipe, Baja California, with notes on other species. *Western Birds* 33:123–124.

Hamilton, R. A. 2001. Book review: The Sibley Guide to Birds. *Western Birds* 32:95–96.

Hamilton, R. A. and R. A. Erickson. 2001. Noteworthy breeding bird records from the Vizcaíno Desert, Baja California Peninsula. Pp. 102-105 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Hamilton, R. A. 2001. Log of bird record documentation from the Baja California Peninsula archived at the San Diego Natural History Museum. Pp. 242–253 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Hamilton, R. A. 2001. Records of caged birds in Baja California. Pp. 254–257 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Erickson, R. A., R. A. Hamilton, and S. N. G. Howell. 2001. New information on migrant birds in northern and central portions of the Baja California Peninsula, including species new to Mexico. Pp. 112–170 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Howell, S. N. G., R. A. Erickson, R. A. Hamilton, and M. A. Patten. 2001. An annotated checklist of the birds of Baja California and Baja California Sur. Pp. 171–203 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Ruiz-Campos, G., González-Guzmán, S., Erickson, R. A., and Hamilton, R. A. 2001. Notable bird specimen records from the Baja California Peninsula. Pp. 238–241 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Wurster, T. E., R. A. Erickson, R. A. Hamilton, and S. N. G. Howell. 2001. Database of selected observations: an augment to new information on migrant birds in northern and central portions of the Baja California Peninsula. Pp. 204–237 *in* Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

Erickson, R. A. and R. A. Hamilton, 2001. Report of the California Bird Records Committee: 1998 records. *Western Birds* 32:13–49.

Hamilton, R. A., J. E. Pike, T. E. Wurster, and K. Radamaker. 2000. First record of an Olive-backed Pipit in Mexico. *Western Birds* 31:117–119.

Hamilton, R. A. and N. J. Schmitt. 2000. Identification of Taiga and Black Merlins. *Western Birds* 31:65–67.

Hamilton, R. A. 1998. Book review: Atlas of Breeding Birds, Orange County, California. *Western Birds* 29:129–130.

Hamilton, R. A. and D. R. Willick. 1996. The Birds of Orange County, California: Status and Distribution. Sea & Sage Press, Sea & Sage Audubon Society, Irvine.

Hamilton, R. A. 1996–98. Photo Quizzes. *Birding* 27(4):298-301, 28(1):46-50, 28(4):309-313, 29(1): 59-64, 30(1):55–59.

Erickson, R. A., and Hamilton, R. A. 1995. Geographic distribution: *Lampropeltis getula californiae* (California Kingsnake) in Baja California Sur. *Herpetological Review* 26(4):210.

Bontrager, D. R., R. A. Erickson, and R. A. Hamilton. 1995. Impacts of the October 1993 Laguna fire on California Gnatcatchers and Cactus Wrens. *in* J. E. Keeley and T. A. Scott (editors). Wildfires in California Brushlands: Ecology and Resource Management. International Association of Wildland Fire, Fairfield, Washington.

Erickson, R. A., R. A. Hamilton, S. N. G. Howell, M. A. Patten, and P. Pyle. 1995. First record of Marbled Murrelet and third record of Ancient Murrelet for Mexico. *Western Birds* 26: 39–45.

Erickson, R. A., and R. A. Hamilton. 1993. Additional summer bird records for southern Mexico. *Euphonia* 2(4): 81–91.

Erickson, R. A., A. D. Barron, and R. A. Hamilton. 1992. A recent Black Rail record for Baja California. *Euphonia* 1(1): 19–21.

Exhibit C

Tom Brohard and Associates

November 12, 2021

Mr. Josh Chatten-Brown
Chatten-Brown, Carstens & Minteer
302 Washington Street, #710
San Diego, CA 92103

SUBJECT: Alpine County Park Project – Traffic Safety Issues

Dear Mr. Chatten-Brown:

Tom Brohard, P.E., has reviewed the September 2021 Draft Environmental Impact Report (Draft EIR), the Concept Plan, and the July 2020 Transportation Impact Study (TIS) for the Proposed Alpine County Park Project within the unincorporated community of Alpine in San Diego County. The Proposed Project includes 24 acres of active park uses on the west and north sides of South Grade Road. Facilities and amenities include a baseball field, soccer fields, skate park, bike skills area, dog park, basketball and pickleball courts, playground, fitness stations, equestrian staging area with corral, community garden, picnic areas with shade structures, picnic tables, and multi-use trails.

In my over 50-years of traffic engineering and transportation planning experience, I believe that this is one of the worst Transportation Impact Studies whose unsupported conclusions and recommendations were then carried forward into the Draft Environmental Impact Report.

A linear parking lot with about 250 parking spaces is proposed along both sides of a two-way driveway that accesses South Grade Road at each end. The maximum parking demand must be calculated, and provisions must be added (such as event scheduling) to contain all parking within the site so it does not overflow the park onto South Grade Road or into the adjacent residential areas. No parkway or roadway improvements such as sidewalks for pedestrians, lanes for bicyclists, or turning lanes for vehicles on South Grade Road are shown on the Concept Plan or described in any of the documents.

My review disclosed that the lack of sidewalks, bicycle lanes, and turning lanes on South Grade Road will compromise traffic safety for users of the proposed park and for those passing by. Physical infrastructure improvements must be thoroughly studied now and implemented with the Project. This letter points out inconsistencies and conflicts among the various documents and recommends that these items be resolved. Implementing recommendations in the documents to install unwarranted multi-way STOP controls 700 feet apart on high-speed South Grade Road where stopping sight distance is inadequate will significantly increase the potential for numerous severe injuries and/or fatal traffic collisions, some involving pedestrians.

81905 Mountain View Lane, La Quinta, California 92253-7611
Phone (760) 398-8885
Email tbrohard0@gmail.com

Education and Experience

Since receiving a Bachelor of Science in Engineering from Duke University in Durham, North Carolina in 1969, I have gained over 50 years of professional traffic engineering and transportation planning experience. I am licensed as a Professional Civil Engineer both in California and Hawaii and as a Professional Traffic Engineer in California. I formed Tom Brohard and Associates in 2000 and have served sixteen diverse communities as the City Traffic Engineer and/or the Transportation Planner. During my career in both the public and private sectors, I have reviewed numerous environmental documents and traffic studies for various projects as shown in a brief summary of my experience in the enclosed resume.

South Grade Road Conditions

- Google Earth photography dated June 2019 shows that South Grade Road adjacent to the Proposed Park is comprised of an 11' travel lane with a 2' wide asphalt shoulder in each direction.

  Comment: Development of this park or any other project on this site must be required to provide street improvements as called out by the County of San Diego Department of Public Works (DPW) for the entire frontage of the project, plus adequate transitions, and tapers to join existing improvements to the north and west.

- The exiting travel lanes are separated by a double yellow centerline which prohibits passing and the narrow shoulders are delineated by a 4" wide white edge stripe.

  Comment: The need for left turn lanes for traffic entering at the park access points as well as for acceleration and deceleration lanes must be evaluated and incorporated into the park project.

- The roadway contains a horizontal curve as the alignment changes from north/south to east/west approximately midway adjacent to the park site. The curve is posted in both directions with 90-degree curve warning signs and advisory 30 MPH speed plates. North of the curve, the regulatory posted speed limit is 40 MPH, and it is 45 MPH south of the curve.

  Comment: Improvements to South Grade Road must be designed in accordance with sight distance requirements for the design speeds on the roadway, 10 MPH above existing posted speed limits of 40 and 45 MPH.

Alternate Modes of Transportation

- Page 4.17-2 of the Draft EIR states "The closest bus stop is approximately 0.88 miles north of the project site."

  Comment: With this condition and without any sidewalk improvements, no park users can be expected to use public transportation to reach the closest bus stop and then walk to or from the Proposed Park.

- Page 4.17-2 of the Draft EIR states "There are no bike facilities along South Grade Road adjacent to the project site. All County roadways are open for travel by bicycle regardless of bikeway treatment."

  Comment: With narrow shoulders and traffic speeds of many vehicles on South Grade Road likely exceeding the posted speed limits of 40 and 45 MPH, it is unsafe for even an experienced bicycle rider to use South Grade Road to and from the park. While the heading in the Draft EIR on Page 4.17-2 indicates "Pedestrian and Bicycle Facilities"; the total lack of all pedestrian facilities is not mentioned or discussed.

- The Concept Plan indicates that the park facilities will be separated from South Grade Road by a "bermed landscape screen." Page 4.17-9 of the Draft EIR states "The project includes improvements to circulation facilities including a decomposed granite walking path situated between the proposed berm and South Grade Road..."

  Comment: This walking path is not shown on the Concept Plan. Either a sidewalk within the public right of way or a walking path within the park should be provided to improve pedestrian safety.

Project Access Considerations

- Page 4.17-12 of the Draft EIR states "The project would involve two ingress/egress driveways providing access to the parking and staging areas within the park from South Grade Road. As part of the standard project approval process, the proposed access improvements would be reviewed by the County Department of Public Works (DPW) for safety and sight distance standards. Upon review of the improvements, County DPW would either approve the plans or provide specific recommendations for improving the safety of the proposed ingress/egress. County DPR would comply with all recommendations of County DPW."

  Comment: Now is the time to evaluate basic traffic engineering requirements and conditions at the access points such as stopping sight distance as well as the need for left turn lanes. The TIS should have

evaluated these items but failed to do so. Relying on DPW to catch design oversights during the plan review process is not appropriate.

- Page 4.17-12 of the Draft EIR states "Based on the queuing analysis, the vehicle queues at the project driveways and South Grade Road are expected to fit within the existing storage and would not impede traffic at the driveway or the adjacent roadway system."

  Comment: Without any improvements such as separate left turn lanes on South Grade Road at the project access driveways, eastbound and northbound vehicles will be required to wait in the high speed through lane until opposing traffic passes. This condition creates significant safety issues, particularly if the vehicle at the northern vehicle park access is a slow-moving pick-up truck hauling a horse trailer and waiting to access the equestrian facilities.

- In discussing the park access at Calle de Compadres, Page 4.17-13 of the Draft EIR states "...the intersection does not meet the minimum peak hour volumes for an all-way stop controlled intersection... The intersection at Calle de Compadres will operate with an all-way stop controlled intersection."

  Comment: From Google Earth photographs, Calle de Compadres provides access to six properties east of South Grade Road. The west leg will provide primary access to the park, serving about 250 vehicle trips a day in and out. To be effective by commanding respect of motorists as an all-way stop, traffic volumes on South Grade Road should be about equal to those at the park/Calle de Compadres. Multi-way stop control is not warranted at this intersection as the traffic volumes on South Grade Road are many times greater than on the cross streets. The TIS and Draft EIR should not propose multi-way Stop control if warrants are not satisfied. Installing unwarranted multi-way stop control will create more serious traffic collisions than would otherwise occur, especially when installed at locations with high vehicle speeds on the major roadway.

- In discussing the park access at Calle de Compadres, Page iii as well as multiple other pages in the TIS state "...the intersection does not meet the minimum peak hour volumes for an all-way stop controlled intersection. However, due to a number of pedestrian collisions occurring in the vicinity of this intersection, and since the project driveway at this intersection is considered an important and integral safety design feature of the Proposed Project, it is suggested that this intersection be converted to an all-way stop-controlled intersection with implementation of the Alpine Community Park. All-way stop controls would provide for an enhanced pedestrian safety route from the residential neighborhood on the east side

of South Grade Road to the park as well as reduce the potential severity conflict between pedestrians and motorists."

Comment: The TIS has not disclosed or analyzed the "number of pedestrian collisions occurring in the vicinity of this intersection." There are no sidewalks in the vicinity of this intersection or on any of the other residential side streets that could channelize pedestrians to a single crossing point. Only six homes are served by Calle de Compadres, and other unconnected residential streets are further away. Unwarranted multi-way stops on this high-speed road with highly unbalanced intersection traffic volumes defies proper traffic engineering judgement and rationale. All-way stop controls would not provide for an enhanced pedestrian safety route from the residential neighborhood on the east side of South Grade Road to the park. Furthermore, the severe conflict between pedestrians and motorists would be increased and not reduced as stated in the TIS.

- In discussing the intersection of South Grade Road and Via Viejas, Page 37 of the TIS states "...the intersection does not meet the minimum peak hour volumes for an all-way stop controlled intersection. However, due to the high pedestrian volumes that the Alpine Community Park is anticipated to generate, it is recommended to convert the intersection to an all-way stop controlled intersection to control vehicle/pedestrian conflicts... It is important to note that "STOP AHEAD" signs are recommended to be installed on the south leg of the intersection as the stopping sight distance at this approach is not met (360 feet required)."

  Comment: First, no vehicle or pedestrian access through the landscaped berm in the park to South Grade Road opposite Via Viejas is proposed in the Concept Plan. The TIS has not forecast the number of pedestrian crossings between the park and Via Viejas in order to properly determine if stop signs on South Grade Road would be warranted based upon pedestrian crossings. I believe few pedestrians will cross as there are no sidewalks on any of the residential side streets to the east. Providing an unwarranted multi-way stop on a high-speed road where motorists may not believe there is a legitimate reason to stop and where there is inadequate stopping sight distance defies proper traffic engineering judgement and rationale. If implemented, multi-way stop control on South Grade Road at Via Viejas will create unsafe conditions. All-way stop controls would not provide for an enhanced pedestrian safety route from the residential neighborhood on the east side of South Grade Road to the park. Furthermore, the potential severe conflict between pedestrians and motorists would be increased and not reduced as stated in the TIS.

In summary, further study must be made to properly address the numerous comments in this letter. Following recommendations to install unwarranted multi-way STOP controls 700 feet apart on high-speed South Grade Road where stopping sight distance is inadequate will significantly increase the potential for numerous serious injury and/or fatal traffic collisions, with some likely involving pedestrians.

If you have questions regarding these comments, please contact me at your convenience.

Respectfully submitted,

Tom Brohard and Associates

Tom Brohard, PE
Principal

Enclosure





Tom Brohard, PE

Licenses: 1975 / Professional Engineer / California – Civil, No. 24577
1977 / Professional Engineer / California – Traffic, No. 724
2006 / Professional Engineer / Hawaii – Civil, No. 12321

Education: 1969 / BSE / Civil Engineering / Duke University

Experience: 50 Years

Memberships: 1977 / Institute of Transportation Engineers – Fellow, Life
1978 / Orange County Traffic Engineers Council - Chair 1982-1983
1981 / American Public Works Association – Life Member

Tom is a recognized expert in the field of traffic engineering and transportation planning. His background also includes responsibility for leading and managing the delivery of various contract services to numerous cities in Southern California.

Tom has extensive experience in providing transportation planning and traffic engineering services to public agencies. In addition to conducting traffic engineering investigations for Los Angeles County from 1972 to 1978, he has previously served as City Traffic Engineer in the following communities:

- Bellflower ..... 1997 - 1998
- Bell Gardens ..... 1982 - 1995
- Big Bear Lake..... 2006 - 2015
- Indio..... 2005 - 2019
- Huntington Beach ..... 1998 - 2004
- Lawndale..... 1973 - 1978
- Los Alamitos ..... 1981 - 1982
- Oceanside..... 1981 - 1982
- Paramount ..... 1982 - 1988
- Rancho Palos Verdes ..... 1973 - 1978
- Rolling Hills ..... 1973 - 1978, 1985 - 1993
- Rolling Hills Estates ..... 1973 - 1978, 1984 - 1991
- San Fernando..... 2004 - 2019
- San Marcos..... 1981
- Santa Ana ..... 1978 - 1981
- Westlake Village ..... 1983 - 1994

During these assignments, Tom has supervised City staff and directed other consultants including traffic engineers and transportation planners, traffic signal and street lighting personnel, and signing, striping, and marking crews. He has secured over $10 million in grant funding for various improvements. He has managed and directed many traffic and transportation studies and projects. While serving these communities, he has personally conducted investigations of hundreds of citizen requests for various traffic control devices. Tom has also successfully presented numerous engineering reports at City Council, Planning Commission, and Traffic Commission meetings in these and other municipalities.

In his 14 years of service to the City of Indio, Tom accomplished the following:

- Oversaw preparation and adoption of the 2008 Circulation Element Update of the General Plan including development of Year 2035 buildout traffic volumes, revised and simplified arterial roadway cross sections, and reduction in acceptable Level of Service criteria under certain conditions.

- Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Jackson Street and on Monroe Street over I-10 as well as justifications for protected-permissive left turn phasing at I-10 on-ramps, the first such installations in Caltrans District 8 in Riverside County; reviewed plans and provided assistance during construction of both $2 million projects to install traffic signals and widen three of four ramps at these two interchanges under Caltrans encroachment permits.

- Reviewed traffic signal, signing, striping, and work area traffic control plans for the County's $45 million I-10 Interchange Improvement Project at Jefferson Street.

- Reviewed traffic impact analyses for Project Study Reports evaluating different alternatives for buildout improvements of the I-10 Interchanges at Jefferson Street, Monroe Street, Jackson Street and Golf Center Parkway.

- Oversaw preparation of plans, specifications, and contract documents and provided construction assistance for over 70 traffic signal installations and modifications.

- Reviewed and approved over 2,000 work area traffic control plans as well as signing and striping plans for all City and developer funded roadway improvement projects.

- Oversaw preparation of a City-wide traffic safety study of conditions at all schools.

- Obtained $47,000 grant from the California Office of Traffic Safety and implemented the City's Traffic Collision Database System. Annually reviews "Top 25" collision locations and provides traffic engineering recommendations to reduce collisions.

- Prepared over 1,500 work orders directing City forces to install, modify, and/or remove traffic signs, pavement and curb markings, and roadway striping.

- Oversaw preparation of engineering and traffic surveys to establish enforceable speed limits on over 500 street segments.

- Reviewed and approved traffic impact studies for more than 35 major projects and special events including the annual Coachella and Stagecoach Music Festivals.

- Developed and implemented the City's Golf Cart Transportation Program.

Since forming Tom Brohard and Associates in 2000, Tom has reviewed many traffic impact reports and environmental documents for various development projects. He has provided expert witness services and also prepared traffic studies for public agencies and private sector clients.

Exhibit D

BOARD OF SUPERVISORS

NORA VARGAS
First District

JOEL ANDERSON
Second District

TERRA LAWSON-REMER
Third District

NATHAN FLETCHER
Fourth District

JIM DESMOND
Fifth District

COUNTY OF SAN DIEGO

LAND USE AGENDA ITEM

DATE: **October 20, 2021** **05**

TO: Board of Supervisors

SUBJECT
RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE REGIONAL PARK GRANT PROGRAM (DISTRICTS: 1, 2, 5)

OVERVIEW
On June 5, 2018, California voters approved the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 (Proposition 68). Proposition 68 authorized $4.0 billion in general obligation bonds to support projects that enhance environmental and social equity in communities with median household incomes less than 60 percent of the statewide average by expanding access to local and regional outdoor spaces and investing in infrastructure that builds community resiliency. The Statewide Regional Park Grant Program (RPP) funding was made available by Proposition 68. The competitive program is in its first round of applications with $23,125,000 available to create, expand, or improve regional parks and recreational facilities across California. Proposition 68 requires that at least 20% ($4,625,000) of the $23,125,000 is awarded to severely underserved communities with a median household income below $42,737.

The first minimum eligibility criteria for the RPP grant is the project site must be at least 50 acres. The second criteria is a new recreational amenity attracting visitors from at least a 20-mile radius or a county-wide population. The Department of Parks and Recreation (DPR) must submit a resolution adopted by the Board of Supervisors approving one, or more, application(s) for the grant program. DPR uses a Capital Investment Model to assess community needs. This model assesses park infrastructure and compares it to national and local standards to determine how a community's amenities compare to those standards. DPR reviewed all 97 active park projects with this model and compared the projects to the grant eligibility criteria. Four projects met the eligibility requirements. DPR is applying for up to $9,525,000: $3,000,000 each for Alpine County Park, Bonsall Community Park, Sweetwater Summit Regional Park Campground Expansion Phase II, and $525,000 for Stelzer Park Ranger Station and Visitor Center in the community of Lakeside to fund construction. Beyond satisfying minimum qualifications, these projects also meet the majority of RPP's stated priorities.

This request is to adopt a resolution authorizing DPR to apply for, and accept, up to $9,525,000 from the RPP's first round of grant funding administered by the Office of Grants and Local Services (OGALS). In addition, this request would authorize the Director of DPR, or designee, to

conduct all negotiations and to execute and submit all documents that may be necessary to apply for and accept the grant funds. Applications are due November 7, 2021 and grants will be awarded in Spring 2022.

RECOMMENDATION(S)
CHIEF ADMINISTRATIVE OFFICER

1. Find that the proposed project is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the State CEQA Guidelines.

2. Adopt a resolution entitled: RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN DIEGO APPROVING THE APPLICATION FOR REGIONAL PARK PROGRAM GRANT FUNDS

3. Authorize the Director, Department of Parks and Recreation, or designee, as agent of the County, to conduct all negotiations and submit all documents including, but not limited to, applications, contracts, payment requests and to execute the grant agreements, including any extensions or amendments thereof that do not materially impact or alter the grant program or funding levels.

EQUITY IMPACT STATEMENT

Improvements at various parks will ensure continuation of accessible recreational amenities for families and youth throughout the region. It is anticipated that the recreational improvements at Alpine Park and Bonsall Park will be located in two unincorporated communities that do not currently have a County park, and both projects will provide healthy recreational opportunities that are open and accessible to all demographics in the county by providing new parks and recreational facilities. It is anticipated that the campground expansion at Sweetwater Summit Regional Park Campground and the Stelzer Ranger Station and Visitor Center will have a positive health impact on all demographics in the county by expanding two parks and recreational facilities that will remain open and accessible.

FISCAL IMPACT

There is no fiscal impact associated with today's request to apply for and accept grant funds from the Proposition 68 Statewide Regional Park Program Grant. If approved, today's actions would authorize the submittal of one, or more, project application(s) for grant funds up to $9,525,000. There are no matching funds required for this grant.

The Board approved a waiver of Board Policy B-29 for LUEG grants on June 24, 2020 (12), therefore a waiver is not requested as part of this action. The waiver authorizes LUEG department Directors, or designee(s), to submit, negotiate, and execute all documents that may be necessary to secure and spend grant funds for LUEG department projects and/or programmatic activities through June 30, 2025, including, but not limited to, applications, payment requests, agreements, and amendments to the agreements. If a grant is awarded, any unrecovered cost per Board Policy B-29 would be funded by existing General Purpose Revenue in the Department of Parks and Recreation (DPR) as determined by the nature of the project(s) or program(s).

If grant funds are awarded, the DPR will return to the Board of Supervisors to establish the necessary appropriations in Fiscal Year 2022-23. There will be no change in net General Fund cost and no additional staff years associated with the award of this grant. Alpine County Park Phase I, Bonsall Community Park, and Sweetwater Summit Regional Park Campground Expansion Phase II will require staffing additions. The funding source, costs, and full-time employee (FTE) requests will be included in future Operational Plans.

Phase I of Alpine County Park is projected to open in Fiscal Year 2023-24, and ongoing operations will be supported by existing maintenance crews and temporary staff with costs estimated at $322,330 and including the need for 4.0 additional FTEs. These ongoing operations costs have not been allocated and will be included in future Operational Plans for the DPR.

Bonsall Community Park is projected to open in Fiscal Year 2023-24 and will have ongoing costs of approximately $552,000 including the need for 4.0 additional FTEs. These ongoing operations costs have not been allocated and will be included in future Operational Plans for the DPR.

Sweetwater Summit Regional Park Campground Expansion Phase II is projected to open in Fiscal Year 2022-23 and will have ongoing costs of approximately $224,174 including the need for 2.0 additional FTEs.

Stelzer Park Ranger Station and Visitor Center is projected to open in Fiscal Year 2022-23. Upon completion, annual operations and maintenance of improvements will be provided by existing Department of Parks and Recreation staff. The funding source is Department of Parks and Recreation budgeted General Purpose Revenue. There will be no change in net General Fund and no additional staff years.

BUSINESS IMPACT STATEMENT
N/A

ADVISORY BOARD STATEMENT
N/A

BACKGROUND
California voters approved the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 (Proposition 68). Proposition 68 authorized $4.0 billion in general obligation bonds to support projects that enhance environmental and social equity in disadvantaged communities, expand access to local and regional outdoor spaces, invest in infrastructure that builds community resiliency, and protect California's natural, historic, and cultural legacy. Upon passage of Proposition 68, funding for the Statewide Regional Park Program (RPP) was made available. The competitive program is in its first round of applications with $23.125 million available to create, expand, and improve regional park and recreational amenities.

SUBJECT: RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE REGIONAL PARK GRANT PROGRAM (DISTRICTS: 1, 2, 5)

To receive an RPP grant contract, the Department of Parks and Recreation (DPR) must submit a signed resolution approving application(s) for the grant program and one, or more, project application(s) that equal up to the amount of its allocation. DPR must also certify availability of funding to complete, operate, and maintain the project prior to commencement of any project work. In accordance with Public Resources Code §80001(b)(8 A-G), should DPR be selected as a funding recipient, DPR must also consider a range of actions promoting diversity and inclusion as identified in the "Presidential Memorandum – Promoting Diversity and Inclusion in our National Parks, National Forests, and Other Public Lands and Waters." The Presidential Memorandum includes expanding outreach efforts, building partnerships, and improving programs to increase access to parks for diverse populations. DPR is applying for grant funds to support the construction of four large-scale parks that attract visitors county-wide: Alpine County Park, Bonsall Community Park, Stelzer Park Ranger Station and Visitor Center, and Sweetwater Summit Regional Park Campground Expansion Phase II.

The minimum eligibility criteria for the RPP grant are that the project site is at least 50 acres and offers a feature that attracts (or will attract) visitors from at least a 20-mile radius or a county-wide population. DPR uses a Capital Investment Model (CIM) to assess community needs. This model assesses park infrastructure and compares it to national and local standards to determine how the community's amenities compare to these standards. DPR reviewed 97 active park projects with this model and compared the projects to the minimum grant eligibility criteria described above. Four projects met the eligibility requirements: Alpine County Park, Bonsall Community Park , Stelzer County Park Ranger Station and Visitor Center, and Sweetwater Summit Regional Park Campground Expansion Phase II.

Alpine County Park is 98 acres, Bonsall Community Park is 63 acres, Louis A. Stelzer County Park is 373 acres, and Sweetwater Summit Regional Park is 500 acres. DPR is applying for $3,000,000 each for Alpine County Park Phase I, Bonsall Community Park, Sweetwater Summit Regional Park Campground Expansion Phase II, and $525,000 for Stelzer Park Ranger Station and Visitor Center to fund construction of these projects.

The proposed Alpine Community Park is located at the intersection of South Grade Road and Via Viejas in the unincorporated community of Alpine in District 2. Currently, the Alpine community does not have any County-owned active parkland or park amenities. The County acquired the 98-acre site that will become a 25-acre park and 73 acres of preserve land in March 2019. Currently, DPR is finalizing construction documents and an Environmental Impact Report for the park. Design of the park is based on input received during four public outreach meetings conducted between May 2019 and January 2021. Proposed amenities include multiuse pathways, baseball/softball field, basketball court, pickleball courts, restrooms, playgrounds, bike skills park, all-wheel skate park, picnic areas, community garden, dog park, and equestrian staging area. Total project cost is estimated at $28,000,000, and $6,500,000 was appropriated for Alpine Park acquisition, design and environmental analysis in the Fiscal Year 2018-19 Operational Plan, and $10,500,000 was appropriated in Fiscal Year 2021-22 Operational Plan for Phase 1 Construction. Phase 1 construction is anticipated to begin in Fall 2022 and include a baseball field, a dog park, playgrounds, picnic areas, a restroom, equestrian staging area, a volunteer pad, a maintenance

building and pervious parking. Phase 2 is anticipated to include a community garden, sport courts, nature play area, multi-purpose grass area, all-wheel area, and additional trails and additional parking, pending receipt of funding. Phase 3: is anticipated to include a bike skills course, fitness stations, and expansion of the multi-purpose grass area and trail system, pending allocation of funding. DPR will include solar carports and two Electric Vehicle (EV) charging stations in the bidding and construction documents as additive alternates. The solar carports are anticipated to provide enough energy for the energy demands of the park. Additive alternates will be included with the construction contract if the bids received for the base contract and additive alternates are below the total amount of funding available for construction. If awarded, the grant funding would be applied to the project in order to realize the community's vision and provide high-quality, recreational experiences throughout the region.

The proposed Bonsall Community Park is part of the greater San Luis Rey River Park located near the intersection of Highway 76 and Camino Del Rey in the unincorporated community of Bonsall in District 5. Currently, the Bonsall community does not have any County-owned active parkland or park amenities. The County acquired the 63-acre site that will become the new park in 2015. At present, DPR is finalizing construction documents for the park and preparing an environmental analysis. Design of the park is based on input received during three public outreach meetings conducted between April 2019 and November 2020. Proposed amenities include multiuse pathways, soccer fields, baseball/softball fields, basketball courts, tennis courts, restrooms, playgrounds, bike skills park, skate park, picnic areas, and a dog park. To offset electrical usage from proposed buildings and lighting, DPR will include solar carports in the bidding and construction documents as additive alternates. In addition, green infrastructure including pervious parkving, infiltration basins, and low-water use, native plants will be featured at the new park. The proposed improvements will be the first active recreational amenities implemented from the San Luis Rey River Park Master Plan. Total project cost is estimated at $25 million, and $800,000 was appropriated for Bonsall Park in the Fiscal Year 2018-19 Operational Plan, and $22,950,000 was appropriated in the Fiscal Year 2020-21 Operational Plan. If awarded, the grant funding would be applied to the project in order to realize the community's vision and provide high-quality, recreational experiences throughout the region. Construction is anticipated to begin in spring 2022.

The proposed replacement of the Stelzer Ranger Station is located in Louis A. Stelzer County Park (Stelzer Park) off of Wildcat Canyon Road in the unincorporated community of Lakeside in District 2. Stelzer Park is a 420-acre facility that includes several miles of multi-use hiking trails, old-growth canopy trees, play equipment, and a 702 square-foot, single story ranger station that serves as staff headquarters and a visitor center. The existing ranger station was built in 1983. Recent conditions assessments determined that a replacement was needed. The proposed replacement building will be one story, 990 square feet. The new building will create a visitor and interpretive facility in addition to provide office space and storage for the park rangers. In addition to compliance with Title 24 of the California Code of Regulations and the California Green Building Standards Code, the project utilizes rain barrels to capture and reduce runoff. Stelzer Park is the headquarters for the Department of Parks and Recreation's Discovery Program, a program that immerses students and teachers in nature-related activities designed to educate them about

science and history of the local environment. DPR is currently finalizing construction documents for the project and has already completed an environmental analysis. No changes to access the park or parking are required. The total project cost is anticipated to be $500,000, which was appropriated in the Fiscal Year 2018-2019 Operational Plan. If awarded, the grant funding would be applied to the project in order to provide a high-quality, recreational and educational experience available for all visitors. Construction is anticipated to begin in winter 2021-2022.

The proposed Sweetwater Summit Regional Park Campground Expansion Phase II project is located within Sweetwater Regional Park at the intersection of State Route 125 and Summit Meadow Road in the unincorporated community of Sweetwater in District 1. The Sweetwater Regional Park is 500-acres and offers a variety of recreational activities and amenities to the public including 15 miles of multi-use trails, a playground, picnic facilities, a community garden, splash pad, a community building, bicycle skills course, and an amphitheater. The project includes a new photovoltaic solar panel installation which will completely offset the energy requirements of the 27 new campsites. The project also plants shade-providing trees along with a thousand native shrubs. The Sweetwater Summit Campground continues to be one of DPR's most popular facilities, with reservations booking out six months in advance and an average occupancy of 90 percent. Weekends typically reach 100 percent capacity. The proposed project will help meet the consistent demand for campsites at the park by constructing 34 full hook-up campsites, bringing the total number of campsites for the campground to 144, which will complete the facility's masterplan. The project also includes trees, day-use parking, walkways, solar carports, improved circulation throughout the campground and landscaping. DPR will include two Electric Vehicle (EV) charging stations in the bidding and construction documents as additive alternates. Additive alternates will be included with the construction contract if the bids received for the base contract and additive alternates are below the total amount of funding available for construction. By expanding the campground, the proposed project will also increase access to nature by its proximity to Sweetwater Regional Park amenities and adjacent open space areas. DPR is presently finalizing construction documents for the project and has already completed an environmental analysis. The estimated total project cost for the proposed Campground Expansion Phase II is $4,150,000 in the Fiscal Year 2020-21 Operational Plan. If awarded, the grant funding would be applied to the project in order to expand recreational opportunities and provide an improved visitor experience at the existing campground. Construction is anticipated to begin in winter 2021-2022.

The robust public engagement processes for each park, combined with the potential to deliver multiple environmental and social benefits, make each project well-suited to compete for funding statewide. In particular, the projects' capacities to: improve local health and wellness through access to nature and recreation opportunities; enhance community connectivity through the addition of multiuse paths; provide volunteer opportunities through collaboration with the California Conservation Corps, reduce greenhouse gas emissions and energy use through tree-planting and enhanced connectivity, improve stormwater infiltration and local habitat through use of retention basins or native rainwater harvesting gardens, align closely with RPP's stated priorities.

SUBJECT: RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE REGIONAL PARK GRANT PROGRAM (DISTRICTS: 1, 2, 5)

Today's request is to adopt a resolution authorizing DPR to apply for, and accept, up to $9,525,000 in grant funding from the Statewide Park Development and Community Revitalization Program administered by the Office of Grants and Local Services. In addition, this request would authorize the Director, DPR, or designee, to conduct all negotiations, sign and submit all documents, including, but not limited to applications, agreements, amendments, and payment requests that may be necessary to apply for and accept the grant funds. The Department of Parks and Recreation will return to the Board of Supervisors to establish the necessary appropriations in Fiscal Year 2022-23.

ENVIRONMENTAL STATEMENT

The request for approval to apply for and accept grant funding is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the CEQA Guidelines. Section 15061(b)(3) of the CEQA Guidelines provides that a project is exempt from CEQA review where "it can be seen with certainty that there is no possibility the activity in question may have a significant effect on the environment…" The proposed action seeks to authorize the Department of Parks and Recreation to apply for and accept Proposition 68 grant funds to offset costs to develop and implement future projects. Since the action involves delegation of authority to seek and accept grant funding without a commitment to implement any particular project, the action is exempt from CEQA review because it can be seen with certainty that the activity will not have a significant effect on the environment. If funded, each project will be required to comply with CEQA prior to project implementation.

SUBJECT: RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE REGIONAL PARK GRANT PROGRAM (DISTRICTS: 1, 2, 5)

LINKAGE TO THE COUNTY OF SAN DIEGO STRATEGIC PLAN
The proposed actions to adopt resolutions to apply for and accept grant funds, if awarded, support the Sustainable Environments/Thriving Initiative in the County of San Diego's 2021-2026 Strategic Plan by promoting an environment where residents can enjoy parks, open spaces, and outdoor experiences.

Respectfully submitted,



SARAH E. AGHASSI
Deputy Chief Administrative Officer

ATTACHMENT(S)
Attachment A: Vicinity Map
Attachment B: RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN DIEGO APPROVING THE APPLICATION FOR REGIONAL PARK PROGRAM GRANT FUNDS

SUBJECT: RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE REGIONAL PARK GRANT PROGRAM (DISTRICTS: 1, 2, 5)

AGENDA ITEM INFORMATION SHEET

REQUIRES FOUR VOTES: ☐ Yes ☒ No

WRITTEN DISCLOSURE PER COUNTY CHARTER SECTION 1000.1 REQUIRED
☐ Yes ☒ No

PREVIOUS RELEVANT BOARD ACTIONS:
N/A

BOARD POLICIES APPLICABLE:
B-29 Fees, Grants, Revenue Contracts- Department to certify that project would be worthy of County financial support.

BOARD POLICY STATEMENTS:
Board Policy B-29 mandates that departments seek to recover the full cost of all services provided to agencies or individuals outside the County of San Diego organization. Reimbursement by fees, contracts and grants will be for the full cost of all services, with certain exceptions approved by the Board.

The Board approved a waiver of Board Policy B-29 for all LUEG Grants on June 24, 2020 (12). The proposed grant funding from the California Statewide Park Program Grant Program may not offset all administrative costs. If a grant is awarded, any unrecovered cost per Board Policy B-29 would be funded by existing General Purpose Revenue in the Department of Parks and Recreation, as determined by the nature of the project(s) or program(s). The projects to be funded will enhance the quality of life in San Diego County by offering the public exceptional parks and recreation experiences and preserving significant natural resources.

In accordance with Board Policy B-29, the Director of the Department of Parks and Recreation certifies that the activities proposed to be funded by the California Statewide Park Program Grant Program would be worthy of County funding if external financing were unavailable.

MANDATORY COMPLIANCE:
N/A

ORACLE AWARD NUMBER(S) AND CONTRACT AND/OR REQUISITION NUMBER(S):
N/A

ORIGINATING DEPARTMENT: Parks and Recreation

OTHER CONCURRENCE(S): N/A

CONTACT PERSON(S):

SUBJECT: RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE REGIONAL PARK GRANT PROGRAM (DISTRICTS: 1, 2, 5)

Brian Albright	David Norgard
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E-mail	E-mail

Exhibit E

Preserve Alpine's Heritage
Alpine Community Plan Area (CPA) Recreational Facilities
Date: October 7, 2021

Included below are the six parks listed as Local Parks for Alpine CPA on Table 6-4: Parks and Specialty Facilities Serving Each CPA, from the County of San Diego Parks Master Plan, December, 2020. Missing from that list but included here are the facilities at Boulder Oaks Elementary School, Grossmont Adult Education/Alpine Education Center and Van Buskirk Field, all located in Alpine.

1. SUMMARY

Some fields are shared, based on the season. See specifics in Section 2, Details of Facilities By Location

- Baseball: 13 fields
- Basketball: 14 full courts, 1 half court
- Lacrosse: 2 fields
- Parks/Areas with play structures: 7 parks/play areas of varying sizes
- Soccer: 7-11 fields depending on age group
- Softball: 2 fields currently open; 3 additional fields currently closed
- Tennis: 1 court

2. DETAILS OF FACILITIES BY LOCATION

- Facility rating scale is Good - Fair - Poor
- Condition determined by visual observations from May - July, 2021
- Acres included are approximates based on the best available information

Alpine Community Center (ACC) 3.12 total acres (2.25 acres of fields/tennis courts; 0.87 acres of park/playground/grass)	
Owner	Alpine Community Center http://alpinecommunitycenter.com **Objectives of ACC:** To provide a site for youth, senior citizens, family, civic, and community activities; To promote friendship among all peoples in the Alpine Community; To encourage and aid the development of youth in the area; To explore, promote and support innovative and creative programs to meet the changing social and recreational need in the community; To encourage and provide opportunities for recreation and educational growth for all people in the Alpine Community.
Google maps view	https://www.google.com/maps/place/Alpine+Community+Center/@32.8389291,-116.77622,186m/data=!3m1!1e3!4m5!3m4!1s0x80d9608d1a20b2b5:0xb6277cb065893046!8m2!3d32.8382192!4d-116.7757626
Fields/Courts and conditions	Softball (Otto Fields) • One full-size softball field with backstop, dugouts and bleachers. Condition: Good • One smaller softball field with backstop, dugouts and bleachers used for games and practices. Condition: Poor • Announcer's booth/snack bar. Condition: Fair • Batting cage. Condition: Good Tennis

	• One lighted tennis court. Condition: Good
Other amenities and conditions	• Park and playground with seven picnic tables, fenced playground area with multiple play structures, built-in stage and grass lawn area. Condition: Good • Community Center with a variety of indoor and outdoor event and meeting rooms. Condition: Good
Organization(s) known to use facilities	Alpine Girls Softball (includes girls from all of East County and many games are played in El Cajon and Lakeside) www.alpinesoftball.com

Boulder Oaks Elementary School 2.85 total acres (2.85 acres of fields, 0.78 acres of asphalt courts)	
Owner	Alpine Union School District https://www.alpineschools.net
Google maps	https://www.google.com/maps/place/Boulder+Oaks+Elementary+School/@32.8192568,-116.7781493,371m/data=!3m1!1e3!4m12!1m6!3m5!1s0x80d960bed597682f:0xe6e1c001c3714a61!2sBoulder+Oaks+Elementary+School!8m2!3d32.8187664!4d-116.7775683!3m4!1s0x80d960bed597682f:0xe6e1c001c3714a61!8m2!3d32.8187664!4d-116.7775683
Fields/Courts and conditions	Baseball (Fields not used during soccer season) • One baseball field with backstop, dugouts and bleachers. Condition: Poor Soccer (Fields not used during baseball season) • One U8 or three small soccer fields. Condition: Poor
Other amenities and conditions	Unknown
Organization(s) known to use facilities	Alpine Youth Soccer Organization www.alpineayso.org/region295

Boulder Oaks Neighborhood Park 3.97 total acres (3.97 acres of grass/playgrounds)	
Owner	Alpine Union School District https://www.alpineschools.net
Google maps	https://www.google.com/maps/place/Boulder+Neighborhood+Park/@32.8204985,-116.7770847,186m/data=!3m1!1e3!4m9!1m2!2m1!1sboulder+oaks+neighborhood+park!3m5!1s0x80d960beddbd1061:0x5bd256d3e24be78a!8m2!3d32.8206788!4d-116.7766609!15sCh5ib3VsZGVyIG9ha3MgbmVpZ2hib3Job29kIHBhcmtaQAoeYm91bGRlciBvYWtzIG5laWdoYm9yaG9vZCBwYXJrIh5ib3VsZGVyIG9ha3MgbmVpZ2hib3Job29kIHBhcmuSAQRwYXJrmgEjQ2haRFNVaE5NRzluUzBWSlEwRm5TVU5SZEdOVFVGRm5FQUU
Fields/Courts and conditions	No fields or courts
Other amenities and conditions	• Park and playground with 18 picnic tables, some benches, multiple play structures and grass lawn area. Condition: Good to Fair, depending on amenity
Organization(s)	Fit4Mom Alpine and Rancho San Diego

known to use facilities	https://alpine.fit4mom.com San Diego Yo-Yo Club https://www.facebook.com/San-Diego-Yo-Yo-club-107183227832486/

Grossmont Adult Education/Alpine Education Center (former site of Alpine Elementary School) 1.6 total acres (1 acre of grass field; 0.6 acres of asphalt)	
Owner	Alpine Unified School District Currently used by Grossmont Union High School District https://adultschool.guhsd.net/Locations/Alpine-Education-Center/index.html
Google maps	https://www.google.com/maps/place/Alpine+Elementary+School/@32.8385975,-116.7748317,186m/data=!3m1!1e3!4m8!1m2!2m1!1salpine+ca+elementary+school!3m4!1s0x80d9608cdb814cb9:0xd7a6c49ca27e8736!8m2!3d32.8383495!4d-116.7736817
Fields/Courts and conditions	Basketball • Two basketball courts. Condition: Fair Soccer • One artificial turf soccer field. NOTE: Good for practices and games for younger children because not regulation size. Condition: Fair
Other amenities and conditions	• Play structure. Condition: Fair
Organization(s) known to use facilities	Unknown

Joan MacQueen Middle School (JMMS) 7.16 total acres (5.9 acres of fields; 1.26 acres of asphalt)	
Owner	Alpine Union School District https://www.alpineschools.net
Google maps view	https://www.google.com/maps/place/Joan+MacQueen+Middle+School/@32.8240762,-116.7748061,373m/data=!3m1!1e3!4m5!3m4!1s0x80d960bfda1e0f17:0xb0ca8383a4882a8d!8m2!3d32.8249219!4d-116.7736928
Note(s)	Per Dr. Rich Newman, Superintendent of Alpine Union School District, plans for a major renovation of JMMS fields have been approved and the County is expected to fund the project in October or November, 2021. Groundbreaking will happen as soon after that as possible. The area to be renovated is approximately 9 acres.
Fields/Courts and conditions	Basketball • Eight basketball courts. Condition: Poor Lacrosse (Fields not used during soccer season) • One “upper” lacrosse field. Condition: Poor • One “lower” lacrosse field. Condition: Fair

	Soccer (Fields not used during lacrosse season) • One “upper” regulation U12 soccer field. Condition: Poor • One “lower” regulation U10 soccer field. Condition: Fair Softball (Per Alpine Girls Softball website, field is closed) • Two softball fields with back stops, dugouts and bleachers. Condition: Poor • Batting cage. Condition: Poor
Other amenities and conditions	• Gravel track circling the “lower” field. Condition: Poor
Organization(s) known to use facilities	Alpine Youth Soccer Organization www.alpineayso.org/region295 Alpine Eagles Lacrosse https://www.alpineeagleslax.com

Old Ironsides County Park 3.6 total acres	
Owner	San Diego County Department of Parks and Recreation https://www.sdparks.org/content/sdparks/en/park-pages/OldIronsides.html
Google maps	https://www.google.com/maps/place/Old+Ironsides+County+Park,+El+Cajon,+CA+92019/@32.8218489,-116.8298151,601m/data=!3m1!1e3!4m5!3m4!1s0x80d95e38ddb32001:0xc09f8cc6d5fea113!8m2!3d32.8227154!4d-116.8271627
Fields/Courts and conditions	Basketball • One half court. Condition: Good
Other amenities and conditions	• Two playground areas with multiple play structures, one exercise course, seven picnic tables, horseshoe pit, small gazebo. Condition: Good to Fair, depending on amenity • Community Center, restrooms and large outdoor covered meeting area. Condition: Unknown
Organization(s) known to use facilities	Unknown

Rios Baseball Park 9.88 total acres	
Owner	Appears to be San Diego County Department of Parks and Recreation. While Rios Baseball Park is not listed on the County Parks and Rec (DPR) website as a park, a notice posted at the facility states, “The County of San Diego Department of Parks and Recreation is reopening park amenities in sync with public health orders.” An additional 3-page form (with a date of completion of 12/4/20 and naming a contact person who, as of July 22, is an employee of DPR) details the Safe Reopening Plans for the facility. https://www.rioscanyonll.com

Google maps	https://www.google.com/maps/place/Rios+Canyon+Little+League+fields/@32.8571424,-116.8604813,323m/data=!3m1!1e3!4m5!3m4!1s0x80d95f6f71a4595b:0x61e89e0844eecf5!8m2!3d32.8570996!4d-116.859226
Fields/Courts and conditions	Baseball • Four baseball fields with backstops, dugouts and bleachers. Condition: Good – Fair depending on the amenity • Two additional baseball fields. Condition: Poor
Other amenities and conditions	• Snack bar. Condition: Good • Restrooms. Condition: Unknown • Batting cage. Condition: Good • Picnic tables and playground with play structure. Condition: Good
Organization(s) known to use facilities	Rios Canyon Little League https://www.rioscanyonll.com

Shadow Hills Elementary School/Creekside Early Learning Center 7.76 total acres (3.94 acres of fields and 0.6 acres of asphalt at SHES, and 2.2 acres of fields and 1.02 acres of asphalt at CELC,)	
Owner	Alpine Union School District https://www.alpineschools.net
Google Maps view	https://www.google.com/maps/place/Creekside+Early+Learning+Center/@32.8326704,-116.8174808,373m/data=!3m1!1e3!4m5!3m4!1s0x80d95e340c6b36fb:0xbddb006f5c0dc81c!8m2!3d32.8337725!4d-116.8154235
Note(s)	Alpine American Little League and Alpine American Youth Soccer Organization partnered at the end of 2020 to complete significant upgrades to the grass fields behind both schools, including overhauling irrigation, laser leveling the fields, spreading topsoil with seeds for grass and adding new dirt for baseball infields. They each use the facilities during their respective seasons. Alpine Unified School District contributed by fixing a drainage issue on Creekside fields to help with runoff during the rainy season.
Fields/Courts and conditions	Baseball (Fields not used during soccer season) • Two full-size baseball fields with backstops, dugouts and bleachers behind Shadow Hills. Condition: Good • Two smaller baseball fields with backstops, dugouts and bleachers behind Shadow Hills. Condition: Fair for fields, backstops and dugouts; Poor for bleachers. • Two full-size baseball fields with backstops, dugouts, and bleachers behind Creekside. Condition: Good Soccer (Fields not used during baseball season) • Two soccer fields (One U12 and one U10) behind Shadow Hills. For practices, several teams use one field. Condition: Good • One U19 soccer field or two - three fields for younger children behind Creekside. Condition: Good Basketball • Two basketball courts at Shadow Hills. Condition: Fair • Two slightly smaller basketball courts (one with lower baskets) at Creekside. Condition: Fair
Other amenities and conditions	• Snack bar with an announcer's booth. Condition: Fair • Restrooms. Condition: Unknown • Batting cage. Condition: Good • Playground (behind Creekside). Condition: Good
Organization(s)	Alpine American Little League

known to use facilities	www.alpineamericanlittleleague.com Alpine Youth Soccer Organization www.alpineayso.org/region295

Van Buskirk Field **1323 Administration Way, Alpine, CA 91901** 0.88 total acres	
Owner	Alpine Union School District https://www.alpineschools.net
Google maps	https://www.google.com/maps/place/Administration+Way,+Alpine,+CA+91901/@32.8364246,-116.7748212,186m/data=!3m1!1e3!4m5!3m4!1s0x80d9608d6fd3c775:0xfe226b8b63ec7a24!8m2!3d32.8363688!4d-116.7752698
Fields/Courts and conditions	Softball (Per Alpine Girls Softball website, field is closed) • One softball field with backstop, dugouts and bleachers used for practice. Condition: Poor
Other amenities	Unknown
Organization(s) known to use facilities	In the past, Alpine Girls Softball (includes girls from all of East County and many games are played in El Cajon and Lakeside) used the field. www.alpinesoftball.com

Exhibit F


Alpine Parks and Larger Parcels
AID 17 acres
P&R 2.9 acres
AES 1 soccer field
Alpine elementary playing fields 2 acres
AUSD 1 ball field
AUSD rec area 2.5 ac
P&R 2.4 acres
P&R 1.8 acres
Shadow Hills AUSD recreation area 11 acres
Soccer (room for 5 fields)
Shadow Hills 2 ball fields
Walser 12.5ac
Knifing 21.5 ac
P&R 4.6 acres
Tucci 9.ac
P&R 1.8 acres
P&R 2.6 acres
Yee Group 5ac
Nelson 9.5ac
Halstead-Tyler 35.5ac
Bailey 14 acres
Wright's Field Preserve 201 ac
Carpenter 6.5 ac
Light 1.5 ac
JMMS 3 soccer fields
JMMS AUSD Fields 9 acres
Boulder Oaks Park 4.3 ac
Boulder Oaks playfield 3 acres
private
Lionhead Properties LLC 21ac
Tent City Dev Corp 20 ac
Wise 63 ac
SDC 98 acres
proposed 26 acre County Park
300 total parking spaces
park takes 50% of property's CA native grassland (green)
Coleman 21 Acres
P&R 29 ac
Blackwolf Partners 184 ac
(significant mountain bike interest)
Albertsons Shopping Center
Albertsons 11.5 acres
CUHSD 93 ac
AID 46 ac
O4A 23ac
Thorman 33 ac
Labro 2.5ac
P&R 4.4 ac
P&R 9 ac
P&R 19 ac
P&R 21 ac
Augustyn 49 ac
Pizza Hut / PVR2 - 580 acres

Exhibit G

ERIC GIBSON
DIRECTOR

County of San Diego

DEPARTMENT OF PLANNING AND LAND USE

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666
INFORMATION (858) 694-2960
TOLL FREE (800) 411-0017

February 20, 2009

Jim Harry
ICF Jones & Stokes
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE GROSSMONT UNION HIGH SCHOOL DISTRICT'S HIGH SCHOOL NO. 12

The County of San Diego has received and reviewed the Draft Environmental Impact Report (DEIR) dated January 6, 2009 for the Grossmont Union High School District's proposed High School No. 12 in the unincorporated community of Alpine. In response to the DEIR the County, as a responsible agency under CEQA Section 15381, has comments that identify environmental issues that may have an affect on the unincorporated lands of San Diego County. County Department of Planning and Land Use (DPLU), Department of Public Works (DPW) Transportation Division, and Department of Parks and Recreation (DPR) offer the following comments regarding the content of the document:

GENERAL

The document is well written and does a good job of identifying the issues and environmental impacts on the three potential sites for the new high school. We appreciate the thoroughness of the document in analyzing all three locations at the same level of review. Due to the significant and not mitigable impacts to biological resources for Alternative B (Wright's Field) and the direct implications to the County's Multiple Species Conservation Plan, the County cannot recommend that this site be

chosen for such an intensive land use. However, the other two sites appear to be viable options for consideration.

BIOLOGY

1. Study Area B is located within the County's Wright's Field Pre-Approved Mitigation Area (PAMA) and adjacent to Wright's Field Preserve, an integral part of the County of San Diego's South County Multiple Species Conservation Program (MSCP) Subarea Plan. To date, the County, in partnership with the Back Country Land Trust (BCLT), has acquired 252 acres for open space within the Wright's Field Preserve, owned and managed by the BCLT. The County contributed approximately $1.4 million toward this open space preservation. Loss of this much grassland habitat would impact the overall function and viability of the grassland including the lands that have already been set aside as preserve with significant expense to the County and community. A significant amount of native grassland, such as at Wright's Field, is a very rare habitat in San Diego County and any impacts to it would be considered significant. Since Wright's Field is one of only approximately three remaining areas of significant amounts of intact native grassland in San Diego County, we agree with the significant and not mitigable finding in the DEIR since in-kind mitigation is probably not be feasible.

2. It is agreed that Alternative B would result in a direct and cumulative conflict with the San Diego County MSCP Subarea Plan and would remain significant with implementation of the measures identified in the EIR. Any loss of native grassland habitat will impact the overall function and viability of the grassland including the lands that have already been preserved with significant expense to the County and community. Additionally, indirect effects associated with lighting, noise, invasive plants from landscaping, and ground moisture changes from irrigation runoff and impervious surfaces would also negatively affect the surrounding natural and preserved areas. From a biological and regional planning perspective Alternative B remains the least preferable of the three alternative sites.

3. Executive summary -The acreage of impacts to native grasslands associated with Alternative B is inconsistently stated at Summary of Impacts, Biological Resources (8.23 acres) and Significant Residual Impacts (27 acres) and Table S-1 MM BIO B.1.b (29 acres).

4. Executive summary - Please correct references to the San Diego County MSCP Subarea Plan instead of the MSCP and San Diego County Subarea Plan in the executive summary and elsewhere in the document.

5. The County concurs with impact BIO B.8 that the impacts to the Pre-Approved Mitigation Area (PAMA) are significant and not mitigable.
6. Executive Summary, Significant, Residual Impacts - Please revise as follows: Alternative B would result in a significant, potentially unmitigable loss of approximately 27 acres of native grassland within the ~~MSCP and~~ San Diego County MSCP Subarea Plan through development of a core wildlife area within a PAMA. The impact on native grassland within the PAMA conflicts with the MSCP Subarea Plan and the goals of the General Plan and the Alpine Community Plan related to preservation of natural resources.

CULTURAL RESOURCES

Staff has reviewed the cultural resources portions of the report titled, *"Draft Program Environmental Impact Report for High School Number 12"*, dated January, 2009, prepared by ICF Jones & Stokes. (Note: The Cultural Resources Technical Report, Appendix E, was not provided.) The DIER provides an overview of the potential impacts to cultural resources that were identified at each of the three alternative locations: Alternate B-Wright's Field, Alternate G-Chocolate Summit and Alternate J-Lazy-A Ranch. Each alternative location will impact significant or potentially significant cultural resources.

7. County DPLU concurs with the record search and survey work summarized in the DEIR for this project relating to cultural resources both historic and prehistoric. Staff found the research thorough and well documented and is satisfied that the known important prehistoric sites will be avoided. Sites to be avoided and preserved by easement include CA-SDI-5199 in Alternative B, and sites CA-SDI-8722, CA-SDI-17194, CA-SDI-17195, CA-SDI-17196 and CA-SDI-17197 in Alternate J.

8. Staff does have concerns with the sites that have not been tested and/or evaluated (both historic and prehistoric) that will be impacted in each of the three alternatives. All site testing and evaluation is proposed after project approval and location selection, prior to grading. However, should human remains be uncovered in the prehistoric sites, or the historic structures prove to be significant, there is no opportunity is provided for alternatives to the proposed mitigation. In addition, no opportunity is given for the public to comment on the testing and evaluation of these resources.

9. Staff is concerned that the proposed mitigation for Historical Documentation (HABS/HAER) alone may not be adequate for the destruction of significant historic structures (should site assessment determine significance). In the case

of Architectural Heritage Association v. County of Monterey, 122 Cal.App.4th 1095 (2004), it was found that "archival documentation cannot normally reduce destruction of an historic resource to an insignificant level". Also in the case of League Protection of Oakland, 52 Cal.App.4th 896 (1997), the Court of Appeal held that the historic resources of the building to be demolished "normally cannot be adequately replaced by reports and commemorative markers".

10. Should future evaluation of the historic structures determine significance pursuant to CEQA criteria, DPLU recommends that adaptive reuse of the historic structures be considered as an alterative. It is understood that some of the buildings may be in poor condition, and that there is a cost associated with rehabilitation; however, CEQA requires mitigation of significant structures to a level below significance and all mitigation measures should be considered. In addition, rehabilitation can use the California Historical Building Code as adopted by the State Historical Building Safety Board, located in Title 24, Part 8. It is also published in the latest adopted California Building Code as Chapter 34, Existing Buildings, Division II, California Historical Building Code. DPLU recommends that the EIR evaluation of the historic structures include an analysis of what would be required for adaptive reuse of the significant structures.

11. Staff has noted that site of Alternative B, Wright's Field is the same site for the proposed Park Alpine project TM 5433, a 142 acre subdivision for 41 single family residential lots.

12. Additionally, a portion of Alternative J, Lazy-A Ranch, is an open County project: Oak Creek at Lazy A Ranch, project numbers: SP 07-002; GPA 07-010, REZ 07-011, TM 5546, MUP 07-016 for a residential subdivision. The parcels included in the Oak Creek project are: 404-231-05 and 404-042-01.

If you have questions regarding cultural resources, please contact Gail Wright with the Department of Planning and Land Use at (858) 694-3003.

LAND USE

13. Summary Page S-41 – LU B.1 states in the second paragraph that "mitigation measures could be implemented to reduce stadium and PA noise" yet on page S-44, it appears that these are required. LU B.1 does not imply that these measures will be required or pursued. Please clarify.

14. Section 3.8 Land Use - Discussion of the effects of the proposed project on planned land uses should include reference to the County's Community Trails

Master Plan (CTMP), which is the implementing document for the County Trails Program described in the Public Facilities Element of the San Diego General Plan. The CTMP contains adopted individual community trails and pathway plans.

Communities participating in the CTMP are doing so because they have reached a consensus on the importance of recreational trails in their area and have expended considerable time and effort in formulating community trails plans. The Alpine Community Trails and Pathways Plan identifies proposed trail corridors within each of the three proposed school sites. The DEIR should be revised to include an analysis of any potential conflicts with or impacts to these proposed trails and pathways.

If you have any questions regarding trails or pathways locations, trail alignment study, or potential options, please contact Maryanne Vancio, County Trails Program Coordinator, Department of Parks and Recreation at 858-966-1372 or e-mail at: maryanne.vancio@sdcounty.ca.gov.

TRANSPORTATION AND TRAFFIC

Transportation Division staff has reviewed the following documents regarding the proposed Grossmont Union High School District, High School #12 in the Alpine community:

- Traffic Impact Analysis (TIA) prepared by Kimley-Horn and Associates dated December 2008

- Draft Program Environmental Impact Report prepared by ICF Jones & Stokes dated January 2009

TRAFFIC IMPACT ANAYSIS (TIA)

15. The proposed high school project will generate substantial new and redistributed trips onto County Circulation Element roads in the Alpine area. The proposed projects will result in significant cumulative traffic impacts to Circulation Element Road throughout the Alpine area.

16. The proposed project should contribute to the County's Transportation Impact Fee (TIF) Program to mitigate the proposed projects cumulative traffic impacts.

17. An opening year traffic assessment with 1,100 students and the existing road network and horizon year (2030) traffic assessment with 2,200 students and

build-out of the County Circulation Element Roads by others assessment is provided. At this time, there is no proposed condition that would restrict expansion of the school to 2,200 students prior to 2020. The TIA should include an analysis of the school's peak capacity of 2,200 students in the Existing/Opening-Year Scenario. There is also no guarantee that other projects will construct the Circulation Element Roads prior to expansion of the school to 2,200 students. A phased traffic assessment should be provided based upon the anticipated road network at the time the school enrollment is expanded.

18. A near term cumulative traffic assessment, (existing plus project plus near term projects) should be provided. Preparation of the list of near-term / cumulative proposed / pending projects should be coordinated with the Department of Planning and Land Use.

19. On page 6-30 it is noted that fairshare contributions toward the installation of traffic signals should be provided to mitigate direct impacts at several intersections. Fairshare contributions alone will not fully mitigate a direct traffic impact.

20. The TIA should identify what uses are allowed under the existing land use permits for each of the proposed alternatives and compare it to the proposed school trip generation.

21. The TIA should include an assessment of potential impacts at the Marshall Road (El Tinge Drive)/Alpine Boulevard intersection.

22. The TIA should specify the traffic volume on Alpine Boulevard between East Victoria Drive and Marshall Road (El Tinge Drive). The TIA should assess potential traffic impacts at this location.

23. Construction permits from the County of San Diego will be required for access onto the County Circulation Element Roads at the proposed driveways and for any other work within the County right-of-way.

24. The TIA should provide greater detail and analysis of the proposed driveways / access points for each of the alternatives. The need for turn pockets and acceleration lanes should be assessed. Based upon the anticipated traffic volumes turn pockets and other access improvements should be constructed by the proposed project prior to construction of the proposed school.

25. Conceptual plans for access, intersection and other improvements in the County right-of way should be provided. The following are access related items which should be addressed:

    - Corner sight distance adequacy at the project driveways.
    - Lane geometric improvements at each of the project driveways/intersections.
        - Conceptual striping and signing plans should be provided for all proposed road improvements and should identify existing and/or proposed bike lanes. (Both South Grade Road and Alpine Boulevard are part of the County's Bicycle Roadway Network.)
        - The TIA should demonstrate that the throat length at driveways and the bay length of any dedicated turn lanes on County roadways will be sufficiently long enough to minimize traffic queues during peak pick-up/drop-off times.
    - County's Design Standards for minimum driveway/road spacing.

26. Frontage improvements along the proposed school sites should be provided.

27. Dedications and preservation of right-of-way along the ultimate County Circulation Element Road cross sections should be identified and provided.

28. The safe routes to school for each project site should be identified. Identification and assess of the provision of pedestrian facilities along the proposed safe routes to school should be provided for each site.

29. The TIA should identify the proposed school operation times and how those proposed times would impact the peak traffic periods.

30. The Traffic Volume Adjustment exhibits should be included in the main body of the text, not in the Appendix. Also, this section should include an exhibit showing the existing school's traffic volumes on roadway segments. At this time, it is not possible to determine if "Plus Project " scenarios/tables/exhibits are correctly showing the net result between adding the proposed projects' trips and subtracting the existing school's trips.

31. Tables 8-1 and 8-2 should be consistent when arranging the study area columns.

32. For the Study Area B alternative, the TIA recommends the installation of traffic signals as mitigation measures for impacts to several intersections. Traffic signal warrants should be prepared to verify that traffic signal warrants are

satisfied. The installation of traffic signals on County maintained roads would also require approval from the County Board of Supervisors.

33. For Study Area G, an evaluation of the potential for pedestrians crossing the South Grade Road at the intersection of South Grade and Via Viejas should be provided.

34. For the Study J alternative, pedestrian facilities should be provided/verified between the intersection of Alpine Boulevard/East Victoria Drive and the access to the proposed high school.

35. For the Study J alternative, the proposed high school project will result in direct traffic impacts to the Alpine Boulevard/East Victoria Drive intersection, the Alpine Boulevard Willows Drive intersection, the I-8 Eastbound off ramp/Willows Road intersection and the I-8 Westbound onramp/Willows Road intersections. Mitigation measures to address these impacts should be proposed.

DEIR

36. Comments listed above for the proposed project's TIA should also be addressed in the DEIR.

Note to Land Development Project Manager: A copy of the TIA should be submitted to Caltrans for their review and comments.

If you have any questions regarding the above comments, please call Bob Goralka, County Traffic Engineer, with the Department of Public Works at (858) 874-4202.

In conclusion, the County would like to reiterate that Alternatives G and J appear to be viable sites for the intensity of development that a new high school would require. The biological impacts associated with Alternative B, considered a Biological Resouce Core Area (BRCA) would have far reaching impacts to the region and jeopardizes the ability of the County to meet the regional conservation goals of the San Diego County MSCP Subarea Plan. The County has made a significant investment in preserving the biology in the area and the development of a high school on the site would impede the connectivity of the wildlife corridors in the area and significantly reduce the sensitive habitats found on-site.

The County of San Diego appreciates the opportunity to participate in the environmental review process for the Grossmont Union High School District's proposed High School No. 12 in Alpine. We look forward to receiving future documents related to this project for review or to provide additional assistance at your request. If you have

any questions regarding these comments, please contact LeAnn Carmichael at (858) 694-3739.

Sincerely,

ERIC GIBSON, Director
Department of Planning and Land Use

cc: Vince Nicoletti, CAO Staff Officer, DCAO, M.S. A-6
Bob Goralka, Transportation Division, Department of Public Works, M.S. O334
Trish Boaz, Department of Parks and Recreation, M.S. O-29
Priscilla Jaszkowiak, Administrative Secretary, Department of Planning and Land Use, M.S. O650
LeAnn Carmichael, Department of Planning and Land Use, M.S. O650

Exhibit H

Wright's Field MSCP Preserve
Phase IV



Environmental Enhancement and Mitigation Program Application

Submitted by

The Back Country Land Trust
and
The County of San Diego
Department of Parks and Recreation

BACK COUNTRY LAND TRUST
338 W. Lexington Avenue, Suite 204
El Cajon, CA 92020
(619) 590-2258 FAX (619) 590-2248 www.bclt.org

Preserving San Diego's Back Country Since 1991

December 6, 2003

Mr. Dave Brubaker
EEM Program Coordinator
State of California Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dear Mr. Brubaker,

It is our pleasure to submit this application to the Environmental Enhancement and Mitigation (EEM) Program on behalf of the Back Country Land Trust and the County of San Diego Department of Parks and Recreation for Phase IV of the Wright's Field Multiple Species Conservation Plan (MSCP) Preserve. Support from the EEM Program has been critical to the success achieved to date in this land acquisition project.

Wright's Field encompasses a large, high quality native grassland in association with coastal sage scrub, Engelmann oak woodland, vernal pool and riparian habitats, and includes a number of endangered and sensitive species. It is a critical component of the County's Multiple Species Conservation Plan and the State's Natural Communities Conservation Program. In the first three phases of this land acquisition project, starting in 1997, the EEM Program has provided $1,250,000. This has been matched by the County with $1,445,000, and $212,000 mitigation from the Alpine School District, to acquire 230 acres in collaboration with The Back Country Land Trust, which manages the preserve.

This land acquisition project has the wholehearted support of the Alpine community while the preserve itself provides an outstanding educational resource for students in the adjacent Joan McQueen Middle School. The County Supervisor for eastern San Diego County, Dianne Jacob, who has been instrumental in establishing the MSCP, enthusiastically supports the creation of an MSCP preserve in Wright's Field.

We seek the continued support of the EEM Program in this highly worthy project.

Yours Sincerely,

C. D. Stout, Ph.D.

Director of Resources
Back Country Land Trust

Page 3
Insert ‘EEMP Application’ Cover form page (A)
Print separate Word doc, ‘EEMP_page_3_5_insert.doc’

Program Application

INSERT FAX FROM
DON POPE

B. RELATED TRANSPORTATION PROJECT

(B.1) Transportation District (B.2) City (B.3) County (B.4) Route Number/Name

(B.5) Location

(B.6) Description of Related Transportation Project

(B.7) Name of Transportation Agency (B.8) Date Construction Began or Scheduled

(B.9) Name of Approved/Certified Capital Outlay Program for Related transportation Project

I certify that the information contained in this project application form, including required attachments, is accurate and that I have read and understand the Assurances which are a part of this application.

Signed Only YMS needs to sign **Date**

(Grant Applicant's Authorized Representative, as shown on the Resolution)

C. ASSURANCES

Applicant possesses legal authority to apply for the grant and to finance, acquire, and construct the proposed project; and by formal action (i.e., a resolution) the applicant's governing body authorized the filing of the application, including all understandings and assurances contained therein, and authorized the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

Applicant will manage and maintain into the future any property acquired, developed, rehabilitated, or restored with grant funds provided through this program. For property acquisition or conservation easement, applicant will sign, notarize, and record an Agreement Declaring Restrictive Covenant (ADRC) developed by the California Department of Transportation. With the granting agency's prior approval, the applicant or its successors in interest may transfer the management and maintenance responsibilities in the property. If the property is not managed and maintained for the purposes stated in the Agreement, the state shall be reimbursed an amount at least equal to the amount of the grant award or, for real property, the pro rata fair market value of the property, including improvements, at the time of sale, whichever is higher.

Applicant will give the state's authorized representative access to and the right to examine all records, books, papers, or documents related to the grant.

Applicant will cause work on the project to be commenced within a reasonable time after receipt of notification from the state that funds have been approved and that the project will be carried to completion with reasonable diligence. If applicant cannot submit its first invoice for reimbursement to Caltrans by May 31, 2005, applicant will submit a statement of project progress appropriate to the project that provides real assurances that the project will be completed prior to April 30, 2007, including but not limited to: project advertisement or firm advertisement schedule, entry into escrow for acquisitions, date project plans will be completed, anticipated date of receipt of other needed funds from specified entity, etc.

Applicant will comply where applicable with provisions of the California Environmental Quality Act and the California Relocation Assistance Act and any other state, and/or local laws, rules and/or regulations.

Signed_____**Date**_____
(Grant Applicant's Authorized Representative)

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3. Environmental Project Summary

3. Environmental Project Summary

A. Project Scope

Phase IV of the Wright's Field project will add the largest remaining and most critical parcel to the preserve. The 142 acre parcel surrounds already acquired Multiple Species Conservation Plan (MSCP) preserve land on three sides. The acquisition will bring the total area to 372 acres, and is critical to the biological and physical integrity of this MSCP preserve. The Phase IV parcel is entirely comprised of native grassland, coastal sage scrub, Engelmann oak woodland, and vernal pool habitats.

The MSCP is a nationwide model for habitat conservation and a key component of the State of California's Natural Communities Conservation Plan (NCCP). In 1998 the County of San Diego designated approximately 400 acres in Alpine in eastern San Diego County, encompassing Wright's Field, as a pre-approved mitigation area within the MSCP. The Department of Fish and Game, and the U.S. Fish and Wildlife Service support this designation. Inclusion of Wright's Field in the MSCP accomplishes significant protection of sensitive species and habitats, and provides wildlife corridors between components of the MSCP to the west and the Cleveland National Forest to the south and east.

The Wright's Field acquisition project has protected 230 acres to date. Phase I added 80 acres under the FY 98/99 EEM cycle (Project #98-34). Phases II and III were combined to add 120 acres under two awards, EEM 2000(068) and EEM 2001(040). An additional 30 acres (Findel Ranch) was acquired directly by the County of San Diego in 2002. Phase IV will add 142 acres. Only 40 acres in the total planned preserve area of ~400 acres remains.



Wright's Field MSCP preserve in Alpine, CA.

Phases I, II and III are complete. Matching funds for Phase I were $212,000 in the form of mitigation from the Alpine Union School District, and $175,000 from the County of San Diego. Matching funds for Phase II and III were $350,000 and $450,000, respectively, provided by the County of San Diego, with in-kind services from the County and the Back Country Land Trust. (The initial matching funds of $250,000 for Phase III were increased by the County to $450,000 to complete the transaction.) In 2002, the County of San Diego purchased 30 acres of the Findel Ranch for $470,000 and transferred title of the land to the Back Country Land Trust. This land represents a very important addition to the preserve; its purchase demonstrates the County's very strong commitment to the MSCP, and to the Wright's Field preserve. The Phase IV parcel is currently under option contract between the property owner and the Back Country Land Trust. The balance of the Phase IV acquisition cost will be provided by other habitat and open space protection funds. Management of the MSCP preserve is the obligation of the Back County Land Trust.

The continuing support of the EEM program, in partnership with the Back Country Land Trust and the County of San Diego, remains essential to the success of this project. Overall the project is preserving high quality natural and historical resources, accomplishing significant mitigation, affecting regional and local planning, and providing an outstanding educational and recreational resource for the community of Alpine, the County of San Diego, and the State of California.

B. Location, Purpose, and Amount of Request

Wright's Field is located within the rural community of Alpine along Interstate 8, 35 miles east of San Diego, in the foothills of the Cuyamaca Mountains in San Diego County.

The Wright's Field project fulfills or exceeds all of the goals of the EEM Program. It combines resource protection and mitigation with a regional planning effort while creating an open space preserve with outstanding educational and recreational opportunities. Recognized for its habitat value, Wright's Field was included in the pre-approved mitigation area of the County of San Diego's Multiple Species Conservation Plan (MSCP). Local area and MSCP habitat maps are included in Exhibit F.

In the first three phases of the Wright's Field MSCP Preserve project, and with the addition of Findel Ranch, 230 acres have been acquired with $1,250,000 from the EEM Program and $1,445,000 from the County of San Diego. Mitigation from the Alpine School District provided an equivalent of $212,000 in matching funds for Phase I. Therefore, $2,907,000 has been expended to date in establishing the preserve.

This Phase IV proposal by the Back Country Land Trust and the County of San Diego Department of Parks and Recreation, requests an EEMP grant of $300,000. The County of San Diego has committed $470,000 as matching funds through purchase of 30 acres of Findel Ranch for the preserve. The Phase IV funds will be used toward purchase of the largest and most critical parcel of 142 acres required to complete the preserve.

Four sensitive habitats present on this parcel are coastal sage scrub, native grassland, Engelmann oak woodland and vernal pools, which occur throughout the Wright's Field area. The biodiversity within the grassland is high, and it is one of the best native grasslands remaining in the state of California. The preserve area has outstanding ecotonal value because the habitats are integrated. The preserve area provides a critical corridor between MSCP lands to the west and the Cleveland National



Native grassland, coastal sage scrub and Engelmann oak woodland are integrated in the Wright's Field MSCP preserve area.

Forest to the east. The purpose of the Wright's Field MSCP preserve project therefore is to add this critical component to the County-wide MSCP preserve.

The Back Country Land Trust and the County of San Diego are working as partners with community organizations to manage the preserve while providing the community with much needed opportunities for passive outdoor recreation. Moreover, Wright's Field provides an outstanding educational resource for students in the adjacent Joan McQueen Middle School, ensuring that future generations will learn about environmental resources and stewardship. These virtues of the project complement the MSCP goals of protecting sensitive habitats and species.

C. Explanation for Expanded Grant Request

In the combined Phase II and Phase III acquisitions, 120 acres were purchased at fair market value for $1.8M ($1,000,000 EEM funds and $800,000 County matching funds). Escrow closed in September 2003. However, the property owner mandated that the original parcel boundaries be redefined, in order for the transaction to occur. Consequently, the remaining but newly defined 142 acre parcel surrounds the land already in the preserve to the west, south and east, while being north of the Findel component of the preserve (parcel map included in Exhibit J). It is essential to purchase this remaining parcel in order to create the MSCP preserve.

The current market value of the 142 acre Phase IV parcel is $2,124,000. The expanded grant request for $300,000 is required to complement the ~$1.8M that the County of San Diego and Back Country Land Trust must secure to acquire this critical component of the preserve.

Wright's Field lies within the rapidly growing community of Alpine and, as such, has great development potential. It has been under repeated threat of development since 1992. However, due to the efforts of local citizens, the strong support of the County under the leadership of Supervisor Dianne Jacob, and the critical support of the EEM program, great progress has been made, and now 230 acres are permanently protected. However, without the remaining 142 acres, the entire preserve would severely diminished in value. The Phase IV land contains large expanses of high quality California native grassland (Exhibits F, G, J). The pre-approved mitigation area for the MSCP preserve encompasses ~400 acres and all of Wright's Field.



An Engelmann oak in Wright's Field. Engelmann oak woodland is the most rare native oak habitat in California.

The landowner remains a willing seller, and an option contract is presently in force. However, this agreement will expire in July 2005, and the land will again be at risk of development. Indeed, the reason for the owner's demand to redefine the parcel boundaries (Exhibit J) was to improve the

development potential of the remaining land, if habitat acquisition funds are not secured. In other words, the property owner is intent on selling the land either for the MSCP or for development. This expanded grant request is key to our efforts to complete this acquisition in a timely manner.

4. Agency Eligibility

A. Authorizing Resolution

The Authorizing Resolution was approved November 10, 1995 by the Back Country Land Trust Board of Directors (Attachment A), the first year that an EEMP application was submitted. This Resolution remains in effect. The IRS letter regarding the tax exempt 501c(3) status of the Back Country Land Trust is included as Attachment B.

B. Related Prior Experience

The Back Country Land Trust

The mission of the Back Country Land Trust is to preserve land in eastern San Diego County containing significant natural and cultural resources for the benefit of the public and future generations. This effort entails research and education, promotion of land conservation through donation, easement or purchase, and establishment and maintenance of trails. The land trust has been instrumental in the acquisition of over 3500 acres of resource lands in San Diego's back country since 1990.

The Back Country Land Trust is a non-profit 501(c)(3) organization with a paid Executive Director, established office in El Cajon, California, current annual budget of ~$60,000, and an active membership of over 400 throughout the County. The land trust five-year strategic plan calls for significant growth in membership, increased community involvement, expansion of the annual operating budget, and significant additions to its endowment fund. The Back Country Land Trust received a $100,000 gift from an Alpine businessperson in 2000. Land trust education and management programs have received significant grant awards from the San Diego Foundation.



A native plant nursery at Joan McQueen Middle School is maintained by the students for vegetation and restoration projects on the school campus and in Wright's Field, and for sales at the annual Back Country Land Trust plant sale in Alpine.

The Back Country Land Trust has ownership and management responsibilities of Wright's Field MSCP preserve. The County of San Diego County Department of Parks and Recreation and the land trust are working together closely to implement a management plan. This on-

going effort involves the Center for Natural Lands Management, the California Conservation Corps, the San Diego Coalition of Conservancies and local community groups, to obtain expertise and provide manpower. Projects have included the installation of fences, gates and signs, clean-ups, erosion control and exotic plant removal. In collaboration with San Diego State University a grassland restoration project is planned for a 10 acre disturbed area in the Phase I mitigation parcel.

The Back Country Land Trust has an extensive volunteer base. The land trust has operated the Youth for Conservation Program for several years, and works closely with the nearby Joan McQueen Middle School in outdoor education projects. The land trust has an active docent training program concerning natural resources, and docents lead nature walks with local and county-wide organizations (*e.g.* Alpine Historical Society, Chamber of Commerce, Audubon Society). The land trust hosts community outreach events, including an annual native plant sale and a dinner lecture series, and maintains a native plant demonstration garden in central Alpine.

The County of San Diego Parks and Recreation Department

The mission of the County of San Diego Department of Parks and Recreation is to preserve regionally significant natural and cultural resources and provide opportunities for high quality parks and recreation experiences. The Department has been developing, operating, and maintaining parks since 1913.

The Department has taken a leadership role in the region in the acquisition, development and operation of 90 open space preserves, regional and local parks and facilities, with over 40,000 acres administered. These lands include the acquisitions for the MSCP.

The Department has received well over $85 million in state, federal and other types of grants for acquisition, development, rehabilitation/restoration and preservation projects.

The Department has received $2.2 million in EEM grants, which were instrumental in the preservation and restoration of lands in Volcan Mountain, Tijuana River Valley, Guajome Regional County Park, and for the North County MSCP.

The Department and the Back Country Land Trust have collaborated in the preservation of 230 acres of unique biological resources, wildlife corridors, and sensitive habitats in the Wright's Field area of Alpine.

Page 12
Insert Attachment A – 1st page

Page 13
Insert Attachment A – 2nd page

Page 14
Insert Attachment B – 1st page

Page 15
Insert Attachment B – 2nd page

5. Related Transportation Projects

A. Discussion of Required and Additional Mitigation

This EEM project will greatly enhance the mitigation for environmental impacts to 34.6 acres coastal sage scrub habitat due to construction of a new 6-lane segment of Interstate 125 between La Mesa, El Cajon, and Santee in San Diego County. This impact has been mitigated by preservation of 70 acres of coastal sage scrub in Rancho San Diego according to the California Environmental Quality Act (CEQA).

This Phase IV enhanced mitigation project would result in the protection of ~40 additional acres of high quality coastal sage scrub. Hence, the enhanced mitigation raises the mitigation ratio from 2:1 to over 3:1. It also provides enhanced mitigation by being at another location (Alpine), and by contributing to a MSCP preserve. Diegan coastal sage scrub is one of the most threatened habitats in San Diego County, and is a critical habitat within the MSCP.

In addition, this EEM project will protect integrated habitat partners of coastal sage scrub, including ~70 acres of native grassland and ~30 acres of Engelmann oak woodland. The total 142 acre Phase IV area also includes ~10 acres of vernal pool habitat on heavy clay soils (Exhibits G, J). Therefore, the mitigation is enhanced by the presence of associated habitats, which increases the biological value of the coastal sage scrub.

B. Lead Agency Form Letter

The Transportation project lead agency form letter, from Don Pope, Caltrans District 11 representative, is attached.

Page 17
Insert form letter from Don Pope

6. General Criteria

A. Increased Mitigation and Enhancement

The Wright's Field MSCP Preserve Phase IV acquisition project in Alpine, CA significantly enhances the mitigation for the Caltrans new I-125 freeway construction between El Cajon, La Mesa and Santee, CA. While separated by ~20 miles both sites share the Diegan coastal sage scrub habitat indigenous to San Diego County. The Wright's Field project significantly enhances CEQA mandated mitigation already in place for this CalTrans project for five reasons.

First, the mitigation ratio for the impact to coastal sage scrub due to the Caltrans project is increased from 2:1 to greater than 3:1 by addition of ~40 acres in Alpine, CA.

Second, the coastal sage scrub to be protected is intimately associated with three other sensitive habitats, significantly increasing its ecotonal value. Because these habitats have evolved to function interactively, the viability of species within them is increased when they are protected together in an integrated whole.

Third, the Phase IV acquistion is a critical component of the MSCP preserve being assembled in eastern San Diego County. In particular, the coastal sage scrub on Wright's Field belongs to a larger connected complex of endangered habitats and corridors that have been identified as a statewide priority in the NCCP, namely native grasslands, riparian, vernal pool wetlands and oak woodlands. These are "Tier I" habitats under the Biological Mitigation Ordinance of San Diego County and the MSCP.



Coastal sage scrub overlapping with native grassland in Wright's Field. The knoll in this view is entirely within the 142 acre Phase IV parcel, and is covered with coastal sage scrub vegetation.

Fourth, Wright's Field functions as an important wildlife corridor between MSCP lands to the west in Harbison canyon, El Capitan Reservoir and the Oakridge preserve in Crest, and the Cleveland National Forest to the south and east. In particular, two drainages from Wright's Field lead west via Chocolate Creek to El Capitan Reservoir. These streambed corridors are a vital link for wildlife movement between habitats. Wildlife access to these streambeds on Wright's Field will be enhanced by the protection of the 142 acre Phase IV parcel, connecting MSCP preserve lands to the Cleveland National Forest.

Fifth, protection of Wright's Field in the MSCP preserve adds a key component to the County trail system planned for the Alpine area (discussed in Section 6(B)).

The proposed acquisition complements and reinforces federal, state, and local policies to preserve unique biological resources, corridors, and sensitive habitats, as well as

historic resources. It is compatible and will not interfere with the operation or safety of any transportation facility, nor will it limit any improvements to these facilities, and it significantly increases the mitigation for the designated I-125 project beyond that required by CEQA.

B. Statewide Project Goals and Local Cash Contributions

I. Statewide Resource Priorities

Habitat Protection

In January 1994, in an on-going effort to protect at-risk natural communities and wildlife species, the U.S. Fish and Wildlife Service, the California Department of Fish and Game, the Department of Forestry and Fire Protection, and The Nature Conservancy, performed an extensive GAP Analysis for the southwestern California region. This report lists 18 at-risk plant communities. Five of these are found on Wright's Field in significant concentration. Forty-two wildlife species in the Southwestern region were identified as being at-risk. Of these species, 11 are found on Wright's Field. The purpose of the analysis was to target and prioritize candidates for preservation before they became further endangered. This process lead to the creation of the Multiple Species Conservation Plan for San Diego County, a habitat conservation plan based on requirements of the Endangered Species Act, and fulfilling goals of the State Natural Communities Conservation Plan.

Wright's Field is comprised primarily of three key habitats targeted for protection under the MSCP, Diegan coastal sage scrub, native grassland, and Engelmann oak woodland (MSCP vegetation communities map, Exhibit F). The U.S. Fish and Wildlife Service and the California Department of Fish and Game stressed their concern that sufficient native grasslands and oak woodlands / oak woodland riparian habitat be included in the MSCP. Subsequently, Wright's Field was included as a pre-approved mitigation area in the MSCP with the support of the Resource Agencies and the County of San Diego in a Board of Supervisors motion passed October 28, 1998.



Spiny redberry bushes (*Rhamnus crocea*) in Wright's Field. These shrubs are the host plant for the *Hermes* copper butterfly, an example of a rare endemic species found only in San Diego County. The butterflies have been observed in the preserve area on several occasions.

A number of experts, agencies, and studies support the high habitat value of Wright's Field. Selected references are included as follows.

"The property has been ranked as having very high and high biological value in the Habitat Evaluation Model performed by Ogden Environmental for the Multiple Species Conservation Planning (MSCP) effort. … The size of the grassland and the presence of numerous sensitive species occurring within this habitat on site provide

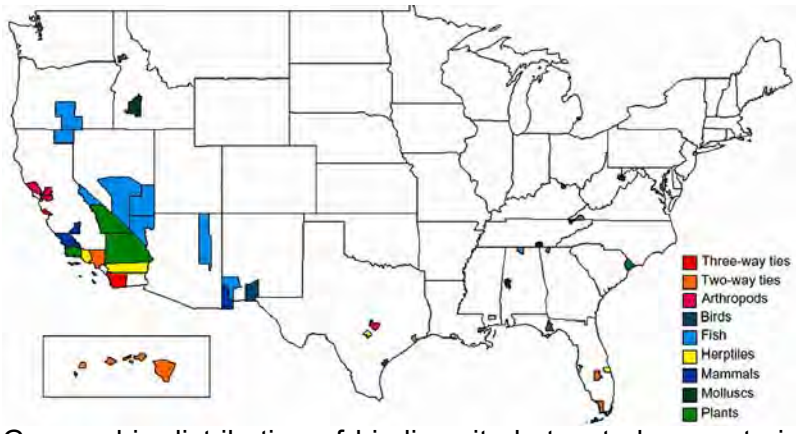
evidence that the site is of regional and cumulative significance." – California Department of Fish and Game.

Representatives from the US Fish and Wildlife Service and the California Department of Fish and Game concur with biologists that the site is "one of the largest and highest quality examples of southern California grassland remaining in San Diego County." - Nancy Gilbert, U.S. Fish & Wildlife Service. "The Wright's Field grasslands are one of the most biologically important valley grassland areas I have seen in the state." - Dr. Jason Hamilton. "Statewide it would certainly rank as one of the significant remaining grasslands." - Dr. Jon Keeley.

In an independent UC Santa Barbara GAP Analysis valley needle grassland was ranked as the second most at-risk plant community, following valley oak woodland. Both occur in the Wright's Field MSCP preserve area. At the same time, Engelmann oak woodlands have the smallest range of any California tree oak habitat and are an "at-risk" plant community according to this GAP Analysis. "Engelmann oak is probably the most imperiled of all tree oaks in California" (Oaks of California, Cachuma Press, p. 23). Engelmann oak woodland habitat is presently restricted to a small range, virtually all of which is in San Diego County.

Dr. Ted Case, a noted conservation biologist at UCSD, who has visited Wright's Field, has commented, "The site is characterized by a large expanse of Engelmann oak woodland, a habitat recognized as rare in California ('Sliding Toward Extinction: The State of California's Natural Heritage', 1987). I encourage you to preserve and protect this habitat and the many valuable biological resources that it harbors."

Data for the geographic distribution of endangered species in the United States were used to locate 'hot spots' of threatened biodiversity (A. P. Dobson *et al.*, *Science*, vol. 275, pp. 550-553, 1997). Hotspots were found where 'anthropogenic activities' coincided with regions possessing large numbers of endemic species. By this criterion, San Diego County is a biodiversity hotspot in the United States. This study concluded that 'conserving endangered plant species maximizes the incidental protection of all other species'.



Geographic distribution of biodiversity hotspots by county in the United States (this figure taken from a 1997 Science paper referenced in the text). The data show that San Diego County is a key region for threatened species nationwide.

It is not an exaggeration that the protection of natural resources in Wright's Field through the MSCP is important at the county, regional, state, and national levels.

Wetlands Protection and Acquisition

The predominant soil type on Wright's Field, according to USDA soil survey topographic maps, is heavy Bosanko stony clay, which absorbs and retains moisture for long periods, and does not percolate. As a result, Wright's Field contains vernal pool wetlands habitat. Approximately 10 acres within the Phase IV acquisition area contain mima mounds and depressions associated with vernal pool habitat. Exhibit G includes a picture of the mima mounds, and Exhibit J indicates the vernal pool area with respect to the parcel boundaries. The following wetland associated and indicator species have been observed in Wright's Field, except for the *Quino* checkerspot butterfly, but the host plant for this butterfly occurs extensively.

- *Crassula aquatica,* a vernal pool indicator plant species.
- *Scaphiopus hammondi* (western spadefoot toad), a vernal pool indicator species, which is present by the thousands, observed as tadpoles in the pools, and toads living within cracks in the heavy clay soil.
- *Acanthomintha ilicifolia (*San Diego thornmint), a state and federally listed endangered plant that occurs in three high density populations in the Phase II+III area.
- *Plantago erecta*, the host plant for the *Quino* checkerspot butterfly. These plants occur in dense patches throughout the grassland.



A vernal pool in the Phase IV acquisition area of Wright's Field. All of the native grassland is underlain by heavy clay soil. Large numbers of spadefoot toads are observed in these pools.

- *Euphydryas editha quino* (*Quino* checkerspot butterfly), a recently listed federal endangered species included in the MSCP. While not yet observed in Wright's Field, the extensive occurrence of the host plant, favorable habitat, and proximity to known populations to the east (Campo) and south (Baja), indicate that the butterfly was present historically. Hence, if not actually present, the preserve provides an ideal site for a *Quino* recovery program.

The presence of vernal pool habitat with heavy clay soils, and the availability of water in riparian habitat (included in the Phase II+III area), are vital for wildlife, and augment the value of the preserve as a corridor. Mountain lion, southern mule deer, bobcat, coyote, ringtail cat, gray fox, black-tailed jackrabbit and desert cottontail, have been observed or tracked on Wright's Field (additional species pictures and lists are included in Section 7(A) and Exhibit A).

Recreational Access

Wright's Field lies near the heart of the community of Alpine (Exhibit F). Its central location and relatively flat, open topography make it ideal for passive recreational uses. As is apparent from the aerial photograph (Exhibit J), a number of preexisting trails pass through Wright's Field. These trails are an important asset, allowing hiking, jogging, and horseback riding, and they link different segments of the community. Students of the Joan McQueen Middle School also use them. The Back Country Land Trust, and the County of San Diego Department of Parks and Recreation, are committed to maintaining and improving trails in Wright's Field for passive recreation and interpretive nature hikes.



Docents on the trail to learn about natural resources in Wright's Field.

Alpine is a rapidly growing community of over 15,000 residents. At present there is no publicly accessible trail system within the 108 square mile planning area linking Alpine to the Cleveland National Forest to the east, and to open space and trails to the west in the communities of Blossom Valley, Crest and Lakeside. In an effort to create an integrated trail system throughout the County, and provide an important recreational outlet for the community, the County of San Diego Department of Parks and Recreation is working closely with the Parks and Recreation Committee of the Alpine Planning Group, and in partnership with the Back Country Land Trust, to design and implement a trail system for the Alpine area. Members of the land trust serve on the Committee. This project has the support of the Alpine Chamber of Commerce, the Alpine School District, and the San Diego Trails Council.

The plan envisions Wright's Field as a nexus for the trail system in Alpine. Acquisition of the Phase I, II and III land in Wright's Field represents a significant step toward creation of a permanent trail system, and is already a tremendous asset to the community. However, it is equally clear that for a functioning network of trails to be created that the Phase IV parcel must be acquired.

II. Local Cash Contributions

The fair market value of the 142 acre Phase IV area (Exhibit J) is $2,124,000 under the current option agreement (Exhibits B, C). As discussed in Sections 3(A) and 3(B), in the three phases of this EEM project to date, $1,657,000 has been committed as matching funds. These funds have come for the County of San Diego ($1,445,000), and from the Alpine School District as mitigation for the new Joan McQueen Middle School ($212,000)

Findel Ranch

In 2002, the County of San Diego purchased 30 acres of the Findel Ranch for $470,000 through the newly enacted Environmental Subdivision Ordinance, and transferred title of the land to the Back Country Land Trust. These 30 acres represent a very important

addition to the MSCP preserve; they are contiguous, contain high quality native grassland and Engelmann oak woodland, and link the preserve area to additional Engelmann oak woodland to the south (Exhibits F, J). The purchase of Findel Ranch demonstrates the County's commitment to the MSCP. This purchase is a part of the County's total $1,445,000 commitment to creation of the Wright's Field preserve.

The Wright's Field MSCP preserve project has been in progress since 1998 with the leadership of District 2 County Supervisor Dianne Jacob. The project has entailed a strong partnership between the County of San Diego and the Back Country Land Trust, and has involved the participation of the Alpine School District (in Phase I) and the efforts of the Conservation Fund (in Phase I and Findel Ranch). Over the course of this project, significant contributions and volunteer efforts, directed by the Back County Land Trust, have facilitated the acquisition process. At the same time, the land trust provides for management of the preserve. These volunteer contributions are difficult to quantify. However, because of the on-going commitment of the land trust to maintain the MSCP preserve in perpetuity, and provide an educational and recreational resource within it, these contributions will continue, and increase over the years.



In this view to the south from within the MSCP preserve, Findel Ranch is beyond the grassland at the base the hill in the distance. The 30 acre Findel Ranch was purchased by the County of San Diego for $470,000 in 2002. This hillside is covered with Engelmann oak woodland and is protected by an open space easement (Exhibit J).

C. Project Readiness

The Phase IV parcel is currently under option contract for purchase from the property owner by the Back Country Land Trust. The same property owner was involved in the sale of the Phase II+III land to the County and the Back Country Land Trust. The option contract stipulates a two year period from the close of escrow of the Phase II+III purchase, which was in September 2003. The property owner received $1,800,000 in that transaction for 120 acres, or $15,000 an acre, based on appraisals and mutual agreement. The estimated cost of the 142 acre Phase IV area (Exhibit J) at this fair market value is $2,124,000. The County and the Back Country Land Trust are working to secure the balance of the necessary funding within the option period, which ends in July 2005. The requested Phase IV EEMP funding would be expended by that time.

The $300,000 request in this application is a critical component of the total acquisition cost. The Wright's Field MSCP project would not be possible without the support of the EEMP grants for Phases I, II and III. The Phase IV funds, matched by the County's purchase of Findel Ranch, will allow additional County, State and Federal habitat, wildlife, watershed, and open space protection funds to be secured.

The Back Country Land Trust will hold title to the entire MSCP preserve area (372 acres with inclusion of Phase IV), and manage the preserve lands under the guidelines of the MSCP. The project is consistent with state, regional, and local plans (Exhibit A). The related Caltrans I-125 transportation project has been funded, mitigated, and is complete. The Phase IV acquisition will not require environmental permits, approvals, or clearances as a resource lands acquisition.

7. Project Category Criteria (Resource Lands)

A. Important Resource Values

Biological Resources

One cannot overstate the important resource values associated with the overall project that spans five habitats and 18 sensitive, threatened, and/or endangered species. These resources include high quality California native grassland, Diegan coastal sage scrub, Engelmann oak woodland, as well as vernal pool wetland, riparian and chamise chaparral habitats. The Phase IV parcel consists of approximately ~70 acres of native grassland including ~10 acres of mima mound and vernal pool habitat, ~40 acres of Diegan coastal sage scrub, and ~30 acres of Engelmann oak woodland (Exhibits F, J). These undisturbed habitat areas occur in natural association, providing the entire 142 acre parcel with exceptional ecotonal value.

At the October 1995 Land Trust Alliance Rally, Dr. Reed Noss reported from his GAP analysis that grasslands and oak savannahs rated in the category suffering the second greatest loss of habitat nationally, coastal sage scrub rated in the third most endangered habitat nationally, and California riparian habitat rated in the fourth greatest loss category. All four of these habitats occur in Wright's Field, and three occur in the Phase IV area of the MSCP preserve.



Native bunch grass (*Nassella pulchra*) plants in Wright's Field. The MSCP preserve area includes 160 acres of native grassland where the density of bunch grass coverage is 50% or more (see also Exhibit G)

The native grassland on Wright's Field lies at ~2000 ft. in elevation ~30 miles from the coast. This cismontane location is underlain by a lens of heavy, very rocky clay soils. The combination of soils and local climate means that the grasslands are particularly rich in biodiversity. At the same time the nature of the soil has prevented the grassland from ever being plowed or significantly disturbed; hence it is also particularly pristine.

A research study into the genetic composition and morphological features of *Nassella pulchra* in Wright's Field was conducted by Drs. Kevin Rice and Eric Knapp of UC Davis for the Nature Conservancy using seeds collected from within the MSCP preserve area. In their published report (Dec. 20, 1995; #CARO 050195-PR-K) comparing 13 native

grassland locations throughout California, they found that *Nassella pulchra* plants from Wright's Field are genetically unique in several alleles while also being most similar to the native grasses at the Santa Rosa plateau in Riverside County. In transects conducted by Dr. Jason Hamilton from UC Santa Barbara in 1994 it was found that the size, plant density and basal coverage of bunch grass patches in Wright's Field is comparable to those in well studied native grasslands at Hastings Preserve in Monterey County and Sedgwick Ranch in Santa Barbara County. While these survey data are preliminary, they demonstrate the Statewide significance of the Wright's Field native grassland. A goal of the Back Country Land Trust to promote further scientific study of the grassland.



Burrowing owls have been observed in Wright's Field on a number of occasions. Breeding pairs of another sensitive, grounding nesting bird species, the grasshopper sparrow, also occur on site. (This photograph not taken at Wright's Field.)

Wright's Field provides unique value for wildlife as a corridor for larger mammals including the bobcat, ringtail cat, coyote, deer, and mountain lion. Each of these animals have been observed or tracked. The preserve provides foraging habitat for raptors, including the golden eagle, Northern harrier, red-shouldered hawk, Cooper's hawk, white-tailed kite, American kestrel, great horned owl, barn owl, and red-tailed hawk. In addition, it provides nesting habitat for the grasshopper sparrow, burrowing owl, western meadowlark, and other ground nesting species known to occur on site. Wright's Field is a focus area for the San Diego Natural History Museum breeding bird atlas, and 102 species of birds have been documented in 15 focused surveys by expert birder Claude Edwards. Sensitive species of reptiles observed on Wright's Field include the San Diego coast horned lizard and the granite night lizard.



Three high density populations of San Diego thornmint (*Acanthomintha ilicifolia*) occur in the Phase II+III parcel of the MSCP preserve area. Acquisition of the Phase IV parcel is critical to protecting the integrity of the entire preserve.

Wright's Field contains large populations of endangered or sensitive grassland associated species including the San Diego thornmint (ESA, CESA listed), Palmer's grapplinghook, chocolate lily, Cleveland shooting stars, blue-eyed grass, hyacinth, mariposa lily and field brodiaea. The presence of *Plantago erecta* and owl's clover indicates that the federally endangered *Quino* checkerspot butterfly may be present. Another rare invertebrate, the *Hermes* copper butterfly, has been observed in Wright's Field repeatedly, and its host plant, the spiny redberry, is present. Species occurring in Wright's Field relative to MSCP criteria are listed in Exhibit A.

Watershed Resources

The Wright's Field MSCP preserve area lies in the watershed of three major San Diego County reservoirs. The Phase I, II and III parcels lie primarily in the watershed of El Capitan Reservoir, San Diego's largest drinking water reservoir. Most of the Phase IV area drains into Sweetwater Reservoir. A smaller portion lies in the Loveland Reservoir watershed. Consequently, permanent protection of Wright's Field provides a significant long term benefit to water quality in San Diego County.



Overlapping native grassland and Engelmann oak habitat in Wright's Field. The MSCP preserve area is in the watershed of El Capitan Reservoir, the largest drinking water reservoir in San Diego County.

Historical Resources

The Phase I, II and III areas contain very significant archaeological and historical features that are important to understanding prehistoric and Spanish Colonial uses of the grassland, associated oak woodland, and watercourses. Native American (Kumeyaay) milling sites and artifacts are numerous throughout the preserve, especially in Findel Ranch. An application to place a complex of Spanish rancho features, thought to date from the 1840s, is being prepared for the National Registry of Historic Landmarks, based on extensive research by members of the Back Country Land Trust. The Mission or Spanish era rancho or rancheria features include stone foundations, dams, a cistern, water diversion walls, and an enormous and highly significant stone wall enclosure encompassing 10 acres. Completion of the MSCP preserve will provide essential protection to these unique archaeological and historical resources, and maintain their environmental aspect.

B. Sustainability

Mission

The nature of the MSCP program and the mission of the Back Country Land Trust assure the sustainability of the Wright's Field MSCP preserve. The MSCP is designed to protect habitat lands in perpetuity. The County of San Diego has a strong commitment to the MSCP. The MSCP is a program of the Department of the Planning and Land Use; the Department of Parks and Recreation is working on land acquisition projects for the MSCP. The Back Country Land Trust will hold title, manage, and maintain the preserve area in collaboration with these County Departments. The mission of the Back Country Land Trust is to preserve land in rural areas of San Diego County that contain natural, scenic, and cultural resources for the benefit of the public

and future generations. This commitment entails research, management, and education regarding resources, and the maintenance of trails.

Management

Management of open space lands, especially for habitat value, is a significant commitment in terms of planning, effort, and expense. The Back Country Land Trust is fully prepared to manage MSCP habitat lands in Wright's Field, having participated in land management efforts for over eight years. A comprehensive management plan for Wright's Field incorporates the requirements of the MSCP, and follows guidelines of the Land Trust Alliance and the Center for Natural Lands Management. An endowment fund has recently been established by the land trust with $10,000. The goals of the endowment are based on an in-depth PAR analysis for maintenance and management costs conducted by the Center for Natural Lands Management. The funding for the PAR analysis was made possible by a grant from Bank of America.

The management plan is revised and implemented as each phase of the acquisition of Wright's Field occurs. An advisory board, consisting of people experienced in the multiple aspects of land management, has been assembled, together with a committee of land trust members and local volunteers, to implement the management plan. The volunteers have formed an association, the Friends of the Mesa del Arroz (Wright's Field) preserve. The Civilian Conservation Corps, Americorps, student members of our Youth for Conservation Program, and the San Diego Trails Council, assist in maintaining the property.



Civilian Conservation Corps youth working under the supervision of the California Department of Forestry to remove eucalyptus trees at the entrance to the Wright's Field preserve next to Joan McQueen Middle School. School students subsequently planted Engelmann oaks and other native plants here. The Back Country Land Trust organized these projects.

Management experience, funding, and projects and activities have been discussed in Section 4(B). Further examples of activities include: a project by the Civilian Conservation Corps to remove non-native trees at the entrance of the preserve and in the Phase I area; a major clean-up by Alpine citizens in April 2003 (Earth Day) in the Phase II+III property; erection of 4' wire fence with wooden posts along the western and northern edges of the Phase I parcel; erection of gates and signs at two entries to the Phase I parcel; erection of signs to prevent off-road vehicle entry from the Phase IV parcel (a condition of the option contract); on-going compilation of a comprehensive plant list in collaboration with Dr. Jon Rebman of the San Diego Natural History Museum; on-going compliation of a bird species list based on periodic surveys since 1994 by expert birder Claude Edwards. These types of management activities will enable the Back Country Land Trust to

maintain and protect Wright's Field in perpetuity, in accord with area-specific management directives of the MSCP.

C. Other Benefits and Community Participation

This resource lands project provides public benefits at the local, regional, and statewide levels. At the same time the community activities associated with the Wright's Field preserve provide a model for management of other MSCP preserve areas.

Wright's Field is directly adjacent to the new Joan McQueen Middle School (Exhibit J). This creates a unique opportunity to educate future generations about environmental stewardship and community service. The preserve provides an outdoor laboratory where students can study firsthand about biological and historical resources, and participate in learning projects. The Back Country Land Trust is providing curricula based on preserve resources to teachers at the new school, and working with them closely in the development of educational activities. Two member of the land trust Board are members of the Alpine School Board.



A class project with students of Joan McQueen Middle School in Wright's Field to identify native and non-native species. A study of grassland ecology has been incorporated into the biology curriculum. Members of the Back Country Land Trust are teachers at the school.

This EEM project provides public access via trails to promote environmental awareness. A trail network is providing recreational opportunities for walkers, joggers, and horseback riders, as discussed in Section 6(B)(I). As discussed in Section 4(B), docent lead nature walks are conducted with Alpine and regional organizations, and the land trust sponsors public outreach events to promote environmental education and appreciation of the preserve. And as discussed above, management activities directly benefit youth based organizations. Scenic value is maintained in the rural country town of Alpine in accordance with the goals of its Community Plan. Additionally, creation of the MSCP preserve protects cultural resources from degradation.

Citizen involvement and local agency input has occured throughout the planning and acquisition phases. The Back Country Land Trust has worked closely with the Alpine School District, the Sheriff's Department, the Parks and Recreation Committee of the Alpine Planning Group, and the County Department of Parks and Recreation, in the interest of meeting common educational and recreational needs while protecting resources. Because of this input, the management plan addresses the needs of the community while protecting resources of regional and statewide significance. We will continue to gather input and involve local citizens in the management of the preserve.

8. Exhibits

A. Statement of Project Consistency with Plans
B. Project Cost Estimate
C. Project Budget
D. Project Completion Schedule
E. Project Expenditure Plan (N/A)
F. Project Location Map (MSCP Habitats Map)
G. Project Site Photos
H. Project Design (N/A)
I. Acquisition Schedule
J. Acquisition Map (Parcels, Acres, and Phases)
K. Tree Planting Certification (N/A)
L. Planting Description (N/A)
M. Supporting documents
N. Letters of Endorsement

Exhibit A - Statement of Project Consistency with Plans

Multiple Species Conservation Plan

Wright's Field is an essential regional component of the MSCP for species and habitat protection, and as a wildlife corridor. The project is included by the County of San Diego as a Pre-Approved Mitigation Area within the MSCP (Exhibits F, J).

Table 3-5 of the MSCP lists 85 target species for protection under the plan. Of these, at least 12 are known occur in Wright's Field, or have been observed on the site.

- San Diego horned lizard
- Orange-throated whiptail (observed at Findel Ranch)
- Hermes copper butterfly (host plant abundant)
- Northern harrier
- Cooper's hawk
- Golden eagle (nesting sites in the vicinity)
- Burrowing owl (observed on numerous occasions)
- Southwestern willow flycatcher (observed once)
- Western bluebird
- Mountain lion (tracks)
- Southern mule deer (tracks)
- San Diego thornmint (3 high density populations)

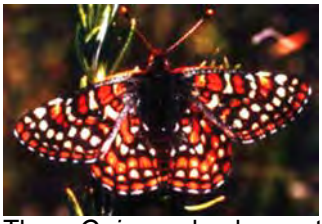

San Diego horned lizard in the Wright's Field MSCP preserve.

Two sensitive species observed in the Wright's Field preserve area but not included in the MSCP target list are:

- Spadefoot toad (large numbers in the vernal pools)
- Grasshopper sparrow (breeding pairs documented)

Several species, included in MSCP Table 3-5, could occur due to the presence of their habitats, especially vernal pool habitat, or may not have been recorded due to limited surveys. The presence of suitable habitat for these species suggests the value of Wright's Field for recovery programs.

- Thread-leaved Brodiaea - other species in the genus present
- Orcutt's Brodiaea - habitat present
- Dunn's Mariposa lily - other Calochortus species present
- Orcutt's spineflower - species in the genus present
- San Diego button-celery - vernal pool habitat present
- *Hemizonia floribunda* - other species in the genus present
- San Diego goldenstar - grassland associated species
- *Navarretia fossalis* - sp. *hamata* present
- Calif. Orcutt grass - vernal pool habitat present
- San Diego mesa mint - vernal pool habitat present
- Otay mesa mint - vernal pool habitat present
- *Quino* checkerspot butterfly - host plant present
- San Diego fairy shrimp - vernal pool habitat present
- Riverside fairy shrimp - vernal pool habitat present
- California gnatcatcher - present in coastal sage scrub several miles to the southwest



The *Quino* checkerspot butterfly is an endangered species whose habitat and host plant occur in Wright's Field.



Brodiaea jolonesis is abundant throughout the native grassland in Wright's Field.



Calochortus splendens (Mariposa lily) is common in the Wright's Field MSCP preserve area.



Large patches of *Plantago erecta* (small white flower heads), the host plant of the *Quino* checkerspot butterfly, occur in Wrights' Field.

Wright's Field provides an important corridor between designated MSCP areas in Harbison Canyon and El Capitan reservoir to the west and north, and the Cleveland National Forest (CNF) to the east and south. The importance of this linkage has been emphasized by the CDFG and USFWS.

In a 3/11/94 CDFG letter concerning Wright's Field it is stated that the "site may act as a stepping stone of habitat for mammals and birds as they move from the Sweetwater River area towards El Capitan Reservoir and the CNF, or *vice versa*. ... Connectivity to the Loveland Reservoir and public lands to the south may be an important link in the eastern part of the MSCP."

In a 3/7/94 USFWS letter regarding Wright's Field it is stated that the "area maintains a healthy ecological diversity indicated by the presence of large mammalian predators. Connectivity ... from nearby natural areas appears to occur through riparian drainages linking the ... site to El Capitan Reservoir to the northwest and through open land to the south ... that is adjacent to National Forest lands. Maintaining this connectivity between Forest Service land and areas to the north ... may be important to the eastern portion of the MSCP."

The riparian drainages to the west are apparent in MSCP Habitats Map (Exhibit F).

Further, the MSCP plan states on page 4-28 (5/15/97): "Harbison Canyon is a key corridor, and the only location in the vicinity ... where wildlife can cross under 1-8. The Harbison Canyon / Chocolate Canyon drainage is a natural open space connection to the City of San Diego Watershed lands surrounding El Capitan Reservoir to the north." Chocolate Creek is the riparian drainage that connects Wright's Field to the El Capitan Reservoir.



Animal tracks and paths in Wright's Field, which provides an important wildlife corridor between MSCP lands and the Cleveland National Forest.

San Diego County General Plan

The EEM project is consistent with the San Diego County General Plan. The Wright's Field area is specifically mentioned as a particular resource on page X-K-1 of Part X, Conservation Element, of the San Diego County General Plan under Resource Conservation Areas for Alpine. '3. Oak-Riparian Woodland in Drainages Between Alpine Boulevard and South Grade -- These woodlands provide seasonal habitat for birds and movement corridors for native mammals, with the area significant also for the presence of *Fritillaria biflora* (chocolate lily), a rare plant, and an oak woodland area.' A large number of chocolate lilies occur in the MSCP preserve area. (The County's General Plan is currently undergoing its 'GP2020' update.)



Chocolate lilies (*Fritillaria biflora*) and native bunch grasses in Wright's Field.

Alpine Community Plan

This EEM project is also consistent with the Alpine Community Plan because it directly addresses the following elements:

Conservation Element: p. 30 'Encourage the protection and conservation of unique resources in the Alpine Planning Area. Utilize all measures to preserve rare, threatened, or endangered plant life. Protect the rare Engelmann oak wherever possible.' p. 31 'Preserve riparian woodland as an important component of habitat for wildlife, and as a necessary corridor of movement between different ecosystems, essential to the viability of wildlife populations.'

Open Space Element: p. 34 'Encourage the development and preservation of a system of open space for wildlife corridors linking residential areas to permanent open space in the Cleveland National Forest, and nearby lakes and wildlife preservation areas… Encourage preservation of riparian habitat in corridors that connect larger habitats… Provide recreational opportunities through the preservation of open space areas… Explore all funding sources for acquisition, upkeep and protection of open space / recreation preserves.'

Recreational Element: p. 38 'Encourage the acquisition and development of park lands which will protect outstanding scenic and riparian areas, cultural, historical and biological resources.'



The annual Back Country Land Trust native plant sale is very popular in Alpine. This is one of a variety of events that educate people about the value of the Wright's Field preserve.

San Diego County wildfires

Wright's Field did not burn in the catastrophic San Diego County Cedar Fire, October 26-28, 2003, that burned north, east and west of Alpine. The preserve area also did not burn in the 10,000 acre Viejas fire January 4, 2001, that occurred east and south of Alpine. It did, however, burn completely in the 1970 Laguna fire, as seen in aerial photographs. To our knowledge, there has been on average one small fire in the preserve area per year over the past 12 years. These fires are usually 3-10 acres in size and are quickly extinguished by local fire departments and the CDF. All but one, which was started by a lightening strike in the grassland in August, has been started by people's careless behavior. We expect this problem to diminish as management controls become more strictly enforced, especially now that the entire perimeter of the preserve is being posted (new signs around the Phase IV parcel are scheduled to be installed in December, 2003).

We are aware of the complexity the issues relating to fire, habitat, and wild lands. At present, members of the Back Country Land Trust are evaluating these issues, and a geography professor and expert in fire ecology has recently joined the Board. The

MSCP defensible space criteria have been, or are being, implemented in the specific locales where the preserve boundary is directly adjacent to private properties with homes. The land trust is working with the Alpine Fire Department on this issue. An alternative to controlled burns for fuel reduction as well as removal of non-native plant species is steam treatment, as employed by the Soil Erosion and Restoration Group at San Diego State University. A proposal is pending by SERG and the Back Country Land Trust to carry out experimental steam treatment in a 10 acre disturbed portion of the Phase I area. This project would be supplemented by $8,000 in mitigation funds set aside by the Alpine School District. If successful, this treatment may reduce excess fuel accumulation without the potential danger of conducting controlled burns.

Exhibit B – Project Cost Estimate

Total Project Cost	$2,124,000

Exhibit C – Project Budget

Resource Lands Acquisition Cost	
Parcel C[1] APN 404-170-04	40.00 acres
Parcel B[1] APN 404-170-05	101.62 acres
Total Project Size	141.62 acres
Price per Acre[2]	$15,000
Total Project Cost[3]	$2,124,000
EEMP Phase IV Request	$300,000
Matching Funds[4]	($470,000)
Balance[5]	$1,824,000

(1) Parcels 'B' and 'C' comprise the total Phase IV area depicted in Exhibit J.
(2) Minimum price set in the option contract between the property owner and the Back Country Land Trust.
(3) Additional expenses in completing the purchase of the Phase IV parcels, such as appraisal, surveys, title reports, title insurance, and escrow fees, will be the obligation of the Back Country Land Trust and/or the County of San Diego.
(4) In 2002 the County of San Diego purchased 30 acres of Findel Ranch for $470,000 as a valuable addition to the MSCP preserve (Exhibits F, J). Under the Environmental Subdivision Ordinance, title was transferred to the Back Country Land Trust.
(5) The balance of the acquisition cost is being sought by the Back Country Land Trust and the County of San Diego from established State and Federal habitat, wildlife, watershed, and open space protection sources. To date the ~$2.9M cost of establishing 230 acres of the preserve has been provided by the EEM Program and the County of San Diego, with mitigation by the Alpine School District. The Back Country Land Trust may initiate a pledge campaign for major fund raising for land acquisition. There are many supporters of the land trust and the Wright's Field preserve in Alpine. The land trust could also participate in the possible formation of a local tax assessment district that would fund active parks and open space protection.

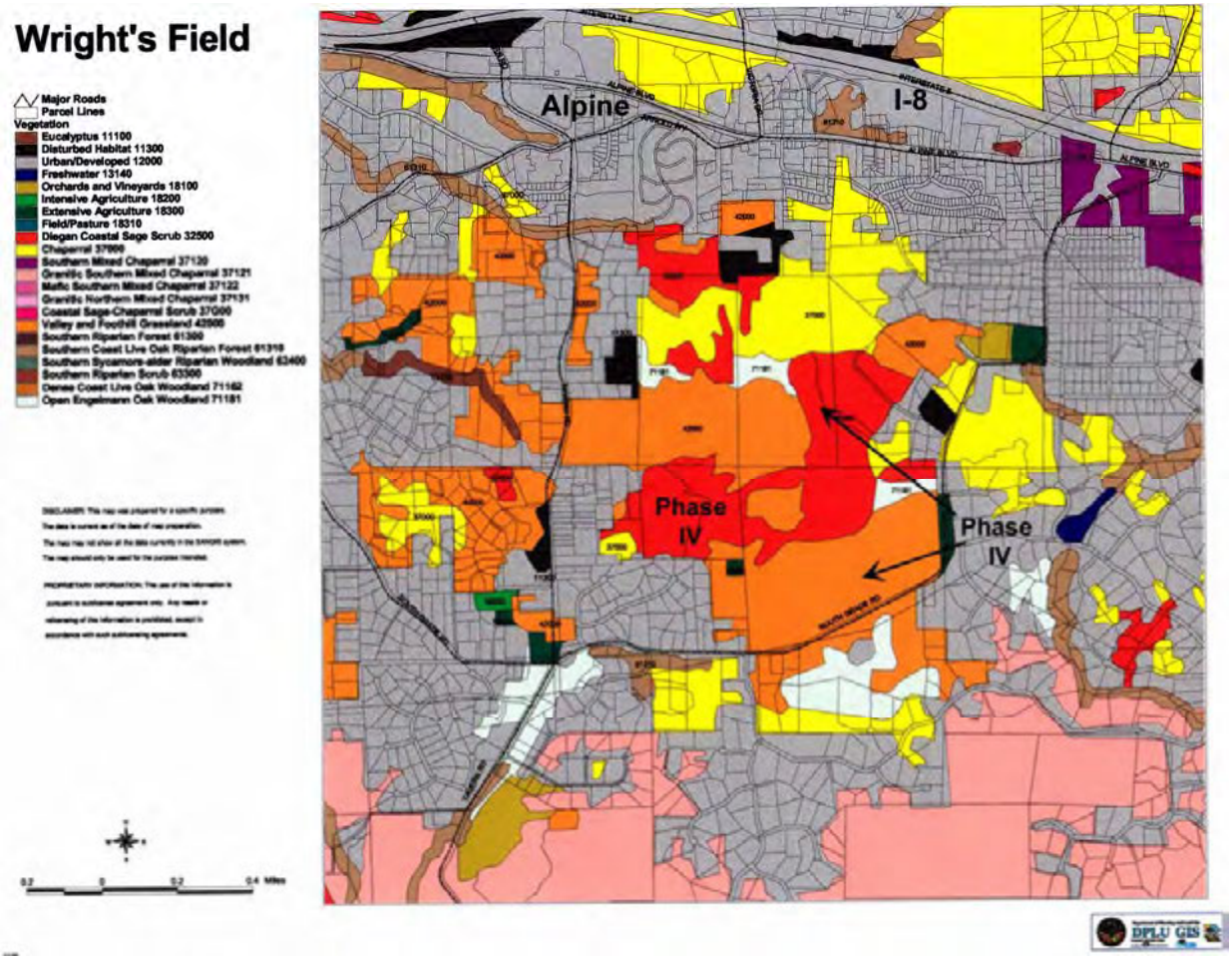
Exhibit D – Project Completion Schedule

Creation of the Wright's Field MSCP preserve has been on-going since 1998, and Phases I, II and III are complete (Exhibit J; Section 3(A)). The option contract between the Phase IV property owner and the Back Country Land Trust extends until ~7/1/05. Following Phase IV, the remaining parcels to be acquired are ~40 acres in the northeast portion of the MSCP pre-approved mitigation area (Exhibits F, J). This area contains a steep ridge, numerous boulder outcrops, and Engelmann oak woodland, and the threat of possible development is not as imminent as for the grassland area of the preserve.

Exhibit E – Project Expenditure Plan

N/A

Exhibit F – Project Location Map (MSCP Habitats Map)



County of San Diego MSCP habitats map for Wright's Field and the Alpine, CA area. Three areas of the 142 acre Phase IV parcel are indicated, which include coastal sage scrub (red), native grassland (orange) and Engelmann oak woodland (white). Parcel lines within Wright's Field have changed since this map was made. Please refer to Exhibit J for the current boundaries with respect to Phases I, II, III and IV. Interstate 8 and central Alpine are to the north of the MSCP preserve area.

Exhibit G – Project Site Photos

Additional photographs of habitat lands in the Wright's Field MSCP Preserve area.



Coastal sage scrub in the Phase IV parcel.



The Wright's Field MSCP preserve area contains 160 acres of native grassland where the coverage of *Nassella pulchra* is ~50% or greater, as seen in this view in the Phase I parcel.



Mima mounds indicative of vernal pool habitat within the Wright's Field MSCP preserve area. All of the native grassland is underlain by heavy clay soil (Bosanko stony clay). This view to the west includes land in the Phase IV parcel and land recently acquired for the preserve.

Exhibit H – Project Design

N/A

Exhibit I - Acquisition Schedule

The option contract between the Phase IV property owner and the Back Country Land Trust extends until ~7/1/05. A request for EEM funds will follow CTC guidelines. Board of Supervisors approvals of matching funds, and funding from other sources, will depend on identification of those sources.

Exhibit J – Acquisition Map (Parcels, Acres, and Phases)

Acquisition Map description

Parcels, acreages, and phases in the Wright's Field MSCP preserve project are superposed on the aerial photograph on the next page. Yellow lines indicate parcels. The 230 acres of Phase I, II and III parcels, and Findel Ranch, are owned and managed by the Back Country Land Trust in partnership with the County of San Diego Department of Parks and Recreation. The Phase IV parcel surrounds the already acquired portions of the preserve to the east, south and west. The unusual shape of this parcel is the result of a condition by the property owner at the time of the sale of the 120 acres in the Phase II + III purchase.

The preserve lands include the integration of native grassland ('*NG*', uniform green), coastal sage scrub ('*CSS*', darker green), and Engelmann oak woodland ('*EOW*', green and mottled red). Vernal pool habitat occurs near the center of the Phase II+III parcel, and within the Phase IV parcel to the west, indicated by '*VP*'. Habitats are depicted in the MSCP habitat and location map (Exhibit F). Future additions to the preserve in the pre-approved mitigation area of the MSCP include ~40 acres of smaller parcels to the north and east of the Phase IV area. About 20 acres of Engelmann oak woodland is protected in an open space easement south of Findel Ranch.

The square-shaped western portion of the Phase IV area is Parcel 'C' (APN 404-170-04; 40.00 acres). The larger eastern portion of the Phase IV area is Parcel 'B' (APN 404-170-05; 101.62 acres). The new Joan McQueen Middle School is directly west of the Phase I mitigation parcel. This Dept. of Public Works photograph was taken in the summer of 2000.

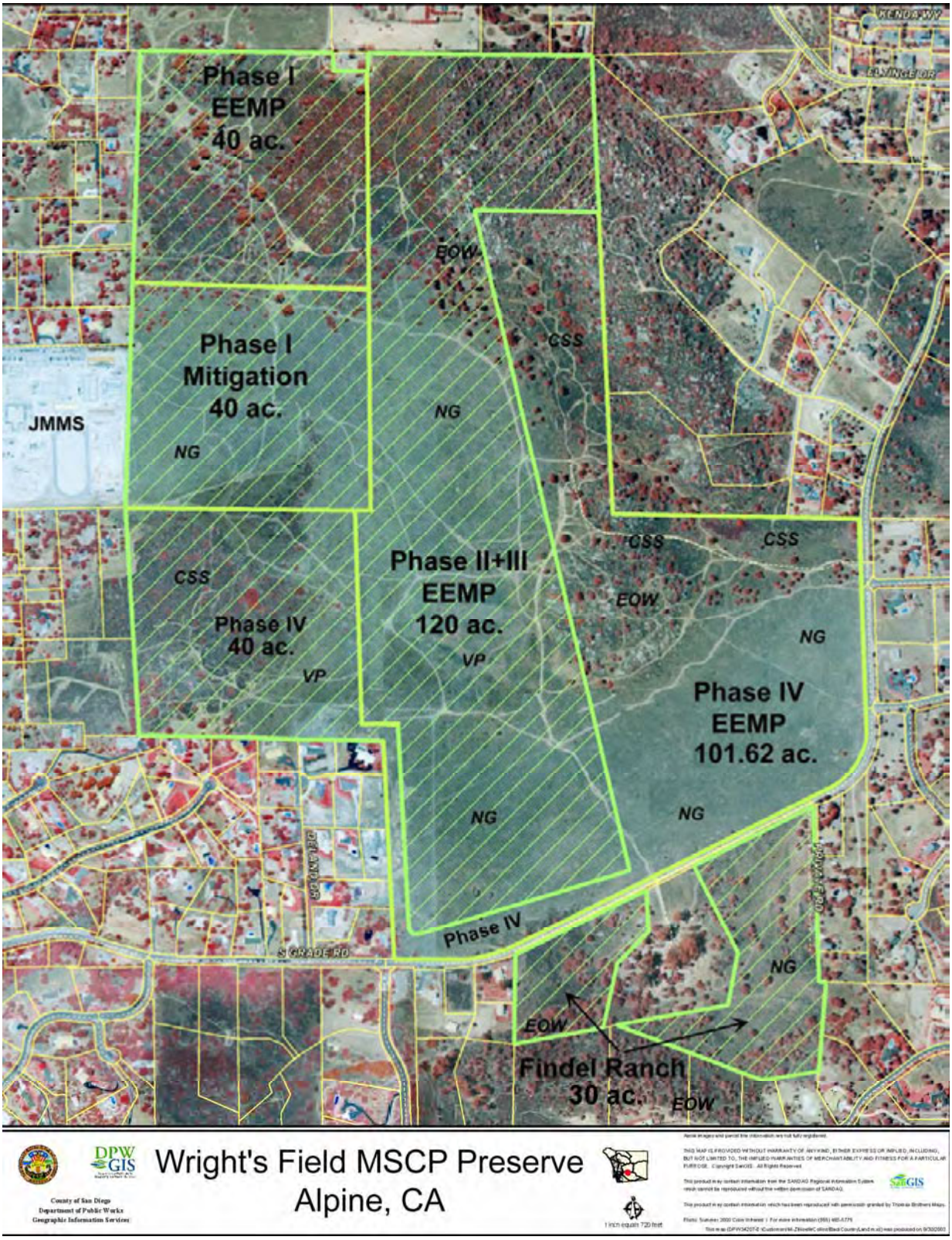

Phase I
EEMP
40 ac.
Phase I
Mitigation
40 ac.
JMMS
NG
EOW
CSS
NG
CSS
Phase II+III
EEMP
120 ac.
VP
CSS
Phase IV
40 ac.
VP
CSS
CSS
EOW
NG
Phase IV
EEMP
101.62 ac.
NG
NG
Phase IV
S GRADE RD
EOW
NG
Findel Ranch
30 ac.
EOW
EOW
Wright's Field MSCP Preserve
Alpine, CA
DPW GIS
County of San Diego
Department of Public Works
Geographic Information Services
1 inch equals 720 feet

Exhibit J

Exhibit K – Tree Planting Certification

N/A

Exhibit L – Planting Description

N/A

Exhibit M – Supporting Documents

Board of Supervisor resolutions, Agreements to Disclose Restrictive Covenants, and Conservation Easements, involving the CTC, County of San Deigo Department of Parks and Recreation, Alpine School District, and Back Country Land Trust, are on file for Phases I, II and III, and Findel Ranch. An ADRC for the Phase IV property will be submitted at the time of acquisition.

Exhibit N – Letters of Endorsement

1. Letter from San Diego County District 2 Supervisor, Dianne Jacob
2. Letter from US Fish and Wildlife Service

Exhibit I

STATEMENT OF PROCEEDINGS
COUNTY OF SAN DIEGO BOARD OF SUPERVISORS
REGULAR MEETING
MEETING AGENDA
WEDNESDAY, JANUARY 13, 2021, 9:00 AM
BOARD OF SUPERVISORS NORTH CHAMBER
1600 PACIFIC HIGHWAY, SAN DIEGO, CALIFORNIA

Order of Business

A. REGULAR SESSION: Meeting was called to order at 9:00 a.m.

PRESENT: Supervisors Nathan Fletcher, Chair; Nora Vargas, Vice-Chair; Joel Anderson; Terra Lawson-Remer; Jim Desmond; also, Andrew Potter, Clerk of the Board of Supervisors.

(Please note, California Governor Gavin Newsom issued Executive Order N-29-20 on March 17, 2020, relating to the convening of public meetings in response to the COVID-19 pandemic. Pursuant to the Executive Order, and to maintain the orderly conduct of the meeting, all members of the Board of Supervisors attended the meeting via teleconference and participated in the meeting to the same extent as if they were present.)

B. Closed Session Report

C. Non-Agenda Public Communication: Opportunity for members of the public to speak to the Board on any subject matter within the Board's jurisdiction but not an item on today's agenda.

D. Approval of the Statement of Proceedings/Minutes for the meeting of December 9, 2020.

ACTION:
ON MOTION of Supervisor Fletcher, seconded by Supervisor Lawson-Remer, the Board of Supervisors approved the Statement of Proceedings/Minutes for the meeting of December 9, 2020.

AYES: Vargas, Anderson, Lawson-Remer, Fletcher, Desmond

E. Formation of Consent Calendar

F. Discussion Items

NOTICE: THE BOARD OF SUPERVISORS MAY TAKE ANY ACTION WITH RESPECT TO THE ITEMS INCLUDED ON THIS AGENDA. RECOMMENDATIONS MADE BY COUNTY STAFF DO NOT LIMIT ACTIONS THAT THE BOARD OF SUPERVISORS MAY TAKE. MEMBERS OF THE PUBLIC SHOULD NOT RELY UPON THE RECOMMENDATIONS IN THE BOARD LETTER AS DETERMINATIVE OF THE ACTION THE BOARD OF SUPERVISORS MAY TAKE ON A PARTICULAR MATTER.

Board of Supervisors' Agenda Items

Agenda #	Subject
1.	NOTICED PUBLIC HEARING: EL MONTE RIVER VALLEY - APPROVE ACQUISITION OF APPROXIMATELY 98 ACRES OF LAND IN LAKESIDE FROM HELIX WATER DISTRICT FOR ACTIVE RECREATION AND TRAIL CONNECTIVITY [FUNDING SOURCES: AVAILABLE PRIOR YEAR GENERAL FUND FUND BALANCE AND DISTRICT TWO NEIGHBORHOOD REINVESTMENT PROGRAM FUNDS]
2.	TRAFFIC ADVISORY COMMITTEE (01/13/2021 - ADOPT RECOMMENDATIONS; 01/27/2021 - SECOND READING OF ORDINANCE)
3.	ADOPT A RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE CALIFORNIA NATURAL RESOURCES AGENCY URBAN GREENING GRANT PROGRAM [FUNDING SOURCE: DEPARTMENT OF PARKS AND RECREATION GENERAL PURPOSE REVENUE]
4.	ADOPT A RESOLUTION TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE STATEWIDE PARK PROGRAM GRANT PROGRAM [FUNDING SOURCE: DEPARTMENT OF PARKS AND RECREATION GENERAL PURPOSE REVENUE]
5.	FRAMEWORK FOR OUR FUTURE: ACTIONS TO ACHIEVE BOLD CLIMATE ACTION AT THE COUNTY OF SAN DIEGO
6.	NON-AGENDA PUBLIC COMMUNICATION

BUSINESS IMPACT STATEMENT
N/A

ACTION:
ON MOTION of Supervisor Desmond, seconded by Supervisor Vargas, the Board of Supervisors took action as recommended, adopting Resolution No. 21-009 entitled: RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN DIEGO APPROVING THE APPLICATION FOR STATEWIDE PARK DEVELOPMENT AND COMMUNITY REVITALIZATION PROGRAM GRANT FUNDS.

AYES: Vargas, Anderson, Lawson-Remer, Fletcher, Desmond

5. SUBJECT: FRAMEWORK FOR OUR FUTURE: ACTIONS TO ACHIEVE BOLD CLIMATE ACTION AT THE COUNTY OF SAN DIEGO (DISTRICTS: ALL)

OVERVIEW
We need to take bold steps to address climate change in San Diego County. Climate change is already impacting our communities, and disproportionately affects those who have contributed the least to our collective problem, furthering climate injustice.

San Diego County needs to do our part. The 2011 General Plan included the development of a Climate Action Plan as mitigation for greenhouse gas (GHG) emissions associated with the build-out of the General Plan. Now, almost a decade later, the County still lacks a Climate Action Plan and other regional strategies to address climate justice, climate resilience, mitigation, and adaptation. County staff have begun the environmental review to create a new Climate Action Plan, but this board letter serves to identify and prioritize those climate action objectives we expect.

To achieve bold climate action, we are asking the Chief Administrative Officer to develop a Climate Action Plan that meets and exceeds state mandates and guides our region toward Zero Carbon. The Climate Action Plan will be comprehensive and legally enforceable, use updated data and modeling, and will not rely on the purchase of carbon offsets to meet emission reduction targets. It will be shaped by community input and center environmental justice.

This will just be the first of many actions that support a Framework for Our Future to tackle climate change in San Diego County.

RECOMMENDATION(S)
CHAIR NATHAN FLETCHER & SUPERVISOR TERRA LAWSON-REMER
Direct the Chief Administrative Officer to:

1. Develop a Climate Action Plan for the County of San Diego that is comprehensive and legally enforceable, does not rely on the purchase of carbon offsets to meet emission reduction targets, uses updated data and modeling, emphasizing environmental justice and equity, is shaped by community input, and will achieve at a minimum Senate Bill 32 greenhouse gas emissions reductions of 40% below the 1990 level by 2030 and establish actions to meet a goal of net zero carbon emissions by 2045 (in line with Executive Order B-55-18).

2. Conduct stakeholder engagement, hold public hearings, and undertake environmental review.

3. Report back to the Board bi-monthly with progress.

FISCAL IMPACT
There is no fiscal impact associated with these recommendations.

BUSINESS IMPACT STATEMENT
N/A

ACTION:
ON MOTION of Supervisor Fletcher, seconded by Supervisor Vargas, the Board of Supervisors took action as recommended, directing the Chief Administrative Officer to:

1. Develop a Climate Action Plan for the County of San Diego that is comprehensive and legally enforceable, does not rely on the purchase of carbon offsets to meet emission reduction targets, uses updated data and modeling, sets clear goals and measurable metrics that shows how we are ensuring environmental justice and equity, is shaped by community input, and will meet and exceed Senate Bill 32 greenhouse gas emissions reductions of 40% below the 1990 level by 2030 and establish actions to meet a goal of net zero carbon emissions by 2035-2045 (in line with Executive Order B-55-18).

2. Conduct stakeholder engagement, hold public hearings, and undertake environmental review.

3. Report back to the Board bi-monthly with progress.

AYES: Vargas, Anderson, Lawson-Remer, Fletcher, Desmond

6. SUBJECT: NON-AGENDA PUBLIC COMMUNICATION (DISTRICTS: ALL)

OVERVIEW
Kathleen Lippitt provided comments to the Board regarding smoke free housing.

Jadon James provided comments to the Board regarding racism.

ACTION:
Heard, Referred to the Chief Administrative Officer.

Exhibit J

Alpine Revitalization Steering Committee –January 24, 2019

COMMITTEE: Parks and Recreation

Activity Level	Item #	Project	Action	Lead Staff	Funding Source	Status
A	**108**	Creation of Parks and Recreation Master Plan for Alpine	Community members to draft "Parks Master Plan for Alpine" to identify current inventory of parks and prioritize future development needs and desires. Once drafted, Parks Master Plan will be heavily circulated for input of various sectors of community.	George Barnett (619) 659-0349 Work would be intended as joint effort with the ACPG Parks Subcommittee.	N/A	Work not yet started as efforts focused on finding suitable land for active sports.
	108a	30-acre park	1) Find & secure a parkland site. 2) Canvas stakeholders as to active park facilities wishes. 3) Work with County on design concepts. Awaiting contact from County Parks.	George Barnett, Chair (619) 659-0345 County Staff: Bill Saumier; Judy Tjiong-Pietrzak	Land donations. Fund raising & grant applications. Facilites donations. (professional sports franchises) Prop H bond funds & State matching funds, if joint development with GUHSD, County &/or Alpine.	No large sites in Alpine have been identified through over a decade of searching. Recommend removing this item from the matrix. Refer to item #103 above. The County has identified approximately 98 acres of vacant land available for purchase in Alpine. The property will be acquired to develop a portion as an active park and to conserve a substantial portion of the property as open space. Second hearing is set for February 13, 2019.

Alpine Revitalization Steering Committee –January 24, 2019

COMMITTEE: Parks and Recreation

Activity Level	*Item #*	*Project*	*Action*	*Lead Staff*	*Funding Source*	*Status*
	108c	Improve Joan MacQueen Middle School sports facilities.	Action completed.	George Barnett, Chair (619) 659-0345	Alpine PLDO funds. Neighborhood Reinvestment Program grant application, and multiple donation sources.	Alpine Education Foundation and the ACPG Parks & Recs Subcommittee jointly developed a comprehensive master plan to upgrade the dirt playing fields to mostly artificial turf. The plan was endorsed by the ACPG. Alpine Union School District has assumed a lead agency role in executing this project. PRD's view of this project is unknown as meetings have apparently been held in the community without ACPG or Revitalization participation. Recommend removing this item from the matrix to the list of completed projects.
	108d	Conversion of 3.24-acre property formerly donated to the County for a Sheriff's substation. Add to the area of interest Tom Dyke's adjoining ~7-acre industrial parcel.	No action foreseen for the near term.	George Barnett, Chair (619) 659-0345		PRD advise that a letter of interest has now been sent to the property owner, but there has been no reply. The property owner first offered an interest to negotiate over a decade ago and had not been contacted until about a month or so ago. Unofficial information is that the property remains under long term leash for the ongoing 5-year SDGE "wood to steel" project and that potential industrial buyers have expressed a purchase interest. Recommend removing this item since DPR has identified another property for purchase.

Alpine Revitalization Steering Committee –January 24, 2019

COMMITTEE: Parks and Recreation

Activity Level	*Item #*	*Project*	*Action*	*Lead Staff*	*Funding Source*	*Status*
A	***109***	**Parks and Trail-**Increase active and passive parks and ensures protection of Wright's Field. Establish a trail system between parks and neighborhoods to encourage pedestrian and alternative modes of transportation.	1) APG and Parks Sub-committee continue to work with the County on park site.	The effort would be partnered with ACPG Parks. Trails and Conservation Subcommittee Chair, Travis Lyon & Jim Easterling.	Community Development Block Grants Developer Fees	See # 103 Action deferred as all resources directed at finding an active sports site of decent size.
	109a	Trails – staging area	Need further consultation with APG Trails, APG Parks and Parks & Recreation (Passive) Committees to determine requirements and responsibilities for this project.		To be Determined.	Plan staging areas or trail markings at select locations in Alpine. No action on this item. See item 109 above.

Exhibit 2

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JOSEPH D. PETTA
Attorney
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May 18, 2022

Via Electronic Mail Only

Ms. Anna Prowant
Land Use/Environmental Planner III
San Diego County
Department of Parks and Recreation
5500 Overland Avenue, Suite 410
San Diego, CA 92123
E-Mail: CountyParksCEQA@sdcounty.ca.gov

Re: Comments re Environmental Impact Report for the Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant:

On behalf of the Cleveland National Forest Foundation ("CNFF") we submit these comments on the proposed Alpine Park Project ("Project") and the associated Environmental Impact Report ("EIR"). For the reasons set forth below, the County has failed to demonstrate a need for the Project. The Project is oversized, incompatible with the rural character of Alpine, would substantially increase overall vehicle miles travelled ("VMT"), and would convert open space in an area with substantial sensitive biological resources to an active recreational facility.

The project proposes construction of a sports complex immediately adjacent to Wrights Field, a 230-acre nature reserve. The Project, which would develop 25 acres of various recreational uses, would include parking spaces for up to 275 vehicles. A sports complex of this size in a rural setting would not only serve Alpine area residents, but would attract people from distant areas as well, resulting in increased VMT and corresponding increases in greenhouse gas emissions.

Importantly, the Project is fundamentally inconsistent with SANDAG's Regional Plan and Sustainable Communities Strategy ("SCS"), which includes among its strategies to "focus housing and job growth in the urbanized areas where there is existing and planned transportation" and to "protect the environment and help ensure the success of smart growth land

use policies by *preserving sensitive habitat, open space, cultural resources, and farmland*."[1] The preeminent goal and performance target of SANDAG's Regional Plan, as mandated by SB 375, is to reduce per-capita CO2 emissions from cars and light-duty trucks to meet the California Air Resources Board's 2020 and 2035 reduction targets for the region. Id.

In addition, the July 2020 Regional House Needs Allocation ("RHNA") Plan reduced the housing allocation for the 2021-2029 planning cycle in the County's unincorporated areas by 15,000 units compared to the allocation in the previous cycle. The units were transferred from the rural unincorporated areas to already urbanized areas that have established infrastructure, transit corridors, and jobs for the express reasons of making housing and transportation more affordable and to reduce VMT and greenhouse gas emissions. This means that compliance with SANDAG's Regional Plan and the RHNA would limit development in rural lands in and adjacent to forest lands, such as Alpine.

The Alpine Park Project was purportedly planned to accommodate population growth and demographic changes anticipated in the area. However, the most recent Regional Plan, indicates otherwise. SANDAG adopted the 2021 Regional Plan[2] and certified the associated EIR,[3] both of which incorporate the Series 14 Regional Growth Forecast which SANDAG adopted in October 2019.[4] The Regional Plan shows a drastic reduction in the projected growth in the County's unincorporated areas.

Specifically, whereas SANDAG's Series 13 housing forecast calculated an increase of 51,123 housing units in the unincorporated county between 2012 and 2050,[5] SANDAG's current Series 14 housing forecast *reduces* this projected growth to an increase of just *7,419 housing units* in all unincorporated areas countywide during a similar timeframe (2021 Regional Plan, Appendix F at p. F-13). This reduction in population growth in the county's unincorporated areas consequently means the Project is not necessary to accommodate growth, because the projected growth rate for the Alpine area is now substantially reduced.

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[1] SANDAG 2015 Regional Plan at 26 (emphasis added), available at https://sdforward.com/pdfs/Final_PDFs/Chapter2_A_Strategy_for_Sustainability.pdf (last accessed January 14, 2022).
[2] Available at https://sdforward.com/mobility-planning/2021-regional-plan, last visited January 12, 2022.
[3] Available at https://sdforward.com/mobility-planning/eir/, last visited January 12, 2022.
[4] Available at https://sdforward.com/docs/default-source/final-2021-regional-plan/appendix-f---regional-growth-forecast-and-scs-land-use-pattern.pdf?sfvrsn=8fc1fd65_2, last visited January 12, 2022.
[5] SANDAG Series 13 Regional Growth Forecast at p. 8, available at https://www.sdforward.com/pdfs/Final_PDFs/AppendixJ.pdf, last visited January 12, 2022.

In brief, in order to be consistent with SANDAG's 2021 Regional Plan and Series 14 forecast and RHNA, the County will have to *reduce* Alpine's housing allocation from the current General Plan, which will result in significantly less population growth in the Alpine area. Based on the foregoing, there no reasonable argument supporting the need for a park project of the proposed size.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



Joseph "Seph" Petta

1508249.1

Fostering the protection and appreciation of birds, other wildlife, and their habitats...

Comments on the Draft Recirculated Environmental Impact Report will now be accepted through February 28th, 2023 until 5:00 P.M. Comments on this Draft Recirculated Environmental Impact Report must be sent to CountyParksCEQA@sdcounty.ca.gov

County of San Diego
Department of Parks and Recreation
5500 Overland Avenue, Suite 410
San Diego, CA 92123
CountyParksCEQA@sdcounty.ca.gov

February 28, 2023

Re: Draft Recirculated Environmental Impact Report for The Alpine Park Project

Dear Anna Prowant,

O11-1 Thank you for the opportunity to comment on the Draft Recirculated Environmental Impact Report for The Alpine Park Project (DREIR). The San Diego Audubon Society (SDAS) is a 3,000+ member non-profit organization with a mission to foster the protection and appreciation of birds, other wildlife, and their habitats, through education and study, and to advocate for a cleaner, healthier environment. We have been involved in conserving, restoring, managing, and advocating for wildlife and their habitat in the San Diego region since 1948. We provide the following comments that address significant impacts from the trail design to sensitive plants and wildlife.

O11-2 The trail system design for the project hasn't changed from the first circulated EIR, therefore it still causes significant impacts to special status plants with mitigation measures either absent or ineffective. The term "Trail System" is used seven times in the Biological Section with no explanation what the trail system is designed to accomplish. A few sentences on page 4.4-46 are at odds with a design that directs an increased number of park trail users, with 250 new parking spaces, into Wright's Field. The below will point out the following identifiable impacts: equestrian manure and invasive plant introduction, increased public presence into Wrights Field, special status plant impacts, QCO host plant impacts, CAGN vegetation impacts, and lack of an Invasive Plant Management Plan.

O11-3 Section Operation, Page 4.4-29, describes a Manure Management Plan (MMP) **would be prepared** for the project to control disease vectors and pests. It then states that **it is anticipated** that long-term impacts would be reduced compared to baseline conditions. The issue is the MMP is not described in this EIR, nor what baseline conditions are to be used for comparison. The expectation provided is a volunteer and two park rangers will eliminate all expected significant impacts for the project description of a 25-acre active park and 70 acres of open space/preserve. This is an unreasonable conclusion. Can the MMP and baseline conditions for comparison be provided in the DREIR for vetting to control disease vectors and pests?

O11-4 Section Operation, Page 4.4.46, states, "Although anthropogenic presence **is likely to increase** through construction of Alpine Park, measures have been sought to reduce impacts on the sensitive natural

O11-4 cont.

communities in the adjacent open space/preserve." The anthropogenic presence **will absolutely increase** and the measures to reduce impacts are not described in this section or directed to where they could be found. It is also unclear how the permanent live-in volunteer will further reduce indirect impacts on sensitive habitats by their mere presence. Can this section of the DREIR be updated to properly describe increased anthropogenic impacts by the project and what detailed measures will be used to reduce indirect impacts and what authority the volunteer will use to protect sensitive natural communities in the adjacent open space/preserve?

O11-5

The following section, Impacts on Wright's Field, describes increased trail usage would have the potential to increase impacts on special-status plants and wildlife. The reasoning that these impacts will be less than significant are due to the distance from Alpine Park, that ballplayers/skateboarders won't traverse, and a different entrance way into Wright's Field are not well founded. The poorly designed trail system directs all Alpine Park trail users, including horses, into Wright's Field increasing potential impacts to special status plants and wildlife habitat. Can the Project trail system be redesigned to direct users away from sensitive habitats and entering into Wright's Field?

O11-6

This section further describes impacts to special status plants by the increase of invasive plant propagules from the increased use of the project trail system. It fails to include this scenario from the horse's hoofs from the equestrian staging area. This section, including Figure 4.4-2, also describes impacts to special status plants, "have the potential to be trampled from unauthorized users within the proposed Alpine Preserve, which could result in plant decline or mortality." The presence of proposed additional signage, a live-in volunteer and park rangers to monitor are not end all viable solutions. Lack of proper mitigation strategies allows the project to be in conflict with LU-6.1 Environmental Sustainability, COS-2.1 Protection, Restoration and Enhancement, Conservation Goal Policy/Recommendation 6 and Policy/Recommendation 11. Can these significant impacts to sensitive plant species be identified and mitigation measures such as trail redesign be provided for in the DREIR?

O11-7

Figure 4.4-3, Special Status Wildlife, shows the project trail system directs an increased amount of park users into Wright Field Preserve in direct contact of QCB host plants. Impacts are described on page 4.4-31," QCB may be restricted from accessing these host plants, reducing the potential reproductive success of individuals.", but are summarily dismissed. This expectation falls under County of San Diego Guidelines for Determining Significance, **4.D. The project would cause indirect impacts to levels that would likely harm sensitive habitats over the long term.** The trail design should direct park users away from QCP host plants. APM-BIO-1, MM-BIO-3 and MM-BIO-9 do not address project trail impacts to QCB host plants adjacent to the project site. Can the DREIR be updated to identify impacts to QCB host plants by increased park users and provide a trail redesign to mitigate these significant impacts?

O11-8

Beyond trial use, impacts to special status plants are further identified on page 4.4-29, specifically "two Delicate clarkia individuals" and" fewer than 100 individual Palmer's grapplinghook individuals were noted in 2019" It is stated that, "potential impacts would be less than significant because of the widespread nature of both species (San Diego Natural History Museum 2021). This conclusion does not match up with Section 4.4.4.2 Thresholds of Significance County of San Diego Guidelines for Determining Significance. It is in direct conflict with **Part 3.A The project would impact one or more individuals of a**

O11-8 cont. **species listed as federally or state endangered or threatened**. Can the DREIR be updated to provide mitigation measures to significant impacts to Delicate clarkia and Palmer's grapplinghook individuals on a project level and not on a regional level?

O11-9 Section 4.4.4 Project Impact Analysis describes a Native Habitat Avoidance Area (NHAA). However, evidence provided in this EIR hardly describes such avoidance. This area is described as adjacent to the proposed equestrian staging area and designated as Permanent Impact in **Table 4.4-2, Summary of Project Components and Associated Impacts.** Threshold 5 on page 4.4-51 describes the new volunteer parking pad extends into the NHAA (Impact BIO-15). Measure APM-BIO-1 states Compensatory Mitigation, but this is not Habitat Avoidance with expected increased human/horse activities and volunteer parking pad. APM-BIO-1 is not sufficient mitigation to lessen the NHAA impacts too less than significant. Can the DREIR be updated to provide achievable protections for identified special status plants in the NHAA?

O11-10 The phrase "Invasive Plant Management" (IPM) is used once in the Special-Status Plant Species section, page 4.4-30 and "Invasive Plants" mentioned only twice more. This section conclusively states that long-term resource management by the county will mitigate significant impacts to special status plants. The absence of details in the IPM leads to a deferred mitigation strategy. Furthermore, additional foot and horse traffic, and equipment will bring large amounts of invasive plant seeds into the habitat area, especially but not exclusively near trails. Those seeds will then be spread by wind, water, and wildlife into other habitat areas including Wright's Field. A significant amount of seasonal weeding will be required each year to offset that additional impact to protect the wildlife resource value. Please specify what entity will perform that removal, manage, fund it, and establish the performance criteria. Additionally, what agency will monitor it, what authority will be able to make sure that it is adequately completed each year, and what protocols will be established to protect the natural areas. Will the Project prepare a conclusive Invasive Plant Management Plan to address all project significant impacts to special status plants described in this letter?

O11-11 In Section 1.4.12.3, Birds, the DEIR states unconvincingly a case for Coastal California Gnatcatcher (Polioptila californica californica), **(CAGN)** non-presence at the project site by using phrases," far eastern extent of the known range of CAGN", "possibly just east of the known current range for this species", and "elevation and related weather extremes of the site may preclude occupation". In Appendix D, the Biological Resources Report, **CAGN** Protocol Surveys states that only three surveys were performed in July of 2019 for 9 hours and 45 minutes (Table 3). A limited survey and conjecture statements are not a reasonable conclusion to have stated in Section 4.4.2.4, "…determined to have low potential to occur; therefore, impacts on these species are not evaluated in this EIR." The project BSA exists in a HCP, NCCP and the San Diego County MSCP. The CDFW- CNDDB has **CAGN** records in the Alpine quadrant, as shown below. Moreover, Table 4.4-1 lists over 12 acres of Diegan Coastal Sage Scrub, **CAGN** habitat, in the BSA. Mitigation for an endangered species in protected habitat is required in the County of San Diego Guidelines for Determining Significance, **7.D. The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the NCCP Guidelines.** Will the RDEIR be

updated to identify impacts to **CAGN** and Diegan Coastal Sage Scrub vegetation to provide protection for an endangered species in protected habitat?

O11-11 cont.

CNDDB Species for Quad (99 records) Field Descriptions

	Element_Type	Scientific_Name	Common_Name	Element_Code	Federal_Status	State_Status	CDFW_Status	CA_Rare_Plant_Rank	Quad_Code	Quad_Name	Data_Status	Taxonomic_Sort
12	Animals - Birds	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	Threatened	None	SSC	-	3211677	ALPINE	Mapped and Unprocessed	Animals - Birds - Polioptilidae - Polioptila californica californica

O11-12 In Section Mitigation Measures, MM-BIO-5, states mitigation for potentially significant impacts on sensitive nesting birds and raptors, "the County DPR shall avoid ground-disturbing activities during the bird breeding season in compliance with state and federal regulations regarding nesting birds." Then in the very next paragraph, its states if this cannot be followed, a 72-hour nesting bird survey will take place instead of avoidance during breeding season. The mitigation measure has no validity if it can simply be ignored as this section suggests. Can MM-BIO-5 be revised to state that ground-disturbing activities will not take place during breeding season and remove the alternative 72-hour nesting bird survey option?

O11-13 Thank you for the opportunity to comment on the Draft Recirculated Environmental Impact Report for The Alpine Park Project.

Sincerely,

James Peugh

Conservation Chair, San Diego Audubon

John Riedel

Conservation Committee, San Diego Audubon Society

From:	Frank Landis
To:	CEQA, CountyParks
Subject:	[External] Coalition comments on Alpine Park Project (SCH No. 2021030196)
Date:	Tuesday, February 28, 2023 2:31:13 PM
Attachments:	Coalition comments on Alpine County Park RDEIR 20230228.pdf Coalition comments on Alpine County Park DEIR 20211115.pdf

Dear Ms. Prowant,

Please find attached comments on Alpine County Park project from CNPSSD, Sierra Club, and Environmental Center of San Diego. The two files are comments on the recirculated portions of the DEIR and 2021 comments on the DEIR as a whole, which you should already have.

O12-1

Please let me know that you received this email and can open the attachments.

Thank you for taking these comments. Please keep us informed about the project at conservation@cnpssd.org, franklandis03@yahoo.com, Ron.Askeland@gmail.com, and pjheatherington@gmail.com. Feel free to contact us with any questions or comments.

Sincerely,

Frank Landis,
Conservation Chair, CNPSSD

February 28, 2023

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Recirculated Sections Alpine Park Project DEIR (SCH No. 2021030196)

Dear Ms. Prowant,

Thank you for the opportunity to comment on the Alpine Park Project's ("Project") recirculated sections ("RDEIR") of the Draft Environmental Impact Report ("DEIR"). The San Diego Chapter of California Native Plant Society ("CNPS"), Sierra Club San Diego Chapter, and Environmental Center of San Diego are united in this commentary on the Alpine Park DEIR. Collectively we have over 15,000 members in San Diego County. O12-2

While we appreciate the additional analysis and the long-delayed inclusion of the community-requested Alternative Five, we still find the DEIR to be a sorely inadequate project description, leaving both the public and the County Board of Supervisors guessing the near-and long-term outcomes of numerous project impacts. Our detailed comments are given below, after our general critique.

Critically, the RDEIR fails to include any design revisions on the preferred alternative, although two redesigns (volunteer pad and equestrian staging area) are mentioned in the text. Therefore, all the critiques of the inadequacies of the preferred design in our 2021 letter (attached) remain relevant. O12-3

Equally critically, there is no Resource Management Plan ("RMP"), there is no Habitat Restoration and Enhancement Plan ("HREP") there is no Invasive Species Management Plan ("ISMP"), nor is there a Manure Management Plan ("MMP"). All of these are required to make the mitigations work. **Why have they not been written in the year since the DEIR first came out? Deferring essential mitigations is inappropriate, as discussed in the 2021 letter.** O12-4

This Project has suffered from trying to be both a regional and community park. The preferred alternative is regional, with public input solicited from all over San Diego County, with facilities designed for regional needs. However, the Project's stated objectives have been to provide benefits only to Alpine. The objectives appear based on unsupported claims that Alpine residents lack access to parks, which they do not; that Alpine lacks park facilities, when in fact Alpine has multiple, underused facilities for these amenities; and that the community wants the preferred alternative, when 60 percent of Alpine residents polled said they wanted something like Alternative 5 (see previous letter, attached, for discussion of all these claims). O12-5

The problem with cramming a regional park's worth of maintenance and funding needs into a community park should be obvious. **Why should a community park require two dedicated rangers and an onsite volunteer? Why does it need millions of dollars in excavation and separate projects for water, sewage, and sidewalk construction? Why does it need so much mitigation for the impacts it causes?** These are not just rhetorical questions. The County will inevitably face recessions and budget shortfalls in the years to come, and park staffing and maintenance is among the first things to be cut. As designed, the Project requires a generous operating budget, multiple full time employees, water regardless of regional drought issues, and substantial maintenance to serve its functions. Otherwise, it will become another pit of deferred maintenance, waiting in perpetuity for whenever resources become available. **Since the Project is, from its objectives, a community-level park, why should anyone expect it to always receive the resources of a larger park, even if it needs them?**

O12-6

Yes, other people in the County do not have access to parks like the one proposed. But they need parks built closer to them, not in Alpine. Park investment should go where there are no recreation opportunities, not to places like Alpine that have underutilized facilities.

O12-7

What to do in Alpine County Park instead?

- Why not re-engineer the curb on South Grade Road where the existing ad hoc parking lot is, to make a simple driveway accessible to regular cars, and to encourage people to park in a single area? How about moving some boulders to keep the informal parking lot from growing further and to prevent people driving onto the grassland? Why not scrape the unpaved lot after rainy years to minimize erosion and encourage people to park only there? This provides stable access for Wright's Field, which is needed. It can remain dirt, which will appropriately keep people out of the park when the soil is wet.

O12-8

- Why not leave the to-be-developed native grassland in its current state and wait 15 years? If Alpine has grown to the point that it needs more local park space, reconsider developing the site using technology that is genuinely carbon neutral. Regardless, in 15 years, revisit the decision to keep the site as it is or build a park that meets the needs of Alpine and the County at that time, because it's superfluous now. Why not consider that the site as it exists may be more useful to the County as a Tier I mitigation bank and/or a carbon sequestration area, and not destroy those sorely needed functions?

O12-9

- Why not write a Resource Management Plan for the entire Park? Why not include an Invasive Species Management Plan? Would a Manure Management Plan or a Habitat Restoration and Enhancement Plan be necessary in a less developed park? If so, why not write them? If the space is minimally developed, most of the mitigations proposed in the DEIR and the RDEIR will be unnecessary, and these plans will be comparatively easy to write.

O12-10

- In other words, why not follow Alternative Five? In a time of rapid change and reorganization, we do not need another heavily engineered, big lawn park to maintain. If the proposed park is built, either it will become a regional destination, in which case Alpine residents will be crowded out, or it will not be used much more than the site already is, in which case it will be a white elephant with a maintenance backlog due to the expansive soils and climate change. Or both sequentially. By the time Alpine grows enough to generate 500 trips per day as a local park, the Preferred Project will be dilapidated and need massive rebuilding to meet new, carbon-neutral land use codes. **Why not skip the white elephant stage and wait to see what the actual, long-term need is?**

O12-11

O12-12
- **If the County has millions to spend on parks, why not prioritize those funds to support environmental justice needs in less developed communities?** Residents of Alpine seem to agree with this idea. **Why not let them be generous?**

. Our specific comments on the recirculated project are given below.

Native Plant and Vegetation Issues (RDEIR section 4.4)

Mapping of Engelmann Oak Woodland

O12-13 There are three levels of issues here. First, especially within the Project boundary, the mapping of Engelmann oak vegetation seems to be limited to the area around the oaks (*Quercus* engelmannii) themselves, with even a few feet between trees mapped as buckwheat scrub. This is problematic for two reasons. First, vegetation units are of minimum size, and for trees blocs of 20 meters square or more are appropriate units. Single trees are not. Also, open Engelmann oak woodlands have <50% cover by Engelmann oaks, which is not what is mapped with these polka dots. Every area where there is 30-50% oak canopy should be mapped as open Engelmann oak woodland.

O12-14 Second, from the *Manual of California Vegetation, Second Edition*, Engelmann oak vegetation can have an understory of grass, coastal sage scrub, chaparral, or a mix. Comparing Figure 4.4-1 with Google Earth, it appears possible that there are a number of Engelmann oaks within the "coastal sage scrub-chaparral transition." If that is the case, some parts of that may need to be mapped as open Engelmann oak woodland.

O12-15 Third, Englemann oak woodland is a Tier I vegetation type, while buckwheat scrub is a Tier II vegetation type. It is therefore troubling that the oaks in the Project area are mapped as not vegetation, because everything else around them is mapped as buckwheat scrub and subject to less mitigation. **Please map vegetation consistently. This may well mean that the Project has unmitigated impacts to Engelmann oak woodland.**

Impacts to Wright's Field

O12-16 The conclusion that operational impacts from the Alpine Park would not have a significant impact on Wright's Field because it's 600 feet away is a poor argument. The RDEIR states (p. 4.4-29). "However, the proposed Alpine Park would be approximately 600 to 800 feet away from the eastern edge of Wright's Field. At that distance, impacts from operation of the active park and formalization of the trails would dissipate considerably and be considered less than significant..." Given that most of the trails connect to Wright's Field and even small children can walk that 600 feet (from on-site observation), this is ludicrous. It is even more ludicrous because the shortest and safest way for children to get from Joan McQueen Middle School or Boulder Oaks Elementary is across Wright's Field. Indeed, Back Country Land Trust has discussed modifying trails in Wright's Field to deal with increased foot and bike traffic from the west, where the schools are.

O12-17 **The Project's indirect impacts to Wright's Field have to be analyzed and mitigated.** At a time when the County is trying to cut Vehicle Miles Travelled and people of all ages traverse Wright's Field as a matter of course, why assume that people using the developed park will only drive there? This is not a future the County is planning for.

Tier I Mitigation

First, MM-BIO-10 prescribes roughly 30 acres of Tier I mitigation for the roughly 15 acres of impacts to native grassland. This measures states (p. 4.4-47) "Success criteria established in that HREP will include achieving at least a 5 percent absolute cover of purple needlegrass within restoration areas while retaining cover and species composition similar to that of the native forbs currently present within non-native grassland areas on-site." Although sources vary on the minimum percentage of native grass cover for mapping native grassland, the DEIR references the Draft Vegetation Communities of San Diego County (Oberbauer et al 2008) which states that "The percentage cover of native species at any one time may be quite low, but is considered native grassland if 20% aerial cover of native species is present." **Therefore, the MM-BIO-10 success criteria should be raised from a goal of 5 percent native grass cover to 20 percent.**

O12-18

Second, Tier I habitat mitigation includes restoring 7.41 acres of habitat on Wright's Field. No additional detail is provided about what type of habitat will be created, where within Wright's Field it will be added, the feasibility of this, or a restoration plan with monitoring, management, and success criteria. **Will the RMP address this offsite restoration and long-term management? We don't know because there is no RMP. The DEIR needs to include a detailed off-site restoration plan as well as a RMP**

O12-19

Trail System Issues

The trail system design for the project has not changed from the DEIR. The trails left open cause significant and unmitigated impacts to special status plants, as shown below. The term "Trail System" is used seven times in the Biological Section with no explanation what the trail system is designed to accomplish. The language on RDEIR page 4.4-46 is problematic in multiple ways:

- How will trails be closed? Some of them cross annual grassland, and most have no suitable brush nearby for brushing them closed. Is signage presumed to be sufficient?
- The "formalized" trail system forces walkers, dog-walkers, families, parents with strollers or small children, bikers, and equestrians onto trails that in some cases are currently only two feet wide. What are the biological impacts of increased, two-way traffic and the likely widening of these trails? What are the safety impacts of forcing so many users to share these trails with two-way traffic?
- How will enforcement work? Will County employees and volunteers be given eBikes to chase down scofflaws riding on closed trails? Will they issue citations or confiscate bikes? Is there a point at which chasing down scofflaws might cause more harm than good?
- What is the point of the trail system? It does little to steer people away from sensitive plants and animal habitat. It loops into Wright's Field, but crucially ignores some major established connections between the properties, thereby tempting people to continue to use informal trails visible on Google Earth in 1990s imagery. And as noted above, if followed, it forces more people onto narrower trails. **What is this effort supposed to improve about the Project? How will this improvement be quantified? Will the improvements outweigh the impacts, especially from trail widening?**

O12-20

Lack of proper mitigation strategies allows the project to be in conflict with LU-6.1 Environmental Sustainability, COS-2.1 Protection, Restoration and Enhancement, Conservation

O12-21

O12-21 cont. Goal Policy/Recommendation 6 and Policy/Recommendation 11. Can these significant impacts to sensitive plant species be identified and mitigation measures be provided for in this EIR?

Second, Figure 4.4-3 and others show the project trail system directs an increased amount of park users into Wright Field Preserve in direct contact with sensitive plants and Quino Checkerspot Butterfly (QCB, *Euphydryas editha quino*) host plants. Impacts are described on page 4.4-31," QCB may be restricted from accessing these host plants, reducing the potential reproductive success of individuals.", but are summarily dismissed. This expectation falls under County of San Diego Guidelines for Determining Significance, **4.D. The project would cause** O12-22 **indirect impacts to levels that would likely harm sensitive habitats over the long term.** The trail design should direct park users away from QCB host plants. APM-BIO-1, MM-BIO-3 and MM-BIO-9 need to be modified to address project trail impacts to QCB host plants adjacent to the project site.

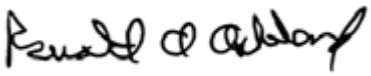
Beyond trial use, impacts to special status plants are further identified on page 4.4-29, specifically "two Delicate clarkia [*Clarkia delicata,* CRPR list 1B] individuals" and" fewer than 100 individual Palmer's grapplinghook [*Harpagonella palmeri,* CRPR List 4] individuals were noted in 2019" It is stated that, "potential impacts would be less than significant because of the O12-23 widespread nature of both species (San Diego Natural History Museum 2021). This conclusion does not match up with Section 4.4.4.2 Thresholds of Significance County of San Diego Guidelines for Determining Significance. **Since delicate clarkia is a list 1B species, impacts to it need to be mitigated within the Project, and impacts to all sensitive species must be properly mitigated.**

O12-24 Thank you for taking these comments. Please keep us informed about the project at conservation@cnpssd.org, franklandis03@yahoo.com, Ron.Askeland@gmail.com, and pjheatherington@gmail.com. Feel free to contact us with any questions or comments, or to set up a meeting.

Stay safe,



Frank Landis, PhD
Conservation Chair, California Native Plant Society, San Diego Chapter



Ron Askeland
Conservation Committee Chair
Sierra Club San Diego



Pamela Heatherington
Board of Directors, Environmental Center of San Diego

November 15, 2021

Anna Prowant
Biologist and Land Use/Environmental Planner III
Resource Management Division
County of San Diego, Parks and Recreation
5500 Overland Avenue, Suite 410, San Diego, CA 92123
By email to: CountyParksCEQA@sdcounty.ca.gov

RE: Alpine Park Project (SCH No. 2021030196)

Dear Ms. Prowant,

Thank you for the opportunity to comment on the Alpine Park Project's ("Project") Draft Environmental Impact Report ("DEIR"). The San Diego Chapter of California Native Plant Society ("CNPS"), Sierra Club San Diego Chapter, and Environmental Center of San Diego are united in this commentary on the Alpine Park DEIR. Collectively we have over 15,000 members in San Diego County. We find the DEIR to be a sorely inadequate project description, leaving both the public and the County Board of Supervisors guessing the near-and long-term outcomes of numerous project impacts.

While some type of park on this site might be good, the material in the DEIR does not yet rise to the level of a finished design. It fails to meet its own (arbitrary) objectives, and the No Park Alternative better fulfills those same objectives. It is missing necessary analysis, and the DEIR fails to meet County goals to decarbonize, end extinction, and keep people safe from fire. Most importantly, it fails to include potential compromises that would garner broad-based community support while simultaneously meeting the objectives set for it. This is a work in process, not a finished product. It needs a massive rewrite, quite possibly with recirculation, before it goes forward in the CEQA process.

The Questionable Need for the Park

Per the DEIR, page 4.16-2 "According the County of San Diego Parks Master Plan (PMP), the County's minimum level of service standard for local parks is 3 acres per 1,000 residents, and 10 acres per 1,000 residents for regional parks (County of San Diego 2016). However, the goal identified in the 2011 San Diego County General Plan is 10 acres per 1,000 residents for local parks and 15 acres per 1,000 residents for regional parks (County of San Diego 2011a). The PMP minimum standard is an analytical tool for County DPR to determine where parks and recreational resources are needed, whereas the 2011 general plan establishes a goal for long-term park and recreational development. As of 2019, the Alpine Community Plan Area (CPA) has approximately 1.44 acres of local parkland per 1,000 residents, and no regional parkland. These totals do not include parks that are not owned by the County or for which there is no JEPA because, although they may meet some of the recreational needs of particular communities, access and use may be restricted."

Per worldview.com, Alpine's 2020 population is 14,878, so it needs 148 acres of local parkland and 222 acres of regional parkland. Per the DEIR, table 4.16-1 (p. 4.16-1, below), Alpine residents have access to 202 acres of unencumbered local parkland at Wright's Field and 28, 020 acres of regional parkland in the adjacent Cleveland National Forest (CNF). **Why was County ownership assumed as a precondition? Where in the PMP does it specify that what entity owns the parks matters?** Wright's Field Preserve operates under agreement with County DPR through the MSCP, and US National Forests are open to the public. **Why does the DEIR fail to analyze the contribution the Cleveland National Forest makes to Alpine.**

Figure 1 Table 4.16-1. Parks and Recreational Facilities within the Project Area

Park/Facility Name	Park Type	Existing Acreage
Boulder Oaks Neighborhood Park	Local	2
Joan MacQueen Middle School	JEPA[1]	12
Shadow Hill Elementary School	JEPA[1]	12
Wright's Field		202
Cleveland National Forest Regional Park 28,020	Regional Park	28,020
Total		28,248

[1]Indicates that the park is in a Joint Exercise of Powers Agreement (JEPA), which means that the owner of the facility agrees to allow limited use of the facility by another entity, in this case the County of San Diego and its residents.

Based on the numbers, Alpine is not park-poor but a park-rich. This is borne out by evidence from Wright's Field. If Alpine is truly underserved for parkland, then anyone would expect that existing facilities would be heavily visited and seriously overused. Certainly anyone used to, say, the heavily visited Los Peñasquitos Canyon Preserve in the City of San Diego, would expect dozens to hundreds of the approximately 14,800 people in Alpine to be using Wright's Field, in line with the project proposing to accommodate 500 visitors per day.

I (Landis) went to Wright's Field on Sunday, November 7, 2021 at 1100-1315. The day was clear, partially overcast, in the low 70s, and perfect hiking weather. We saw a total of seven cars parked along South Grade Road (not all at once), and fewer than 20 people, a third of whom were a single family with children. For most of our visit, no other humans were in sight. This is not an overused park. Figure 1 (next page) shows the empty parking lot and three cars across the street at 1:15 pm, when we left. Figures 2 and 3 (next page) show the kind of damage expected in an overused park, these from Los Peñasquitos, where I volunteer weekly.

The logic that parkland only counts if it is owned by the County is specious. By that logic I, a resident of Rancho Peñasquitos, live in a park-poor area, because the only county park nearby is a small part of Los Peñasquitos Canyon Preserve. The square miles of city parkland, Torrey Pines State Preserve, the beaches, and the land trust lands do not count. **Why should it matter whether a public park is controlled by federal, county, municipal authorities, or for that matter a land trust with an open access policy?**



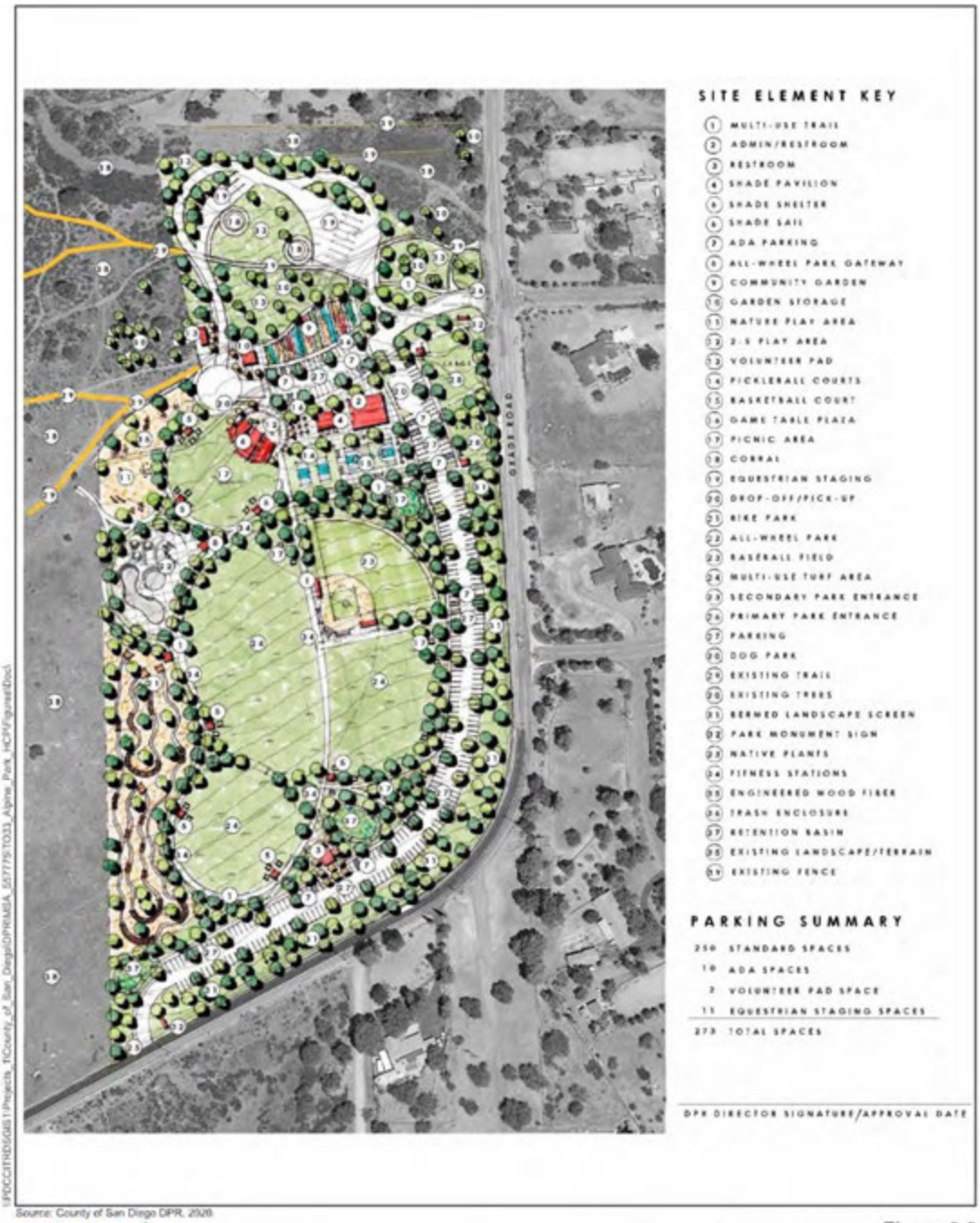
Figure 1. Alpine County park parking lot area, empty, with 3 cars (including mine) parked on South Grade Road. This is not excessive use.



Figure 2. Concrete fence vandalized by two teenage boys at Del Mar Mesa. This is excessive use.



Figure 3. Wood fence vandalized at Del Mar Mesa, using a sawzall on the posts and beams, and a razor to deface the keep-out sign (white). This is also excessive use.



Source: County of San Diego DPR, 2020

Figure 3.2
Proposed Active Park Concept Plan
Alpine Park Project

Second, why include the general plan goal COS-21.4 Regional Parks (p. 4.4-6), which requires " new regional parks to allow for a broad range of recreational activities and preserve special or unique natural or cultural features when present." **Why is this regional park goal given as a justification for a local park?** Alpine has almost 100 times more regional parkland than it needs per the PMP. **Does this section even belong in the DEIR?**

The need for recreation at this site needs to be rethought. Two possible alternatives are given at the end. As for the project objectives, they are covered at the end as well.

Issues with the Proposed Design

The project design (DEIR Figure 3.2, previous page) conflicts with the geometry of the site and at least two parts of the DEIR, in that the project cannot not be built as shown if the Project is to implement its mitigation measures to deal with the site. Therefore, the Project Description (Chapter 3, especially Figure 3.2) needs to be revised to reflect the reality of the project.

First, the project site slopes, with approximately 50 feet of elevation between top in the north and bottom in the south. The highest point is very approximately at the community garden in Figure 3.2, and the site slopes at around a 3% grade both north and south from that ridge. The topographic lines in Figure 3.2 appear to show the slope in 1' increments. **Why are these not more obvious?**

The existing slope is proposed to be flattened out in several places, which is good, because a baseball diamond (#23) that slopes 6' across the field will be suboptimal for play, while the horse trailers being forced to load on a 3% slope (#19) will be awkward at best and lead to trouble if the horses are not trained for it.[1]

However, the massive excavations necessary to flatten out the site are not shown in Figure 3.2, and that is a worse problem. **The site is proposed to be laced with cut and fill slopes, but where are they on Figure 3.2?** While ADA access is not a CNPS issue, one wonders how any wheeled seat, be it a wheelchair or a stroller, will handle the slopes. **Where will the access ramps be?**

CNPS is concerned about native plants, and the massive amount of grading is incompatible with the health and continued existence of the Engelmann oaks (*Quercus engelmannii*) and other existing trees on site. While the fill may avoid their trunks, damaging root systems will simply substitute a slow death for a quick one. Furthermore, the DEIR itself (p. 4.7-14) proposes, as mitigation for soil conditions: "[s]ite preparation should begin with the removal of existing improvements, vegetation, utility lines, asphalt, concrete, and other deleterious debris from areas to be graded. Tree stumps and roots should be removed to such a depth that organic material is generally not present. Clearing and grubbing should extend to the outside of the proposed excavation and fill areas. The debris and unsuitable material generated during clearing and grubbing should be removed from areas to be graded and disposed of at a legal dumpsite away from the project area, unless noted otherwise in [the report]." Since existing improvements, utility lines, asphalt, and concrete are largely absent from the site, this is obviously boilerplate, and its lack of customization shows a complete lack of care by whoever assembled the document. **How would the (p. 3-5) "21.75 acres of grading…with approximately 47,200 cubic yards of soil excavated, and approximately 5,750 cubic yards of**

[1] As an aside, a ranch-owning friend commented that most equestrians prefer to tie their horses to one side of the trailer while handling them, which requires an additional 6-8' of clearance. This is not shown in Figure 3-2, and halve the usable number of spaces in the equestrian staging area.

soil imported to the project" be reconfigured to retain existing trees, as required elsewhere in the DEIR?

Second, as discussed in the fire section below, the County fails to follow its own regulations concerning landscaping in a very high fire hazard zone. Therefore, along with the lack of cut and fill noted on the map, the placement of trees throughout the project certainly appears to be too dense and a fire hazard in an extreme wind driven wildfire. **What would a fire-resistant tree planting and landscape plan look like, in place of Figure 3.2?**

Third, the project site sits on what soil scientists call a vertisol, the unusual (for San Diego) Lusardi Formation with contains "unweathered granitic rock corestones … and boulders" capped with at least three feet of heavy clay. (p. 4.7-2). "Vertisols are clayey soils [described as "expandable" in the DEIR], which have deep, wide cracks on some occasions during the year ... They shrink when dry and swell when moistened… Irrigation also presents special problems due to their low saturated hydraulic conductivity. Bypass flow in open cracks is the common situation. Because of their low permeability, irrigation of these soils may result in waterlogging and a buildup of salinity unless adequate artificial drainage is provided."[2] In laymen's terms, these soils crack when dry and pull off shoes when wet. If irrigated improperly they pond, ruining lawns and killing trees. If inadequately drained they build up salts, and if improperly engineered, they crack, cracking pavement and foundations, and creating water outflow channels that manifest as perched water tables in cut and fill slopes and berms.

The vertisol extends across Wright's Field, which is why vernal pools and clay specialists like San Diego Thornmint (*Acanthomintha ilicifolia*) occur there. In design terms, dealing with the impermeable clay requires a massive system of drains that need to be visible in the plans. Compressing this clay for building purposes will make it impermeable, so water will flow laterally, effectively making perched water tables that will leak out of cut slopes and berms if not properly channeled. **Does this affect the park design? If so, what changes need to be made? Will water flowing along impermeable clay surfaces or subterranean cracks cause issues on Wright's Field, on South Grade Road, or to neighbors north of the project? What will be done to prevent salt buildup? How will drainage issues be fixed? Will the soils significantly impact the County by creating an unending maintenance burden and continuous, if minor, property damage on-site? How much will this impact cost annually?**

In a related issue, the plan shows septic systems in this impermeable soil**. Where will the sewage go? How will it affect nearby plants and nearby people?**

Finally, the trails plan for the rest of the parcel ignores existing unauthorized trails, which can be seen under the map. While the DEIR states that one mile of trail will be retained and approximately 3,300 feet of unauthorized trail will be closed, even a two hour stroll made it obvious that there is more than 3,300 feet of unauthorized trail onsite already. Some of it is visible in Figure 3-2 above. **How much unauthorized trail is actually present onsite?**

All the mitigations and impacts need to be summarized in Figure 3-2, not hidden. What would the proposal actually look like with all required mitigation measures in place?

Procedural Issues with the CEQA process

Unfortunately, the DEIR presents serious procedural flaws. The area impacted by the proposed project is far bigger than area analyzed. It defers mitigation by failing to include a Resource Management Plan for the preserved part of the park, even though this is a basic objective of the Project. It also fails to analyze multiple other projects that either it proposes or

[2] https://www.sciencedirect.com/topics/earth-and-planetary-sciences/vertisol

are being proposed to meet the needs of the proposed project. Whether this is piecemealing of a bigger project or failure to analyze cumulative impacts is unclear. Finally, the County posted a video presentation of the project and claimed this action constituted a scoping meeting.

The first issue is that the Project is obviously designed to feed more people into the adjacent Wright's Field Preserve, but the direct, indirect, and cumulative impacts to Wright's Field are not analyzed or mitigated. The very design of the project is absurd without access to Wright's Field. Are dozens of equestrians and mountain bikers expected to show up to use a mile of already-existing trail? Of course not. Furthermore, the site is already an informal, and small, parking lot for Wright's Field. And the project assumes that neighbors will use trails in Wright's Field to access the project. Therefore, the Project's direct, indirect, and cumulative impacts on Wright's Field Preserve have to be analyzed and mitigated. **What are they?**

Second, the project fails to include a Resource Management Plan (RMP). Per P. 4.4-25, "Long-term management of the open space/preserve will also occur as part of the County's commitment to species conservation as a signatory to the Multiple Species Conservation Program (MSCP) and as outlined in a resource management plan that will be prepared for the project." To quote CEQA[3]:

> "Where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. **Formulation of mitigation measures shall not be deferred until some future time** [emphasis added]. The specific details of a mitigation measure, however, may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will considered, analyzed, and potentially incorporated in the mitigation measure."

Where are the specific performance standards for the RMP, and what potential actions can feasibly achieve those performance standards? The lack of an RMP is deferred mitigation. The RMP needs to be written, and it needs to also mitigate impacts from the Project to Wright's Field.

Although these provision of water and sewer services are CNPS issues only for the greenhouse gas emissions they emit, these also might be considered as deferred mitigation. Alternatively, the provision of water and sewer services are separate projects with separate CEQA analysis, in which case they were improperly excluded from the cumulative impacts analysis. **Are these part of the Project or not? Where and in what form will their impacts be analyzed? Is also deferred mitigation?**

At least two other projects were apparently omitted from the analysis of cumulative impacts. It is not clear whether these projects constitute piecemealing or unanalyzed cumulative impacts. Regardless, they only exist because of the current proposed project, so their cumulative impacts must be analyzed and mitigated. The first is that Back Country Land Trust ("BCLT") is reportedly working with SANDAG to come up with a plan to widen the trails on Wright's Field that feed into the Project site. The other project has been proposed by the Alpine Community Planning Group, to create a sidewalk along the north/west side of South Grade Road from Tavern Road, so that people can use it to walk to the project. Considering that the Project proposes to install tall berms along the edge of Tavern Road, the cumulative impacts of creating tall berms immediately beside a sidewalk along such a known dangerous stretch of road must be

[3] CEQA 15126.4(a)(1)(B)

considered. **With berms, can pedestrians avoid out-of-control cars? Are other projects known to be in process in the area?**

Finally, the County chose to not hold a scoping meeting on this project. Instead, a video was posted on a website, and comments were solicited. **Is a posted video a meeting? If not, what can be done to remedy this clumsy kickoff for the Project?**

Issues with Plants

As mentioned in the previous section, the DEIR fails to include a Resource Management Plan. **Without an analysis of the trails onsite in an RMP, how can any trails plan be even proposed. This has a number of bases:**

- **What native plants are adjacent to which trails? How will trail closure affect the plants? Will they be cut down to brush trails closed? Will they be trampled by people going around closures?**
- **Which trails have invasive non-native plant species next to them? Will trail closure stop weeding from occurring, or will it prevent their further spread?**
- Mule deer, which are covered by the MSCP, use trails. **Are any trails used by mule deer?** If so, they cannot be closed, for humans (including mountain bikers) can readily follow deer trails, and efforts to close trails necessarily exclude deer.
- **What other wildlife uses with trails? Which will be affected by trail closure?**
- **Which trails are regularly used by people, and which are less used? Have trail users been interviewed about their views on which trails to close?**
- **Are any trails incorporated into first response plans by law enforcement or fire?** If so, they cannot be closed for public safety reasons.

The above questions all should have been asked, but weren't, in the messy failed trail closures on Del Mar Mesa, in which I (Landis) was intimately involved for a decade, as a trail volunteer who worked largely on attempting to close trails and protect rare plants and wildlife. Up until 2020, efforts to close trails caused far more damage to the plants and wildlife than the trails themselves did. In 2020, widespread illegal clearing along trails caused even more damage, but staff and volunteers were unavailable to stop it. There are six lessons from this ongoing mess:

- Illegal trails have a community, and trail closure is therefore more a process in influencing the community than one of building barriers.
- There is a fundamental asymmetry: Signs, fences and barriers are expensive, require contracts and budgets, and take time to install. Wire cutters cost around $30, portable powered saws are less than $100, and knives and razor blades for vandalizing signs are cheap. Some people (figure 2) use freely available rocks. It is cheaper to vandalize than to rebuild, and this asymmetry always favors the vandals.
- Vandalism and trespassing are not capital offenses. Most of the structures that would completely exclude people (especially mountain bikers wearing protective gear) could injure or kill them, as well as injuring or killing wildlife. This asymmetry always favors the trespassers, since they cannot legally be excluded by harmless barricades or other devices.
- Attempts by park departments to stop vandalism generally cause more harm than good, and often cause more resource damage than the illegal activity they seek to prevent.
- Prolonged law enforcement action (chasing down and fining trespassers) does decrease traffic, but it is expensive.

- Informal agreements among unauthorized users to limit activity so as to limit the damage caused by official backlash can work, so long as those agreements are honored. Sporadic enforcement normally leads to people lashing out and causing more vandalism elsewhere in the park as a protest.

Therefore: what data will the project proponents collect on the trail locations and conditions in the project area? How will trails be evaluated for closure or retention? What are the impacts of closure techniques? Who will maintain structures and closures? Will there be any law enforcement activity? Will there be informal social activity to rein in vandals? Will the onsite park volunteer be expected to carry out enforcement duties? If not, who? Are unauthorized trails proliferating in the area? Stable? Decreasing? How will adding 500 people/day change the rate of trail proliferation?

This is what need needs to feed into a Resource Management Plan, one that contains applied recreation ecology**. Why weren't these studies completed, and a RMP written for the DEIR? Until the RMP is written, biological impacts remain unknown and unmitigated.**

Second, the invasive plant management is problematic. On page 4.4-19, it states "Invasive plant management along the edges of the trails will be a management focus for the County during the long-term resource management associated with the open space preserve. As a result, these activities would not present a significant impact on the regional long-term survival of special-status plants present on site." The goal can only be accomplished if action items and performance standards are specified and measured. A "management focus" will just be ignored unless there are specific requirements. **What are those requirements? What cover of non-natives can be maintained? Will Cal-IPC listed plants be targeted for elimination? How will additional weeds be added to the target list? Without actionable details, this impact cannot be mitigated.**

Third, table 4.4-4 notes 11.73 acres of offsite mitigation through the purchase of credits or land acquisition. **Where and how will this offsite mitigation occur? Is this also deferred mitigation?** Offsite mitigation options need to be presented to demonstrate this mitigation is feasible and sufficient. Language needs to be added stating that offsite credit purchase or land acquisition must be finalized prior to project approval.

Among other commenters, CDFW commented on the NOP that they want to see "[a] discussion regarding indirect project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with an NCCP)." Table 1-2 (summary of NOP comments) suggests that this item is addressed in Section 4.4. **Where is it discussed?** We could not find a discussion of the indirect impacts from increased access through Wright's Field as a result of the project.

Finally, CNPS has been concerned for years about the spread of water-molds (*Phytophthora* species, pronounced *Fi-toff-thor-a*) through infected nursery stock being planted out in restoration and revegetation projects. This has been a particular problem for oaks, as Sudden oak Death is caused by *Phytophthora ramorum*. The problem is not limited to oaks, as there are upwards of 100 pathogenic water molds known from nurseries and outplantings, and virtually any plant can be infected by some water mold. **We strongly recommend, as part of mitigation MM-BIO-3, that all plants, especially all native species used for restoration plantings in native vegetation, be tested and certified to be Phytophthora free**. CNPS has put together a web-page (https://sites.google.com/site/cnpsphytophthoraresources/) on the issue in conjunction with native plant nurseries throughout the state. Local nurseries should be aware of

the issue and be willing to cooperate in this request. Planting clean plants will keep costs down, as replanting gets expensive and controlling a spreading water mold infestation is extremely expensive.

Wildfire Issues

The analysis of fire risk under hazards is problematic in two unfortunately common ways. First, it asserts without substantial evidence that following fire codes mitigate the risk below level of significance, and second, it fails to follow the County's own regulations for fire-safe landscaping. Finally, proposes to vastly increase the number of people on the parcel and using South Grade Road, while asserting without evidence that this will not be a problem. Substantial evidence is needed to back up these assertions. **Where is that evidence?**

First, the question of concern is asked in DEIR section 4.9 CEQA Appendix G, Question IX (e): "IX. Hazards and hazardous materials. Would the project… g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?" Since structures are proposed on the site, the project is proposed to bring in 500 people/day to the site, and the site is in the CalFire Very High Fire Hazard Zone, the answer is that yes, there is a serious potential impact. The question then becomes whether it can be mitigated. The DEIR asserted that preventing campfires and constructing buildings to "fire resistive" code was sufficient to mitigate the impacts below significance. If only this were sufficient. Too many extreme, wind-driven wildfires have shown the problems clearly.

First, it is worth pointing out that building anything to code is "fire resistive" not "fireproof." Any number of homes built to code burned in the Thomas, Woolsey, and Paradise fires. Part of the reason for that is inherent in the building code, which reads as follows: "2019 California Fire Code, Title 24, Part 9, Section 4901.2 Purpose: 'The purpose of this code is to provide minimum standards to increase the ability of a building to resist the intrusion of a flame or burning embers being projected by a vegetation fire and contributes to a systematic reduction in conflagration losses through the use of performance and prescriptive requirements.' Note these are **minimum standards**. While necessary, they are not sufficient to mitigate risk to life and structures, as we find in every extreme, wind-driven fire. **Will buildings on site be built to code, or exceeding code? If built to code, what is the remaining risk that needs to be mitigated? Or is the County expected to periodically rebuild? If built exceeding code, what additional features will be added, and how will they reduce risk below significance? What will be done to guarantee that the onsite volunteer living onsite (in a personal trailer?) will be safe from fire?**

Second, the County on October 20, 2021 passed an update to County regulations section 68.404. Among other things, these prohibit plants taller than 6" within 5' of buildings, prohibit groundcover taller than 6 to 18 inches within 50 feet buildings, require at least 10' between tree crowns within 50' of buildings, and require vegetation density to be "sparse" 0-5' from buildings "moderate" 5-50' out from buildings, and "No more than 50% of square footage" 50-100' from buildings. To put it very bluntly, this is not what is shown in Figure 3.2. There, trees overlap buildings and there is grass (not sparse plantings) right up to the proposed shade sail, baseball field buildings, and volunteer pad.

Worse, the project proposes to clear fuel modification zones into the land preserved under the MSCP, rather than accommodating fuel management onsite (p. 4.9-22). This is less than every single developer is required to do, especially adjacent to MSCP land. As noted in the previous paragraph, the park does not follow fire safe landscaping rules inside its boundary

either. **How can the park be redesigned to have both fire safe landscaping within its footprint and to accommodate Brush Management Zones within its footprint, as the County routinely requires developers to do in Very High Fire Hazard Zones and when building adjacent to preserved lands?**

Also, (p. 4.9-22) "Facility Fire-Safe Design. County DPR shall design elements of the project to reduce risk to users and to the area, including fire-resistive approved landscaping, areas that can serve as Temporary Safe Refuge Areas, safe ingress and egress, and a fire-resistive equestrian facility." **How are temporary refuge areas and safe ingress and egress associated with a parking lot that is entirely lined with trees on all sides? How are people expected to get in or out if the trees catch fire?**

Third, can the evacuation plan for South Grade Road handle cars containing hundreds more people and horse trailers rapidly trying to leave the project site? **Given that fire evacuation routes are normally bumper-to-bumper, how can cars and especially horse trailers squeeze onto South Grade Road? If the trees on the park berms catch fire, will they affect South Grade Road as an evacuation route? What can be done to mitigate these risks?**

Unfortunately, these are not trivial issues. CNPS is or has been involved in three lawsuits against the County where fire was an issue, and other groups have won others. Even the California Attorney General is intervening on fire issues. To quote California Attorney General Bonta, on the win over the County on Adara, ""The land use decisions we make now will have consequences for years and decades to come. Today's ruling by the Superior Court affirms a critical fact: Local governments have a responsibility to address wildfire risks associated with development projects at the front end. Doing so will save dollars – and lives – down the line."[4]

This is not a threat to litigate, but rather a critical point: with respect to wildfires, especially the extreme, wind-driven fires that cause over 90% of all property and life loss, business as usual is radically insufficient. The park design, as shown in Figure 3.2, does not match the measures discussed in section 4.9 to minimize fire. Worse, the mitigation measures in sections 4.9 and 4.20 are insufficient to mitigate the impacts from fire. Worst of all, the County is not demanding of itself the same measures it routinely requires from developers to mitigate fire impacts, including in neighborhood parks. And the mitigations put forward by developers are failing in court. **What can be done to bring the Park design into compliance with current fire threats, the County's own regulations, and AG Bonta's hope that the County will save lives and dollars through completely addressing fire risks in the CEQA process?**

Issues with Greenhouse Gases

It is grimly amusing that the DEIR cites Executive Order B-55-18 (carbon neutral by 2045 or earlier and net negative emissions thereafter (p. 4.8-10) and then blithely talks about amortizing carbon emissions until 2052 seven pages later to make emissions less than significant. **This was meant ironically? If emissions from 2022 are to be carried on the books until 2052, does this not mean that the Project fails to comply with all programs directed at reducing societal emissions to zero before 2045? Is this not a significant, unmitigated impact?**

If it hopes to meet its goals and save itself, San Diego County will be working under a decreasing emissions cap and prioritizing emissions going forward, forcing as many groups as

[4] https://oag.ca.gov/news/press-releases/attorney-general-bonta-secures-victory-lawsuit-challenging-approval-san-diego

possible to decarbonize, and allowing emissions only from critical projects, like public transit, affordable housing, and supplying water, food, power, and sewer service. Therefore, one of the key steps in claiming any special privilege to emit GHGs requires that a project specify, in detail, why it needs to be allowed to emit GHGs while others are not. **What is the reason that the proposed park should be allowed to emit greenhouse gases while most of Alpine will decarbonize? If the Park is to benefit Alpine residents now and into the future, should it not be constructed and maintained with minimal or no GHG emissions? Is there a configuration in which it could sequester enough GHGs to have net negative emissions?**

Second, not all GHG emissions from the Project were counted. Per P. 4.7-14 "Tree stumps and roots should be removed to such a depth that organic material is generally not present… and disposed of at a legal dumpsite away from the project area." Normally, greenwaste rots and produces greenhouse gases. **How much carbon is stored in the project soil as organic matter? What type and amount of GHGs will be produced by its destruction?**

Third, per CEQA section 15064.4(b): 'A lead agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment: (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting."

As noted in the draft San Diego Regional Decarbonization Framework[5], Chapter 4 (citing other sources), grasslands only sequester up to half the carbon as forests. However, adding trees to non-forested landscapes is problematic as the trees may require care that makes them carbon emitters, and they offer fewer cobenefits to wildlife. The report further notes (again citing multiple sources) that converting grasslands to settlements generally turns carbon sequestering lands into carbon emitting lands. That is certainly the case here. **Isn't this a significant impact?**

Can climate change impacts be properly determined without knowing how water and sewer will be supplied to the Project? How were the emissions numbers for water and sewer in the chapter determined, given that elsewhere in the DEIR these structures remain to be determined?

What is the carbon budget of the built park? Are lawns net GHG emitters or a net sequestration, given their shallow roots? Are trees, with the necessity for pruning, watering, fertilizing, net GHG emitters or net sequestration? Given that the trees will be growing in shallow imported soil, how long are they expected to survive, and what are the emissions costs of replacement?

Finally, why didn't the DEIR use the current SANDAG Series 14 growth forecast, instead of Series 13? What happens when Series 14 is used instead?

Issues with the Alternatives Analysis

How does the preferred project alternative meet its objectives?

The alternatives (DEIR Chapter 6) are analyzed against the purpose of the project. Unfortunately, the preferred design is not analyzed against these objectives. Here is our take on how the preferred design meets the project objectives (P. 3-1):

- "Create a place where all Alpine residents can gather and connect as a community." **Only one small shade sail shelter appears designed for communal activity, although the baseball field should lead to increased factionalism among the families of the teams**

[5] https://www.sandiegocounty.gov/content/sdc/sustainability/regional-decarbonization.html

competing. Everything else is designed for individual activity, which does not connect people in community.

- "Anticipate, accommodate, and manage a variety of active and passive recreational uses and open space preserve that benefit all members of the Alpine community both now and in the future." **The proposed design fails to incorporate lessons learned from the construction of Joan MacQueen Middle School, which went over time and budget due to dealing with the same clay and boulder soils under the project. The park fails to justify GHG emissions both during construction and operation, despite the County's increasing commitment to decarbonize by 2035. The project fails to incorporate lessons learned on fire safety, despite the fact that the County has lost multiple lawsuits on this issue and the California Attorney General is now intervening to try to make hazardous projects more safe. Where is the substantial evidence that there is anything forward-looking in the current design, or that it can accommodate a hotter, drier, all-electric, less-lawn future?**
- "Provide for long-term natural and cultural resource management consistent with the goals and objectives of the Multiple Species Conservation Program (MSCP) for the preserve portion of the property." **How is this goal met, when creation of a resource management plan for the preserve is deferred?**
- "Design a community park that integrates and, where feasible, preserves natural features into the park design." **What is natural about lawns, a skate park, a baseball field, and 275 parking spaces? Why were commenters' attempts to request feasible alternatives that preserved more natural features summarily rebuffed and not analyzed in the DEIR?**
- Enhance the quality of life in Alpine by providing exceptional park and recreation opportunities that improve health and wellness, while preserving significant natural and cultural resources. **What is exceptional about ripping up a rare native grassland and planting turf and trees? Nothing could be more 20th Century. What is exceptional about designating one official mile of trail on a site where more than half the existing trails will be closed? What is useful about adding a mountain bike course when bikers can ride miles of trails in the adjacent National Forest? How can a site be preserved if the goal is to increase human usage by an order of magnitude and to radically reengineer it down to the bedrock?**
- Protect public health and safety by incorporating Crime Prevention Through Environmental Design and other safety measures into park design. **Where is Crime Prevention Through Environmental Design mentioned in the EIR, except in lists of objectives? Surely if this is a goal, it wouldn't it be described an analyzed in its own section?**
- Manage Alpine County Park consistent with County DPR's missions, policies, directives, and applicable laws and regulations. **How does this help the County meet its goals for reducing carbon emissions, reducing fire risk, preserving Tier I vegetation communities, and managing recreational impacts to sensitive species?**
- Reflect Alpine community's heritage through inclusion of architectural elements that reflect the rural nature of Alpine. **When over 60% of local respondents asked for more natural space and were told that was impossible, they were getting an active use park whether they wanted it or not, how does this park reflect the character of the community? The community told DPR quite clearly what they wanted. Why aren't their concerns being met?**

In summary, the proposed project fails to meet most of its stated objectives. Some (Crime Prevention Through Environmental Design, a Resource Management Plan for the preserved portion) are not even part of the DEIR.

Other Alternatives

A No Project Alternative performs at least as well as the proposed project. It is forward looking, in that it preserves a landscape that is sequestering carbon (a critical County need for the foreseeable future), and preserves Tier I perennial grassland (habitat preservation is a critical need for the foreseeable future, and potentially a mitigation bank). It is already traversed by a fairly small number of people, in groups and families, so it arguably provides active recreation to the local community. It meets the majority of the community's desire for a rural area with nature (not a naturalistic playground), and it saves the County from unending maintenance costs and carbon emissions to keep acres of lawn green. **Why does the No Project Alternative not score higher than the preferred project?**

CNPS requested, in our comment letter to the NOP: "Please include a project alternative with a smaller, nature-focused, minimally developed park that has no impacts to the biological, cultural, and other resources of the project site, Wright's Field Ecological Preserve, and neighboring properties. Given voiced community concerns about the lack of maintenance on existing Alpine parks, please focus on making park upkeep and maintenance financially sustainable for the community and County. Also make its construction, maintenance, and rebuilding carbon neutral and environmentally sustainable, to meet federal, state, and county goals. Please also analyze each and every project alternative equally, as unequal analysis has been contentious on past county projects." None of this was done. **Why not?**

The proposed equestrian staging area without even a Resource Management Plan utterly fails to meet what the community and CNPS requested. We recognized that a parking site on the east side of Wright's Field would be very useful and increase safety. A Resource Management Plan for the site is necessary, and the existing perennial grassland may be more valuable to the County than more lawns. With minimal development, there is less to vandalize, and a dirt parking lot would at least have the advantage of automatically excluding vehicles during rains, when people would cause the most damage to the park and Wright's Field. This arguably meets the project objectives better than the proposed project does. **Why not consider it?**

Alpine has no need for more park area, as it is abundantly supplied by the adjacent Cleveland National Forest and by existing local parks. **When there is a boulder-covered hill with trails on it next to the park, why should any child be confined to a "naturalistic play area?" With 13 mountain biking trails within the adjacent Cleveland National Forest and Wright's Field open to mountain biking for years, why is closing the existing unauthorized trail system down to a single mile of trail worth adding hundreds of parking spots?**

Furthermore, Alpine is getting upgrades to its existing parks. The County Supervisors this week (11/17/2021) considering another amendment to the JEPA with Joan MacQueen Middle School. Its purpose is "**to rehabilitate an existing underutilized decomposed granite (DG) multi-use sports field [emphasis added]** at Joan MacQueen Middle School. Once completed, improvements will be open to the public during non-school hours and include an artificial turf multi-use sports field and Americans with Disabilities Act (ADA) improvements to increase field access." Within a mile of the proposed project, there is an underused active recreation field, and the County is ready to spend money to upgrade it. Meanwhile, the proposed

Project probably needs to comply with the ADA, as explained above. **What does this JEPA amendment say about the need for this Project within a mile of it?**

What to do to fix all this?

Write a resource management plan for the part that's part of the MSCP Preserve.

Re-engineer the curb on the site where the existing parking lot is, to make it more accessible to regular cars. Possibly clear the existing dirt parking lot and move boulders to keep unauthorized expansions from growing the parking lot or people driving onto the grassland. This provides stable access for Wright's Field, which is needed. It can remain dirt, which will appropriately keep people out of the park when the soil is wet.

Leave the grassland in its current state. Wait 15 years. If Alpine has grown to the point that it needs more local park space, reconsider developing it using technology that is genuinely carbon neutral. Regardless, in 15 years, create a park that meets the needs of Alpine and the County. Consider that the site as it exists may be more useful to the County as a Tier I mitigation bank and/or a carbon sequestration area, and leave these options open.

In a time of rapid change and reorganization, we do not need another heavily engineered, big lawn park to maintain. If the proposed park is built, either it will become a regional destination, in which case Alpine residents will be crowded out, or it will not be used more than the site already is, in which case it will be a white elephant needing continual upkeep and rebuilding due to the expansive soils and climate change. Or both sequentially. By the time Alpine grows enough to generate 500 trips per day as a local park, it will be dilapidated and need massive rebuilding to meet new, carbon-neutral land use codes. **Why not skip the white elephant stage and wait to see what the actual, long-term need is?**

And if the County has millions to spend on parks, why not prioritize those funds to support environmental justice needs in less advantaged communities? Residents of Alpine seem to agree with this idea. **Why not let them be generous?**

Thank you for taking these comments. Please keep us informed about the project at conservation@cnpssd.org, franklandis03@yahoo.com, gcourser@hotmail.com, and pjheatherington@gmail.com. Feel free to contact us with any questions or comments, or to set up a meeting.

Stay safe,



Frank Landis, PhD
Conservation Chair, California Native Plant Society, San Diego Chapter

/S/
George Courser
Conservation Committee Chair
Sierra Club San Diego



Pamela Heatherington
Board of Directors, Environmental Center of San Diego

San Diego Mountain Biking Association

February 1, 2023

County of San Diego
Parks and Recreation
% Anna Prowant
5500 Overland Ave. Suite 410
San Diego, CA 92123
Via email: CountyParksCEQA@sdcounty.ca.gov

Dear Ms. Prowant:

O13-1 I am pleased to write this letter on behalf of the San Diego Mountain Biking Association (SDMBA) to submit our comments on the updated Draft EIR for the plan for the Alpine County Park. SDMBA supports the original proposed park plan and rejects any of the offered alternatives in the DRAFT EIR.

The community of Alpine deserves a park that has been planned with extensive input from the community over the past 4 years. We continue to stand in full support of the bike park and all-wheel park amenities which we know will be embraced by the community and riders of all ages.

O13-2 The San Diego Mountain Biking Association (SDMBA), founded in 1994, is the leading trail advocacy organization in the County. Our mission is to improve trail access for mountain biking in San Diego County. Our goals include creating and enhancing connected trail systems in both urban and rural settings that allow for recreational opportunities and alternative transportation options balanced with the conservation needs of our unique environment.

SDMBA and our 1800 members support the County of San Diego in their planning and design of this park. We thank the County of San Diego Department of Parks and Recreation for their vision of providing connected trails and quality parks for the people of San Diego County.

Sincerely,

Susie Murphy
Executive Director
executivedirector@sdmba.com

Comment Letter O13a

12/22/2022

Murphy, Susie (Voicemail)

O13a-1 Hey Anna, this is Susie Murphy with the San Diego Mountain Biking Association. I was just going through the draft EIR for the Alpine Park and ya wow, just wanted to chat about the alternatives. I skimmed it at this point and it seems that Alternative 3 retains the plans for the bike park and the all-wheel park. So anyway I just wanted to get your insights and we are definitely planning on submitting comments before the February deadline, but just wanted to see other insights and thoughts if we were on the right track on that Alternative 3. Anyway, no rush on this if you are already off for the holiday. Please feel free to get in touch with me in early January or whenever. Okay, bye.