MULTIPLE SPECIES CONSERVATION PROGRAM (MSCP) ANNUAL REPORT WORKSHOP: 2011 YEAR IN REVIEW

Tuesday, June 26th 2012, 9am - noon
Balboa Park Club Ballroom
Balboa Park, Pan American Road West, San Diego, CA 92102

AGENDA

POSTER SESSION

WELCOME/ OVERVIEW/ INTRODUCTIONS
Marisa Lundstedt, City of Chula Vista

WILDLIFE AGENCY REPORTS
15 years of MSCP Montage

JURISDICTION REPORTS - MSCP Highlights
- City of Chula Vista
- City of San Diego
- County of San Diego

BREAK

U.S. GEOLOGICAL SURVEY
Connectivity/Wildlife Corridor Strategy

SAN DIEGO ASSOCIATION OF GOVERNMENTS/ SAN DIEGO MANAGEMENT AND MONITORING PROGRAM
- Dahlem Conference
- Vegetation and Species Mapping
- Regional Strategic Plan for Land Management

QUESTIONS
MSCP
Public Workshop
2012
Outline

• Preserve Assembly
  • Habitat Goals
  • Configuration
• Status of Species Conservation
65% of the MHPA/PAMA has been conserved to date
Preserve Assembly

MSCP Goals

Conserved

CSS/MSS

Chaparral

Grassland

Wetland

Woodland

0
10000
20000
30000
40000
50000
60000
70000
80000
Preserve Assembly
Species Conservation Analysis

Species Evaluations considered three components:

- Habitat
- Point/Polygon locales
- Major Populations

The results of the evaluations are summarized in Table 3-5
Species Conservation Analysis

46 Covered Plant Species
- 13 achieved
- 12 substantial
- 17 partial
- 4 minimal

46 Covered Plant Species
- 4 achieved
- 6 substantial
- 28 partial
- 1 minimal
California Gnatcatcher

Habitat
- 50,588 acres of coastal sage scrub has been conserved (68%)

Points
- 1258 of the 1819 regss points (69%) within the MHPA/PAMA have been conserved

Populations
- 5 major populations identified (Otay, Sweetwater, MTRP/Santee, Poway, and Lake Hodges)
San Diego Ambrosia

Populations

- Mission Trails Population
- San Diego National Wildlife Refuge
Cactus Wren

Habitat
• 860 acres of maritime succulent scrub has been conserved (97%)

Points
• 194 of the 268 regss points (72%) within the MHPA/PAMA have been conserved

Populations
• 2 of 4 major populations (Salt Creek, Lake Hodges) identified for conservation conserved – remaining 2 (Lake Jennings, and Sweetwater) partially conserved
Wandering Skipper

Habitat
- 991 acres of coastal salt marsh habitat has been conserved (58%)
MSCP ANNUAL REPORT
WORKSHOP

June 26, 2012

City of Chula Vista
Chula Vista MSCP Subarea Plan

Presentation Overview

- Chula Vista MSCP Subarea Plan
- Otay Ranch Preserve Update
- TransNet Grant Update
Chula Vista MSCP Subarea Plan

- Subarea Plan Approved: February 2003
- Take Permit and IA: January 2005
- Conservation Estimates: 9,243 acres
- 68% of the required 9,243 acres has been secured
Chula Vista MSCP Subarea Plan
Otay Ranch Preserve

2011-12 Management / Monitoring Activities

• Baseline Surveys

• Quino Checkerspot Butterfly Surveys

• Least Bell’s Vireo Surveys and Nest Monitoring

• General Habitat Management Activities
Otay Ranch Preserve

2011-12 Management / Monitoring Activities (cont.)

Baseline Surveys

- 12 sensitive habitat communities
- 20 rare wildlife species (10 MSCP Covered)
- 33 rare plant species (8 MSCP Covered)

Regional Benefit

- Updates MSCP survey data
- Guide regional land management decisions
Otay Ranch Preserve

2011-12 Management / Monitoring Activities (cont.)

Quino Checkerspot Butterfly Surveys

- 400 acres surveyed
- 40 observations

Regional Benefit

- Above average observations
- Above average abundance of host plant
Least Bell’s Vireo Survey Results/Nest Monitoring

- 8 pairs detected
- 11 nests monitored
  - 5 were parasitized
- Brown-headed cowbird trapping initiated

Regional Benefit

- Program will contribute to an observed increase in regional population trends
Otay Ranch Preserve

2011-12 Management / Monitoring Activities (cont.)

General Habitat Management Activities

- Exotic Species Control
- Access Control: Fence & Sign Installation
- Litter Removal
Coastal Cactus Wren Habitat Restoration

- Location: Central City MSCP Preserve Management Area

- Project Goals/Objectives:
  - Restore/enhance degraded habitat
  - Increase quality/quantity of existing cholla patches
  - Reduce weed and native shrub competition
  - Reduce uncontrolled access

Regional Benefit

- Complements several regional conservation strategies
Coastal Cactus Wren Habitat Restoration

Maintenance / Monitoring Activities (cont.)

Year 2 (2011) Monitoring Results

• 2 cactus wren detected in areas with no prior detections

• 5 active cactus wren nests observed

• Relative Cholla cover and height is increasing

Regional Benefit

• Project is increasing the amount of suitable habitat in the region

• Project is facilitating the dispersal of wrens within the region
Otay Tarplant and San Diego Thornmint Restoration Grant

• Location: Central City MSCP Preserve Management Area

• Project Goals/Objectives:
  • Restore/enhance degraded habitat
  • Manage & increase grassland & clay lens habitat
  • Reduce weed and native shrub competition
  • Reduce uncontrolled access

Regional Benefit

• Otay Tarplant and SD Thornmint are unique to the region

• Protection/enhancement of a major population within the region
Thank You!
2011 MSCP Annual Workshop
City of San Diego

June 26, 2012
Vernal Pool Habitat Conservation Plan (HCP)

- **VP HCP Overview**
  - Identification of a City-wide of a Vernal Pool Preserve
  - Management and Monitoring Plan and funding strategy for vernal pools within the City’s jurisdiction
  - Issuance of a Section 10(a) permit and “take” authorization to the City of San Diego

- **VP HCP Update**
  - Scoping Meeting for the EIR
  - Second Public Workshop
  - Draft Vernal Pool Preserve Maps
Vernal Pool Habitat Conservation Plan (HCP)

- **VP HCP Next Steps**
  - Property owners Meeting June 26, 2012
  - Third Public Workshop in August 2013
  - Draft VP HCP and Draft EIR/EIS for minimum 60-day public review in early 2013
  - Land Use and Housing in April 2013
  - Final Draft VP HCP and EIR/EIS and begin hearing process in July 2013
  - [www.sandiego.gov/planning/mscp/](http://www.sandiego.gov/planning/mscp/)
City of San Diego Burrowing Owl Strategy
As of January 1st 2012

<table>
<thead>
<tr>
<th></th>
<th>Acres</th>
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<tr>
<td>Obligated and Conserved Lands</td>
<td>48,842</td>
</tr>
<tr>
<td>Future Conservation</td>
<td>3,885</td>
</tr>
</tbody>
</table>

City of San Diego MSCP Conservation

Total Conserved and Obligated Land: 48,842 Acres, or 93% of City’s 52,727 Acre MSCP Obligation

Notes: 1) Conserved Lands have been conserved via fee title or conservation easement; 2) Obligated Lands have been entitled by the City, have pending conservation easements, or have existing mitigation bank agreements in place; 3) Future Conservation are lands which are the target of current conservation efforts.
Monitoring and Management

- Monitoring
  - 53 rare plant populations (17 species) monitored

- Major Management Actions
  - 2\textsuperscript{nd} year of invasive grass treatment at 12 acres of Kumeyaay Lakes *Ambrosia pumilla* site
  - Implementation of restoration plan for Mission Valley Preserve with San Diego River Park Foundation and TransNet funding
Monitoring and Management

• Management Plans
  • Carmel Mountain/Del Mar Mesa Natural Resource Management Plan – docketing for Planning Commission
  • Black Mountain Open Space Natural Resource Management Plan – processing DSD permitting for trail plan
  • Mission Trails Regional Park Natural Resource Management Plan – 2nd draft
Resource Management Plan
Implementation

Jake Enriquez
Resource Management Plan
Sections

Five Elements

• Biological Resources
• Vegetation Management
• Public Use, Trails, and Recreation
• Public Access and Facility Maintenance
• Cultural Resources
Habitat Restoration

• Initial and Ongoing Stewardship
• Project related
• Natural occurrence
Non-Native Plant Species Removal and Control

Treated artichoke thistle

Stand of Arundo
Fire Prevention, Control and Management
Public Use, Trails, and Recreation Element

- Public Access
- Fencing and Gates
- Trail and Access Road Maintenance
- Signage and Lighting
Public Access
Fencing and Gates

Fencing to prevent off-road vehicle impacts

Fencing to protect sensitive resources
Trail and Access Road Maintenance
Signage

PRESERVE OPEN HOURS
8AM TO HALF AN HOUR BEFORE SUNSET
FOR MORE INFORMATION CALL
760-745-4379

COUNTY OF SD BOUNDARY

[Images of signage and trail markers]
Operations and Facility Maintenance Element

- Litter/Trash and Materials Storage
- Hydrological Management
- Emergency, Safety and Police Services
- Adjacency Management Issues
Litter/Trash and Materials Storage
Hydrological Management

- Facility Pollution Prevention Plan
- RWQCB
- Preserves with rivers, creeks and streams are “High” priority.
Emergency, Safety and Police Services

- Establish working relations with local offices
- Site Emergency Response Plan
- County Office of Emergency Service
Adjacency Management Issues
WHY IS THERE SUCH A NEED FOR EDUCATION?

- No more ‘Free Range Kids’
- Nature Deprivation
- Limited Curriculum in the Classrooms
- Inner City Children
DISCOVERY KIT PROGRAMS

- Classroom Visits and Ranger Led Hikes
- Outdoor Classroom Settings
- Curriculum Developed That Meets The State Standards
- Currently Implemented at Three Parks and Expanding
- Nearly 20,000 Children Yearly Participate
- Plans For Adding LNT/GU Principles
LOUIS A. STELZER COUNTY PARK

- Funded Through a Trust Fund That Pays For the Buses
- Developed to Ensure Students Were Benefitting From Program
- Five Topics Specific to Stelzer Park
  * Nature Awareness and General Ecology
  * Native Americans
  * Plants of Stelzer Park
  * Geology of Stelzer Park
  * Birds of San Diego County
- Implemented in 1992
- Won the National Counties Achievement Award
- MSCP Information Added 2003
DOS PICOS COUNTY PARK

- Programs for Campers, Schools and Scouts
- Trees and Forest Ecology, Geology, Plants with Lego – photosynthesis, Insects with Build – A- Bug
- Junior Ranger Program
LINDO LAKE COUNTY PARK

- Three Schools Within Walking Distance
- Aquatics, Birds, Native Americans
- SDSU Students Helped Develop Curriculum
- Urban Setting
- Pre-Schoolers
- Work In Progress
“How the young respond to Nature and how they raise their own children will shape the configurations and conditions of our cities, homes and daily lives.”

Richard Louv, ‘Last Child in the Woods’
2011 MSCP Annual Report Workshop:

U.S. Geological Survey – Connectivity/ Wildlife Corridors and Badger Surveys

Carlton J. Rochester, Cheryl Brehme, and Robert N. Fisher
2011 San Diego County Badger Survey

Santa Ysabel Open Space Preserve-2007

Tenaja Corridor-2000
2011 San Diego County Badger Survey

California Natural Diversity Database – San Diego County Badger Records

San Diego Natural History Museum-Badger Habitat Model
2011 San Diego County Badger Survey

Conservation Canines

http://conservationbiology.net/
2011 San Diego County Badger Survey
2011 San Diego County Badger Survey
2011 San Diego County Badger Survey

Camp Pendleton

Santa Ysabel Gorge

Credstridge

Daley Ranch-Escondido
## 2011 San Diego County Badger Survey

<table>
<thead>
<tr>
<th>Date</th>
<th>Site</th>
<th>Badger</th>
<th>Date</th>
<th>Site</th>
<th>Badger</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/17/2011</td>
<td>Fallbrook NWS</td>
<td>Y</td>
<td>12/2/2011</td>
<td>Mission Trails</td>
<td>-</td>
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<tr>
<td>11/20/2011</td>
<td>Santa Ysabel OSP-West/Santa</td>
<td>Y</td>
<td>12/5/2011</td>
<td>Rancho Jamul ER</td>
<td>-</td>
</tr>
<tr>
<td>11/22/2011</td>
<td>Ramona Grasslands</td>
<td>Y</td>
<td>12/8/2011</td>
<td>Otay Valley/Furby</td>
<td>-</td>
</tr>
<tr>
<td>11/28/2011</td>
<td>Sycamore Canyon</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
2011 San Diego County Linkages Evaluation
Ogden 1996. Biological Monitoring Plan for the Multiple Species Conservation Program

CBI 2003. Review of Regional Habitat Linkage Monitoring Locations

2011 San Diego County Linkages Evaluation

Ogden 1996. Biological Monitoring Plan for the Multiple Species Conservation Program

CBI 2003. Review of Regional Habitat Linkage Monitoring Locations

2011 San Diego County Linkages Evaluation

- Linkage between CA-8 and CA-10
- Conserved Lands Database
- Ogden 1996 & CBI 2003 points
- Land use data
- Additional evaluation points
- High likelihood of connectivity
2011 San Diego County Linkages Evaluation

- Linkage between CA-9 and CA-10
- Conserved Lands Database
- Ogden 1996 & CBI 2003 points
- Land use data
- Additional evaluation points
- Low likelihood of connectivity
- San Dieguito River Valley & south through CA-8

USGS
science for a changing world
2011 San Diego County Linkages Evaluation

Linkages evaluated to date:

• CA-8 to CA-10
  • Los Peñasquitos Canyon to Black Mountain
• CA-9 to CA-10
  • Del Mar Lagoon to Black Mountain
• CA-10 to CA-11
  • Black Mountain to Lake Hodges
• CA-11 to CA-12
  • Lake Hodges to Ramona Grasslands/Boden Canyon
• CA-12 to CA-13
  • Ramona Grasslands/Boden Canyon to Mt. Woodson
• CA-5 to CA-8
  • Goodman Ranch to Los Peñasquitos Canyon
2011 San Diego County Linkages Evaluation

Priority list:

• CA-1 to CA-2  
  • Otay Mountain/RJER to SDNWR/Crestridge  
    (north of SR-94 at Las Montañas)

• CA-2 to CA-3  
  • McGinty Mountain/Crestridge to Harbison Canyon/El  
    Capitan Reservoir  
    (Puetz Valley Road and I-8)

• CA-5 to CA-13  
  • Sycamore Canyon/Goodman Ranch to Mt. Woodson  
    (Scripps-Poway Parkway underpass)
Sneak peak: 2012 Underpass Evaluation and Enhancement

- Small vertebrate use of wildlife tunnels
- 8 tunnels with cameras
  - SR-52 at Mission Trails
  - Sorento Valley
  - Carmel Country Road x2
  - Scripps-Poway Parkway
  - Valley Center Road x3
Sneak peak: 2012 Underpass Evaluation and Enhancement

- Deer mouse
- Ground squirrel
- Chipmunk
- CA. Striped racer
- CA. Kingsnake
- Western fence lizard
2011 San Diego County Linkages Evaluation

- Mule deer
- Brush rabbit
- Coyote
- Grey fox
- Raccoon
- Road runner
Thanks:

• Funding:
  – California Department of Fish and Game – Local Assistance Grant
  – San Diego Association of Governments
  – U. S. Geological Survey

• Site access:
  – California Department of Fish and Game
  – County of San Diego Parks & Recreation
  – U.S. Fish and Wildlife Service
  – And many others
Land Acquisitions

- KeepSanDiegoMoving.com
- 22 properties
- 2,376 acres
- $89.3 million
Supporting Regional Management
- KeepSanDiegoMoving.com
- 55 grants
- $11.3 million
- Supporting Regional Monitoring
  - KeepSanDiegoMoving.com
  - 35 contracts
  - $9.2 million
Regional Vegetation Mapping

Vegetation Classification Manual for Western San Diego County

February 2011
Regional Invasive Species Mapping
Regional Management and Monitoring Strategy

“There currently is no broadly recognized formal mechanisms for research coordination and communication of existing and new information to managers.”
Peter Stine et al. 1997

NCCP Guidance to Address Needs of Land Managers
Regional Management and Monitoring Strategy

The Dahlem Conference:
This workshop provided a collaborative forum to address some of the key scientific and organizational challenges facing regional preserve implementation.
Regional Management and Monitoring Strategy

“A comprehensive strategic monitoring and adaptive management plan, informed by sound science, is essential to monitoring and management in and of itself, and is also essential for clearing other impediments to successful implementation of the MSCP. “ Deutschman and Strahm 2012

“Continue efforts to develop comprehensive and coordinated strategic plans and measurable program objectives “ TransNet Triennial Audit Recommendation
Development of the Management Strategic Plan
MSCP Annual Report Workshop

Yvonne C. Moore, Coordinator
San Diego Management and Monitoring Program
www.sdmmp.com
Management Strategic Plan

- Purpose: to prioritize funding and guide management of species, vegetation communities, and stressors across the San Diego region

- Not a preserve-level plan

- Step-down structure:
  - Regional level
  - Management Unit level
  - Preserve complex level
  - Individual preserve level
Management Strategic Plan Approach

1. Define species list, management focus (species specific vs habitat), core pop locations, species life-history, niche models, plan info, etc.

2. Divide County into Management Units (MUs) and characterize - species, vegetation, core reserves, linkages, fire history, stressors, land owners and managers, etc.

3. Develop goals and objectives for species and vegetation communities

4. Prioritize implementation
Management Strategic Plan Review Teams

- **Landscape Group** – DFG, FWS, SANDAG, SDSU, EHL/EHC, City Carlsbad, County San Diego, City San Diego
  - Input on MUs, species, goals and objectives, structure and content of document

- **Land Manager Groups**
  - On the ground implementation – what can be done and where specifically
MSP Species

- 120 Covered Species in 3 plans (MSCP, MHCP, North County Plan)
  - 63 plants
  - 30 birds
  - 9 mammals
  - 7 invertebrates
  - 5 amphibians
  - 5 reptiles
  - 1 fish

Approximately 65 species can be managed at the habitat level
Proposed Management Units
MSP Example:
Southwestern Pond Turtle

- SWPT – managed at the species specific and site-specific level

- Stressors: altered hydrology, urban development, major roads, and exotic plant and animal species

- Low human access and high naturalness = presence of SWPT (Madden-Smith et al 2005)

- On average, in SD County, adult female SWPT have 3 young per year, do not breed every year, and take 8 years to grow to breeding size (pers. comm. Chris Brown, USGS)
## Southwestern Pond Turtle – Known Core Populations in Plan Areas

<table>
<thead>
<tr>
<th>MU</th>
<th>Location</th>
<th>Est. Pop Size</th>
<th>Survey Year</th>
<th>Data Source</th>
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<tbody>
<tr>
<td>3</td>
<td>Sycuan Peak Ecological Reserve – Sweetwater River (MSCP)</td>
<td>38</td>
<td>2002-2003</td>
<td>Madden-Smith et al 2005</td>
</tr>
<tr>
<td>6</td>
<td>Lusardi Creek – 4S Ranch (MSCP)</td>
<td>15</td>
<td>2002-2003</td>
<td>Madden-Smith et al 2005</td>
</tr>
</tbody>
</table>

* SWPT presence known in other areas but population size not known. Additional surveys underway to assess pop. size in these areas.
Overall and MU3 Goals for SWPT

- **Overall Goal:**
  - Protect and enhance existing populations of SWPT to self-sustaining* levels in areas that meet the conditions for long-term management** in MUs 3, 4, 5, and 8 and create at least x new self-sustaining populations.

- **MU3 Goal:**
  - Within 5 years create conditions that put three populations of SWPT in MU3 on a trajectory to becoming self-sustaining* populations requiring minimal yearly management.

* 200+ individuals, even sex ratio, evidence of recruitment
**Low human access, high naturalness
MU3 Priority 1 Objectives for SWPT

- Over the next 5 years, eliminate/reduce aquatic predators and exotic species at Sycuan Peak ER to support the expansion of the SWPT population to self-sustaining levels.

- Over the next 5 years, establish two additional SWPT sites which (1) could be utilized as source populations for SWPT translocations to other natural sites and (2) are capable of becoming self-sustaining populations.
MSP Implementation

- Transnet Land Management Grant Program
  - Future funding of proposals based on implementation of priorities in MSP

- Coordination with preserve managers
  - Efficiencies gained by prioritizing management of species and habitats based on core populations and across preserve complexes

- Leverage other funding opportunities
Questions?

Contact:

Ron Rempel
rrempel@usgs.gov

Yvonne Moore
ymoore@usgs.gov

SDMMP website
http://sdmmp.com