CHAPTER 4.0 PROJECT ALTERNATIVES

This section implements the requirements set forth in CEQA Guidelines Section 15126.6 regarding analysis of alternatives in EIRs. Section 15126.6 calls for analysis of a range of reasonable alternatives considering the "rule of reason." As applied to selection and analysis of project alternatives, the "rule of reason" means that an EIR need consider only those alternatives necessary to permit a reasoned choice. An EIR need not consider every feasible alternative. Alternatives should be limited to those that meet most of the basic project objectives, are feasible, and would avoid or substantially reduce at least one of the significant effects of the project. The discussion of alternatives in this SEIR satisfies those requirements.

CEQA also requires consideration of a No Project Alternative and identification of the environmentally superior alternative from among other project alternatives. If the No Project Alternative is the environmentally superior alternative, the EIR needs to identify an environmentally superior alternative from among the other alternatives. The discussion of alternative in the SEIR satisfies those requirements.

4.1 Alternatives That Would Reduce or Avoid Significant Impacts

4.1.1 Project Alternatives Considered and Rejected

The County developed the Reduced Fill Alternative for consideration. Under this alternative, both basins would be excavated, recontoured, lined, and refilled per the proposed alternative, but the basins would only be refilled to a depth of five feet, which is less than the depth (i.e., ten feet) they would be filled to under the proposed project. The reduced fill quantity under this alternative would be 101,524 cubic yards (cy) of water, which would be 137,563 cy of water less than the 239,087 cy of water to be utilized under the proposed project. All other park landscaping improvements, drainage improvements, and access and circulation improvements included with the proposed project would be included with this alternative.

While the Reduced Fill Alternative would require less water for the initial refill and ongoing water maintenance, this design would result in shallower water basins that would affect water quality and biological resources. With less water volume compared to the proposed project, natural pollutants would not dissipate as quickly due to the reduced size of the water column. Similarly, the reduced size of the water column would lead to a reduced amount of water mixing within the basins, which would result in an increase in stagnant water that would reduce water quality. Additionally, the shallower depth of water would heat up more quickly and have a lower concentration of dissolved oxygen compared to the proposed project, and therefore would not provide the same level of support for invertebrates that would improve water quality compared to the proposed project where the deeper water would remain cooler. This reduced water quality would in turn reduce the quality of habitat for aquatic species and avian species. Therefore, the Reduced Fill Alternative was rejected because it would not meet the project objectives of restoring the natural aquatic functions of the lake and improving habitat for aquatic and avian species.

4.1.2 Project Alternatives Considered

The State CEQA Guidelines require that analysis of a No Project Alternative be included in all EIRs. The No Project Alternative assumes that there would be no development that would change the existing conditions of the project site as described in this SEIR.

In addition to the No Project Alternative, the County developed a West Basin Only Alternative and a No Liner Alternative. The West Basin Only Alternative considers improvements to only the west basin. No excavation, recontouring, lining, or filling of the east basin would occur. The No Liner Alternative considers excavation, recontouring, and refilling both basins, but the bentonite clay liner would not be added to the basins after recontouring. For all alternatives, all other park landscaping improvements, drainage improvements, and access and circulation improvements included with the proposed alternative would be included.

The process of identifying potential alternatives involves analyzing the project objectives as identified in Section 1.1 of this SEIR, and includes input received during public review of the Notice of Preparation (see Appendix A). Reducing impacts to biological resources, cultural resources, hazards and hazardous materials, and hydrology and water quality were the primary environmental issues considered in the selection of alternatives.

The three alternatives selected for evaluation represent a reasonable range of alternatives that 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. Table 4-1 provides a comparison between the impacts of the proposed project and each alternative with regard to the potentially significant project impacts to biological resources, cultural resources, hazards and hazardous materials, and hydrology and water quality.

4.2 Analysis of the No Project Alternative

4.2.1 No Project Alternative Description and Setting

The No Project Alternative would leave the project area in its present condition, without project development or new construction. The No Project Alternative is what would reasonably be expected to occur in the future if the project is not approved. None of the environmental effects associated with the proposed project would occur under the No Project Alternative.

This alternative would not meet any of the project objectives. The east basin would continue to fill with silt and sediment, resulting in more frequent dry periods, and there would be no improvement to the existing west basin water quality, which is too shallow and warm to maintain high water quality and wildlife habitat. If the No Project Alternative were chosen, the shallow water would warm up and become murky. As a result, the lake as a public amenity would decrease, the aquatic functions would decrease, and the habitat for aquatic and avian species would diminish.

4.2.2 Comparison of Effects of the No Project Alternative to the Proposed Project

4.2.2.1 Biological Resources

Under the No Project Alternative, no excavation, lake basin recontouring, or grading would occur. The project site would remain in its existing setting, and no impacts to biological resources would result. The No Project Alternative would avoid impacts to six special status avian species, 25.41 acres of sensitive vegetation communities, and 6.05 acres of wetlands and 18.35 acres of non-wetland waters/lake/streambeds. Therefore, none of the impacts to biological resources associated with the proposed project would occur. The No Project Alternative would provide a substantial advantage in terms of impact avoidance as compared to the proposed project.

4.2.2.2 Cultural Resources

Under the No Project Alternative, no excavation, lake basin recontouring, or grading would occur. The project site would remain in its existing setting, and no impacts to cultural resources would occur. The No Project Alternative would avoid potential impacts associated with unearthing unknown or previously undisturbed archaeological resources. Therefore, none of the potential impacts to cultural resources associated with the proposed project would occur. The No Project Alternative would provide a substantial advantage in terms of potential impact avoidance as compared to the proposed project.

4.2.2.3 Hazards and Hazardous Materials

Under the No Project Alternative, no excavation, lake basin recontouring, or grading would occur. The project site would remain in its existing setting, and the No Project Alternative would avoid impacts associated with hazardous substance handling. Therefore, none of the impacts associated with hazards and hazardous materials identified for the proposed project would occur. Impacts under the No Project Alternative would be less than those identified for the proposed project. The No Project Alternative would provide a substantial advantage in terms of impact avoidance as compared to the proposed project.

4.2.2.4 Hydrology and Water Quality

Under the No Project Alternative, no excavation, lake basin recontouring, or grading would occur. The project site would remain in its existing setting, and the No Project Alternative would not utilize the increased amount groundwater as required to maintain Lindo Lake under the proposed project. Therefore, none of the less than significant impacts associated with hydrology and water quality identified for the proposed project would occur, and the No Project Alternative would provide a substantial advantage in terms of impact avoidance as compared to the proposed project.

4.3 Analysis of the West Basin Only Alternative

4.3.1 West Basin Only Alternative Description and Setting

This alternative would improve only the west basin. No excavation, recontouring, lining, or filling of the east basin would occur. All other park landscaping improvements, drainage improvements, and access and circulation improvements included with the proposed alternative would be included with this alternative.

4.3.2 Comparison of Effects of the West Basin Only Alternative to the Proposed Project

4.3.2.1 Biological Resources

Under the West Basin Only Alternative, no excavation, recontouring, lining, or filling of the east basin would occur. Only the west basin would be excavated, graded, and recontoured, and this alternative would avoid impacts to special status avian species, sensitive vegetation communities, and wetlands and non-wetland waters/lake/streambeds within the east basin. However, the east basin would continue to fill with silt and sediment under the West Basin Only Alternative, resulting in more frequent dry periods. Additionally, the West Basin Only Alternative would create less native riparian habitats, and fewer native riparian habitats would be able to establish naturally around the rim of the east basin due to the increased sedimentation and dry

periods. The West Basin Only Alternative would also allow poor water quality to continue at the east basin, which would also contribute to the continuation of poor habitat for aquatic and avian species as currently exists on-site. Consequently, the West Basin Only Alternative would only partially achieve the project objectives to restore and enhance the natural aquatic functions of Lindo Lake or improve habitat for aquatic and avian species. Therefore, the West Basin Only Alternative would result in greater overall biological resource impacts than the proposed project, and would not provide an advantage in terms of impact avoidance compared to the proposed project.

4.3.2.2 Cultural Resources

Under the West Basin Only Alternative, no excavation, recontouring, lining, or filling of the east basin would occur. Only the west basin would be excavated, graded, and recontoured, and this alternative would avoid potential impacts associated with unearthing unknown or previously undisturbed archaeological resources within the east basin. However, this alternative would still have the potential to result in a significant impact associated with unearthing unknown or previously undisturbed archaeological resources. Therefore, the reduced impacts associated with cultural resources resulting from the West Basin Only Alternative, and associated mitigation measures, would be to the same as those listed in Section 2.2 for the proposed project. The West Basin Only Alternative would provide no advantage in terms of impacts avoidance, but would provide an advantage in reducing the overall amount of excavation that could potentially unearth unknown or previously undisturbed archaeological resources.

4.3.2.3 Hazards and Hazardous Materials

Under the West Basin Only Alternative, no excavation, recontouring, lining, or filling of the east basin would occur. Only the west basin would be excavated, graded, and re-contoured, and no impacts associated with hazards and hazardous materials within the east basin would result. The West Basin Only Alternative would reduce the amount of project excavation by 101,000 cy, and thereby avoid impacts associated with hazardous substance handling in the east basin. However, this alternative would still result in a significant impact associated with hazardous substance handling. Therefore, the reduced impacts associated with hazards and hazardous materials resulting from the West Basin Only Alternative, and associated mitigation measures, would be to the same as those listed in Section 2.3 for the proposed project. The West Basin Only Alternative would provide no advantage in terms of impacts avoidance, but would provide an advantage in reducing the overall amount of material that would require hazardous material testing.

4.3.2.4 Hydrology and Water Quality

Under the West Basin Only Alternative, no excavation, recontouring, lining, or filling of the east basin would occur. Only the west basin would be excavated, graded and recontoured, and no impacts associated with hydrology and water quality within the east basin would result. This alternative would only require 132,512 cy of water to fill the West Basin, compared to the 239,087 cy of water to fill both basins under the proposed project. The West Basin Only Alternative would avoid impacts associated with groundwater use in the east basin. Consequently, the amount of groundwater needed to maintain Lindo Lake would be less than what is required under the proposed project. Therefore, the less than significant impacts associated with hydrology and water quality identified for the proposed project would be further reduced under the West Basin Only Alternative. The West Basin Only Alternative would provide

no advantage in terms of impacts avoidance, but would provide an advantage in reducing the overall amount of groundwater usage and pumping required to be monitored.

4.4 Analysis of the No Liner Alternative

4.4.1 No Liner Alternative Description and Setting

This alternative would excavate, recontour, and refill both basins, but the bentonite clay liner would not be added to the basins after recontouring. All other park landscaping improvements, drainage improvements, and access and circulation improvements included with the proposed alternative would be included with this alternative.

4.4.2 Comparison of Effects of the No Liner Alternative to the Proposed Project

4.4.2.1 Biological Resources

Under the No Liner Alternative, all excavation, grading and recontouring as called for under the proposed project would occur. Consequently, the No Liner Alternative would result in impacts to six special status avian species, 25.41 acres of sensitive vegetation communities, and 6.05 acres of wetlands and 18.35 acres of non-wetland waters/lake/streambeds. However, the absence of the bentonite clay liner under this alternative would allow for increased percolation into the soils. This increased percolation would not sustain enough water within the basins to sustain the fringing riparian habitats and other post-restoration biological resources. Although more groundwater would be pumped in an attempt to maintain water levels under this alternative, the increased percolation could result in a lack of water necessary to sustain the fringing riparian habitats and other post-restoration biological resources, which in turn could result in the continuation of poor habitat for aquatic and avian species as currently exists on-site. This could necessitate additional restoration activities to improve habitat quality at the project site. Consequently, the No Liner Alternative would not achieve the project objectives to restore and enhance the natural aquatic functions of Lindo Lake or improve habitat for aquatic and avian species. Therefore, the No Liner Alternative may result in greater overall biological resource impacts than the proposed project, and would not provide an advantage in terms of impacts avoidance or reduction compared to the proposed project.

4.4.2.2 Cultural Resources

Under the No Liner Alternative, all excavation, grading, and recontouring as called for under the proposed project would occur. Consequently, potential impacts to cultural resources resulting from the No Liner Alternative, and associated mitigation measures, would be the same as those listed in Section 2.2 for the proposed project. Therefore, the No Liner Alternative would provide no advantage in terms of impacts avoidance or reduction.

4.4.2.3 Hazards and Hazardous Materials

Under the No Liner Alternative, all excavation, grading, and recontouring as called for under the proposed project would occur. Consequently, impacts to hazards and hazardous materials resulting from the No Liner Alternative, and associated mitigation measures, would be the same as those listed in Section 2.3 for the proposed project. Therefore, the No Liner Alternative would provide no advantage in terms of impacts avoidance or reduction.

4.4.2.4 Hydrology and Water Quality

Under the No Liner Alternative, all excavation, grading, and recontouring as called for under the proposed project would occur. However, the absence of the bentonite clay liner under this alternative would allow for increased percolation into the soils that would require pumping of more groundwater to sustain post-restoration water levels in Lindo Lake. This increased groundwater pumping may result in use of a greater amount of groundwater that could exceed the County significance threshold of a 50 percent reduction in total groundwater in storage within the Santee-El Monte Groundwater Basin. If projections of groundwater pumping necessary to maintain post-restoration water levels under the No Liner Alternative were to exceed the County threshold, the County would either have to develop mitigation measures or maintain Lindo Lake with lower water levels. Consequently, the No Liner Alternative may not achieve the project objectives to restore and enhance the natural aquatic functions of Lindo Lake. Therefore, the No Liner Alternative may result in greater overall impacts to hydrology and water quality than the proposed project, and would not provide an advantage in terms of impacts avoidance or reduction.

4.5 Environmentally Superior Alternative

A comparison of the anticipated impacts and post-restoration condition associated with each alternative with the impacts of the proposed project is provided in Table 4-1. Each alternative, when compared to the proposed project on an impact-by-impact basis, would result in a different combination of effects that would avoid the impacts, or would result in an impact similar to, greater than, or less than the proposed project.

The No Project Alternative would be the Environmentally Superior Alternative because it would eliminate all the significant impacts. However, Section 15126.6(e)(2) of the State CEQA Guidelines states that if the No Project Alternative is the environmentally superior alternative, another project alternative must be identified as the environmentally superior alternative. Based on the available data and the analysis provided in this section of the SEIR, the West Basin Only Alternative would be the Environmentally Superior Alternative, which would reduce the proposed project's significant environmental impacts associated with cultural resources, hazards and hazardous materials, and hydrology and water quality, although impacts would still remain significant and require mitigation. However, this alternative would create less native riparian habitats, and fewer native riparian habitats would be able to establish naturally around the rim of the east basin due to the increased sedimentation and dry periods. The West Basin Only Alternative would also allow poor water quality to continue at the east basin, which would also contribute to the continuation of poor habitat for aquatic and avian species as currently exists on-site. Consequently, the West Basin Only Alternative would only partially achieve the project objectives to restore and enhance the natural aquatic functions of Lindo Lake or improve habitat for aquatic and avian species.

Table 4-1
Comparison of Project Alternatives to Significant Proposed Project Impacts

Issue Area	Proposed Project	No Project Alternative	West Basin Only Alternative	No Liner Alternative
Biological Resources	Less than Significant with Mitigation Incorporated.	No impact.	Greater than the proposed project. Habitat quality would continue to deteriorate in the East Basin. This alternative would only partially achieve the project objectives to restore and enhance the natural aquatic functions of Lindo Lake or improve habitat for aquatic and avian species.	Greater than the proposed project. The absence of the bentonite clay liner under this alternative would allow for increased percolation into the soils that could affect post-restoration biological resources and in turn necessitate additional restoration activities to improve habitat quality at the project site. This alternative would not achieve the project objectives to restore and enhance the natural aquatic functions of Lindo Lake or improve habitat for aquatic and avian species.
Cultural Resources	Less than Significant with Mitigation Incorporated.	No impact.	Less than the proposed project. This alternative would reduce the amount of project excavation by 101,000 cubic yards, and thereby avoid impacts associated with cultural resources in the east basin.	Similar to the proposed project.
Hazards and Hazardous Materials	Less than Significant with Mitigation Incorporated.	No impact.	Less than the proposed project. This alternative would reduce the amount of project excavation by 101,000 cubic yards, and thereby avoid impacts associated with hazardous substance handling in the east basin.	Similar to the proposed project.
Hydrology and Water Quality	Less than Significant with Mitigation Incorporated.	No impact.	Less than the proposed project. This alternative would reduce the amount of groundwater needed to maintain Lindo Lake.	Greater than the proposed project. The absence of the bentonite clay liner under this alternative would allow for increased percolation into the soils that would require pumping of more groundwater, which may exceed the County significance threshold of a 50 percent reduction in total groundwater storage. This alternative may not achieve the project objectives to restore and enhance the natural aquatic functions of Lindo Lake.

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