

SUMMARY

S.1 Introduction

The California Department of Water Resources (DWR) has prepared this Draft Environmental Impact Report (Draft EIR) to provide the public and responsible and trustee agencies information about the potential adverse effects on the local and regional environment associated with construction and operation of the Perris Dam Remediation Program (proposed project). This Draft EIR has been prepared pursuant to the California Environmental Quality Act (CEQA). As Lead Agency, DWR may use this EIR to approve the proposed project, make Findings regarding identified impacts, and if necessary, adopt a Statement of Overriding Considerations regarding these impacts.

This document is being circulated to local, state and federal agencies, and to interested organizations and individuals who may wish to review and comment on the Draft EIR. Publication of this Draft EIR marks the beginning of a 45-day public review period, during which written comments may be directed to the address below. During the 45-day review period, DWR will hold a formal public hearing on the Draft EIR. Inquiries about the proposed project should be directed to:

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S.2 Background

DWR operates and maintains the State Water Project (SWP), supplying water to 29 contracting agencies across the state. Lake Perris is the terminal reservoir for the East Branch of the California Aqueduct, providing a key water supply to the Metropolitan Water District of Southern California (MWD or Metropolitan). Lake Perris is located within the Lake Perris State Recreation Area (SRA) within Riverside County, providing several recreational opportunities including fishing, boating, picnicking, camping, nature study, rock climbing, horse back riding, and hiking. The water storage and conveyance facilities are owned and operated by DWR, in cooperation with Metropolitan.

Perris Dam is an earthfill embankment completed in 1974 containing approximately 25 million cubic yards of compacted fill. The lake's normal operating water level is 1588 feet above mean sea level (amsl). In 2005, DWR completed a foundation study of the Perris Dam. Results of the detailed liquefaction analysis of the Perris Dam foundation indicated that seismically-induced ground shaking could result in embankment deformations due to the liquefaction potential of sediments under the dam at several locations along the 2,300-foot-long segment along the southern span (left reach) of the dam. With the lake filled to its design capacity, this could result in overtopping of the dam during a strong ground shaking event. Based on the results of this stability analysis, DWR lowered the reservoir water surface elevation by 25 feet to 1563 feet amsl, until a long-term remedial solution can be implemented.

In an effort to maintain recreational activities on the lake, DWR ensured that the marina remained in the lowered lake and constructed a causeway from the shore across the exposed lakebed, providing full access to the marina facility. DWR imported 14,171 tons of sand to the Perris Beach area to allow beach-going recreational uses near the location of the previous beaches. DWR also installed a 2-mile long irrigation system connected to State Park water pumps and drip-line system that conveys lake water to the riparian habitat that exists along the eastern edge of the original lakeshore.

The foundation study also concluded that the presence of loose sands beneath the dam embankment at the right abutment should be investigated. Subsequent investigation by DWR concluded that excavation and replacement of a small portion of the dam in this location is warranted. The proposed project provides greater stability for the dam and outlet tower, as well as adding a new emergency outlet extension channel, providing greater public safety.

S.3 Project Description

In addition to the drawdown itself, the proposed Perris Dam Remediation Program includes three separate projects as described below: (1) Perris Dam Remediation Project, (2) Outlet Tower Replacement, and (3) Emergency Outlet Extension. The three projects combined provide the upgraded seismic protection needed to protect public safety. The following sections describe each project.

Lake Perris Drawdown

On August 2005, DWR initiated the drawdown of Lake Perris from 1588 feet amsl to 1563 feet amsl. The drawdown was complete by November 2005. The water removed from the lake was delivered to MWD for delivery or storage in other facilities. Although the drawdown was conducted under a CEQA Categorical Exemption in 2005, this EIR assumes the baseline condition to be pre-drawdown.

Perris Dam Remediation

DWR proposes to seismically upgrade the dam by improving the foundation material with cement-deep-soil-mixing (CDSM) methods, excavating a small portion of the dam toe and the

upper 20 feet of the downstream liquefiable foundation material, replacing the foundation material with re-compacted engineered fill, and then constructing a stability berm on top of the replaced foundation. This remediation strategy would allow Lake Perris to return to its previous maximum operating pool elevation of 1588 feet amsl after construction.

CDSM methods involve injecting soil-cement columns in the deepest and most liquefiable alluvial materials beneath the berm foundation. Deep soil mixing increases the stability of the soil and reduces liquefaction hazards as well as temporary destabilization caused by excavations at the toe.

Approximately 700,000 cy of soil would be excavated from the shallow foundation at the toe of the dam. The excavated material would be stockpiled on site and recompacted as excavation backfill and as part of the stability berm. A stability berm would be constructed atop the re-compacted foundation along the downstream toe of the dam. The berm would consist of approximately 1.75 million cubic yards of soil and one million tons of rock. The soil for the stability berm would be excavated from within the lakebed at the east end of the lake, and the rock would be quarried from the original rock quarry east of the lake in Bernasconi Hills. To convey the soil and rock to the downstream face of the dam, a haul road would be constructed from the east side of the lake, along the lakebed on the south side of the lake, and over a low spot on the Bernasconi Hills near the dam's left abutment.

Outlet Tower Replacement

DWR is proposing to construct a new outlet facility located approximately 400 feet from the existing tower. An area on the southern shore between the hill and the lake would be excavated and the new outlet tower constructed using dry construction methods. The new facility would consist of a tower extending from the dead pool elevation of 1500 feet of the lake to an elevation of 1600 feet amsl, approximately 12 feet above the lake level when full. A 600-foot long, 12.5-foot diameter tunnel would be constructed to connect the new outlet facility to the existing underground tunnel that connects to MWD's delivery system.

Emergency Outlet Extension

DWR is proposing to construct a new emergency outlet extension that would convey the required release from the dam to the Perris Valley Storm Drain. The proposed outlet extension would be approximately two miles long and would redirect flow parallel to Ramona Expressway and under the Perris Fairgrounds by connecting the outlet structure to the Perris Valley Storm Drain. The alignment crosses three roads which run perpendicular to Ramona Expressway: Fair Way, Lake Perris Drive, and Evans Road. Each road crossing would have reinforced concrete box culverts to allow vehicle traffic across the channel. A reinforced concrete box culvert or pipeline would also be used to pass flow into the Perris Valley Channel. Riprap would be placed on the upstream and downstream slopes of the Perris Valley Channel to reduce localized scour.

S.4 Analysis of Alternatives

CEQA requires that an EIR evaluate a reasonable range of alternatives to the proposed project that could attain the basic objectives of the project, but would avoid or reduce significant environmental effects of the project. This EIR evaluates dam remediation alternatives, an outlet tower retrofit alternative, and emergency outlet extension lining alternatives. These alternatives are discussed further in Chapter 6, Analysis of Alternatives. The EIR concludes that the proposed project is the environmentally preferred alternative for the dam remediation and outlet tower components of the project. However, the alternative to install the emergency outlet extension underground for its entire length was identified as the environmentally superior alternative.

S.5 Summary of Impacts

Table S-1, at the end of this chapter, presents a summary of the impacts and mitigation measures identified for the proposed Perris Dam Remediation Program. The complete impact statements and mitigation measures are presented in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures. The level of significance for each impact was determined using significance criteria (thresholds) developed for each category of impacts; these criteria are presented in the appropriate sections of Chapter 3. Significant impacts are those adverse environmental impacts that meet or exceed the significance thresholds; less-than-significant impacts would not exceed the thresholds. **Table S-1** indicates the measures that will be implemented to avoid, minimize, or otherwise reduce significant impacts to a less-than-significant level.

The EIR finds only two significant and unavoidable impacts of the proposed project:

1) construction activities will likely exceed daily thresholds of significance for criteria air pollutants, and 2) recreational activities at Lake Perris SRA will be significantly affected during construction. All other potentially significant impacts identified would be reduced to less than significant levels with proposed mitigation measures.

S.6 Organization of this EIR

This Draft EIR has been organized into the following chapters:

- 1. Introduction.** This chapter discusses the CEQA process and the purpose of the EIR.
- 2. Project Description.** This chapter provides an overview of the Perris Dam Remediation Program, describes the need for and objectives of the project, and describes in detail proposed design, construction, and operating characteristics.
- 3. Environmental Setting, Impacts and Mitigation Measures.** This chapter presents a description of the physical and regulatory setting of the Perris Dam Remediation Program, describes impacts that could result from implementation of the project, and identifies measures to mitigate those impacts. This chapter is divided into environmental issue areas (e.g., aesthetics; biological resources; land use; recreation).
- 4. Cumulative Impacts.** This chapter identifies and describes other projects that could contribute to significant cumulative impacts; it also indicates the potential for implementation of the Perris Dam Remediation Program, in combination with other projects, to contribute to significant cumulative impacts.

5. **Growth Inducement.** This chapter describes the potential for the proposed project to induce growth.
6. **Alternatives Analysis.** This chapter presents an overview of the alternatives development process and describes the alternatives to the proposed project that were considered.
7. **Report Preparers.** This chapter identifies those involved in preparing this Draft EIR.
8. **Acronyms.**
9. **References.**

**TABLE S-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
Aesthetics		
Impact 3.1-1: Construction activities would temporarily affect the visual quality of the Lake Perris SRA and northern frontage of Ramona Expressway.	None required.	--
Impact 3.1-2: Once constructed, the new elements would alter the appearance of the project site.	<p>Mitigation Measure 3.1-2a: If an open channel is constructed for any portion of the emergency outlet extension, DWR shall prepare and implement a maintenance plan which shall include scheduled trash removal, graffiti removal, general facility upkeep, and placing a fence around the emergency outlet extension to reduce trash deposition.</p> <p>Mitigation Measure 3.1-2b: DWR shall ensure that a DWR maintenance contact is provided to the City of Perris for direct communication if immediate action regarding maintenance of the extension is needed.</p> <p>Mitigation Measure 3.1-2c: DWR shall coordinate with the City of Perris to develop site access control fencing and landscaping to be consistent with the City guidelines.</p>	Less than Significant
Impact 3.1-3: Construction of the haul road within the Bernasconi Hills would permanently alter the granite rock formations just east of the dam.	Mitigation Measure 3.1-3: DWR shall ensure that the construction contractor retain some of the large naturally weathered boulders currently within the Bernasconi pass to adorn the finished road to retain some of the original character of the trail.	Less than Significant
Impact 3.1-4: Construction of the project components would result in additional light and glare impacts during nighttime construction.	<p>Mitigation Measure 3.1-4a: DWR shall ensure that lighting used for nighttime construction is shielded and directed downward to minimize impacts to neighboring residential areas.</p> <p>Mitigation Measure 3.1-4b: DWR shall notify Riverside County Planning Director prior to use of nighttime lighting. The notice shall include the location of lighting, the schedule, and total lumens.</p>	Less than Significant
Air Quality		
Impact 3.2-1: Construction activities would emit criteria pollutants in excess of SCAQMD thresholds of significance that would contribute to existing poor air quality.	<p>Mitigation Measure 3.2-1a: DWR shall ensure that contractors implement a fugitive dust control program pursuant to the provisions of SCAQMD Rule 403.</p> <p>Mitigation Measure 3.2-1b: DWR shall ensure that construction equipment is properly tuned and maintained in accordance with manufacturer's specifications.</p> <p>Mitigation Measure 3.2-1c: DWR shall ensure that contractors maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would turn their engines off when not in use to reduce vehicle emissions. Construction emissions shall be phased and</p>	Significant and Unavoidable

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	<p>scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.</p> <p>Mitigation Measure 3.2-1d: Electricity from power poles rather than temporary diesel- or gasoline-powered generators shall be used where available.</p> <p>Mitigation Measure 3.2-1e: All construction vehicles shall be prohibited from idling in excess of five minutes, both on- and off-site.</p> <p>Mitigation Measure 3.2-1f: Coatings and solvents used in the proposed project shall be consistent with applicable SCAQMD rules and regulations.</p> <p>Mitigation Measure 3.2-1g: Wheel washers shall be installed where vehicles exit the construction site onto paved roads.</p> <p>Mitigation Measure 3.2-1h: Haul vehicles shall be covered or comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.</p> <p>Mitigation Measure 3.2-1i: Prior to removing the existing drainage system down-stream of the dam, DWR shall inventory materials that may be asbestos-containing. Any asbestos-containing materials including cement pipe (transite) will be removed and disposed of by certified asbestos workers in compliance with applicable asbestos abatement regulations (40 CFR Part 763 and 29 CFR Part 1910).</p>	
<p>Impact 3.2-2: Project operation would not violate air quality standards or contribute substantially to an existing or projected air quality violation nor expose sensitive receptors to pollutant concentrations resulting in an adverse health effect during long-term operation.</p>	None required.	--
<p>Impact 3.2-3: The project would not create objectionable odors affecting a substantial amount of people.</p>	None required.	--
<p>Impact 3.2-4: The project could result in a cumulatively considerable net increase of emissions which exceed quantitative thresholds for ozone precursors and/or conflict with implementation of state goals for reducing greenhouse gas emissions.</p>	None required.	--
<p>Biological Resources</p>		
<p>Impact 3.3-1: The lowering of the lake level has resulted in a temporary impact to the pre-drawdown lake shore habitat dominated by riparian plant species. In addition, construction of the stability berm will permanently remove a portion of the similar habitat type found below the dam.</p>	<p>Mitigation Measure 3.3-1a: DWR shall coordinate with CDFG and USFWS to minimize clearing of vegetation on the exposed lakebed outside of the construction zone while ensuring that sensitive species utilizing the habitat would not be impacted by construction activities.</p>	Less than Significant

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	<p>Mitigation Measure 3.3-1b: DWR shall prepare and implement a southern willow woodland and scrub restoration plan for temporal impacts to the northeastern riparian habitat surrounding the lake that may include the following measures:</p> <ul style="list-style-type: none"> • Removal of dead trees within areas of low survivorship, leaving some in place as needed for snags, and re-contouring of select areas into planting basins of various sizes, • Obtain cuttings from the emerging post-draw-down habitat to be installed within the established planting basins, • Development of a maintenance and monitoring plan to ensure successful implementation and establishment until one year after water levels are returned to pre-draw-down conditions. <p>Mitigation Measure 3.3-1c: DWR shall provide compensation lands at a 1:1 ratio for permanently impacted habitat including southern willow woodland. DWR shall prepare an equivalency analysis for the compensation land.</p>	
<p>Impact 3.3-2: Implementation of the proposed project could result in the loss of endangered, threatened, candidate, or rare plant species listed under the federal or state Endangered Species Acts, or plants designated as rare by the CNPS.</p>	<p>None required.</p>	--
<p>Impact 3.3-3: Implementation of the proposed project would result in permanent and temporal loss of southern willow woodland and scrub habitat which provides nesting habitat for the least Bell's vireo.</p>	<p>Mitigation Measure 3.3-3a: DWR shall modify the watering regimen for the band of southern willow woodland and scrub located on the eastern lakeshore pre-drawdown edge to include a periodic flooding schedule or some other means to sustain the pre-drawdown quality and extent of riparian habitat. Maintaining the pre-drawdown quality and extent of the riparian band through the project construction period would reduce temporary impacts to least Bell's vireo habitat impacted by the temporary lake drawdown. The regimen would be discontinued upon the refilling of the lake to its normal operating elevation of 1588 feet.</p> <p>Mitigation Measure 3.3-3b: DWR shall conduct the following measures:</p> <ul style="list-style-type: none"> • Vegetation clearing needed to accommodate construction activities shall occur during the non-nesting season where feasible. • For habitat removal conducted during the vireo nesting season, DWR shall have a qualified biologist conduct a pre-construction nesting season protocol survey for the least Bell's vireo within the project area to determine and map the location and extent of nesting least Bell's vireo occurrence(s). 	Significant and Unavoidable

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	<ul style="list-style-type: none"> • DWR shall avoid direct impacts on nesting least Bell's vireos located within the construction right of way. This could be accomplished by establishing the construction right of way and removal of plant material outside of the typical breeding season. • If construction and vegetation removal is proposed for the vireo nesting period then active nest sites located during the pre-construction surveys shall be avoided and a non-disturbance buffer zone shall be established as approved by the USFWS and CDFG. Nest sites shall be avoided with approved non-disturbance buffer zones until the adults and young are no longer reliant on the nest site for survival as determined by a qualified biologist. <p>Implement Mitigation Measures 3.3-1a through 3.3-1c.</p>	
<p>Impact 3.3-4: Implementation of the proposed project would result in the permanent and temporary loss of non-native annual grassland habitat presumed to support the federally listed endangered Stephens' kangaroo rat.</p>	<p>Mitigation Measure 3.3-4: DWR shall implement the following measures:</p> <ul style="list-style-type: none"> • DWR shall have a qualified biologist with a Stephens' kangaroo rat handling permit, conduct pre-construction surveys for the Stephens' kangaroo rat within the grassland habitat to determine and map the location and extent of Stephens' kangaroo rat occurrence(s) within the project impact area. Confirmed Stephens' kangaroo rat precincts shall be avoided with the establishment of a non-disturbance buffer zone approved by the USFWS and CDFG. DWR shall stake, flag, fence, or otherwise clearly delineate the construction right-of-way that restricts the limits of construction to the minimum necessary to implement the project that also would avoid and minimize impacts on the Stephens' kangaroo rat. • Where avoidance of confirmed Stephens' kangaroo rat precincts is infeasible and unavoidable, and if approved by the RCA, DWR shall have qualified biologists permitted or otherwise approved by the USFWS conduct a pre-construction Stephens' kangaroo rat trapping and relocation effort to minimize take of the Stephens' kangaroo rat during construction. • DWR shall install a silt fence or some other impermeable barrier to Stephens' kangaroo rat to exclude Stephens' kangaroo rat from entering the active work areas. 	<p>Less than Significant</p>

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
<p>Impact 3.3-5: Implementation of the proposed project would result in <u>temporary</u> impacts to migratory avian species due to temporary loss of southern willow woodland habitat and due to disturbance of construction activities.</p>	<p>Mitigation Measure 3.3-5a: DWR shall have a qualified biologist conduct a pre-construction spring/summer active season reconnaissance survey for nesting/roosting migratory bird species, and other nesting birds within 150-feet of the construction limits of each project element to determine and map the location and extent of special-status species occurrence(s) that could be affected by the project.</p> <p>Mitigation Measure 3.3-5b: DWR shall avoid direct impacts on any nesting birds located within the limits of construction. This could be accomplished by establishing the construction right of way and removal of plant material outside of the typical breeding season (February 1 through August 31).</p> <p>Mitigation Measure 3.3-5c: If construction and vegetation removal is proposed for the bird nesting period February 1 through August 31, then active nest sites located during the pre-construction surveys shall be avoided and a non-disturbance buffer zone established dependent on the species and in consultation with the USFWS and CDFG. Nest sites shall be avoided with approved non-disturbance buffer zones until the adults and young are no longer reliant on the nest site for survival as determined by a qualified biologist.</p> <p>Implement Mitigation Measures 3.3-1a through 3.3-1c, and 3.3-3a.</p>	<p>Significant and Unavoidable</p>
<p>Impact 3.3-6: Implementation of the proposed project would result in the permanent and temporary loss of Riversidean sage scrub, southern willow woodland and scrub, non-native grassland and other habitats which may support non-avian ground dwelling special-status species such as the northern red diamond rattlesnake, coastal western whiptail, San Diego pocket mouse, the Los Angeles pocket mouse, San Diego black-tailed jackrabbit, American badger and other special-status ground dwelling non-avian wildlife species.</p>	<p>Mitigation Measure 3.3-6a: DWR shall have a qualified biologist conduct a pre-construction field reconnaissance survey for non-listed special-status ground-dwelling species within the construction right-of-way.</p> <p>Mitigation Measure 3.3-6b: DWR shall avoid and minimize impacts on documented locations of special-status ground dwelling species to the extent feasible and practicable by reducing the construction right-of-way through areas of occurrences to either avoid the occurrence or reduce impacts to the minimum necessary to complete the project.</p> <p>Mitigation Measure 3.3-6c: DWR shall stake, flag, fence, or otherwise clearly delineate the construction right-of-way that restricts the limits of construction to the minimum necessary to implement the project that also would avoid and minimize impacts on special-status ground dwelling wildlife species.</p>	<p>Less than Significant</p>

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	<p>Mitigation Measure 3.3-6d: DWR shall install a silt fence or some other impermeable barrier to exclude small wildlife species from entering the active work areas. Exclusion fencing can be limited to areas of documented occurrences of special-status wildlife as determined during pre-construction surveys.</p> <p>Mitigation Measure 3.3-6e: DWR shall have a qualified biologist conduct pre-construction and construction capture, salvage, and relocation efforts to remove special-status ground dwelling wildlife species, and other common species to the extent feasible, out of harms way to avoid and minimize impacts on these species.</p>	
<p>Impact 3.3-7: Implementation of the proposed project would result in permanent and temporary loss of Riversidean sage scrub, southern willow woodland and scrub, and other habitats which may support the formally listed endangered coastal California gnatcatcher, as well as a number of special-status avian species including the burrowing owl, golden eagle, Cooper's hawk, white-faced ibis and other special-status avian and bat species.</p>	<p>Mitigation Measure 3.3-7a: DWR shall have a qualified biologist conduct a pre-construction spring/summer active season reconnaissance survey for nesting/roosting coastal California gnatcatcher, burrowing owl, special-status bird and bat species, and other nesting birds within 150-feet of the construction limits of each project element to determine and map the location and extent of special-status species occurrence(s) that could be affected by the project.</p> <p>If burrowing owls are found to be present, appropriate protocol surveys must be conducted. Avoidance of burrowing owls during the nesting season shall be required, and if burrowing owls are found outside of the nesting season they shall be relocated by a qualified biologist in consultation with the USFWS and CDFG.</p> <p>Mitigation Measure 3.3-7b: DWR shall avoid direct impacts on any nesting birds located within the limits of construction. This could be accomplished by establishing the construction right of way and removal of plant material outside of the typical breeding season (February 1 through August 31).</p> <p>Mitigation Measure 3.3-7c: If construction and vegetation removal is proposed for the bird nesting period February 1 through August 31, then active nest sites located during the pre-construction surveys shall be avoided and a non-disturbance buffer zone established dependent on the species and in consultation with the USFWS and CDFG. Nest sites shall be avoided with approved non-disturbance buffer zones until the adults and young are no longer reliant on the nest site for survival as determined by a qualified biologist.</p> <p>Mitigation Measure 3.3-7d: If a natal bat roost site is located within the limits of construction during pre-construction surveys, it shall be avoided with non-disturbance buffer zone established by a qualified biologist in consultation with the USFWS and CDFG until the site is abandoned.</p>	<p>Less than Significant</p>

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	<p>Mitigation Measure 3.3-7e: DWR shall minimize impacts on documented locations of special-status species and any nesting birds by reducing the construction right-of-way through areas of occurrences to either avoid the occurrence or reduce impacts to the minimum necessary to complete the project.</p> <p>Mitigation Measure 3.3-7f: DWR shall stake, flag, fence, or otherwise clearly delineate the construction right-of-way that restricts the limits of construction to the minimum necessary to implement the project that also would avoid and minimize impacts on special-status wildlife species.</p>	
<p>Impact 3.3-8: Implementation of the proposed project would result in the alteration of the population structure and composition of the recreational warm-water non-native fishery of Lake Perris.</p>	<p>Mitigation Measure 3.3-8: DWR in consultation with the Lake Perris SRA and CDFG shall plan for restoration of the fishery resource at Lake Perris to a sustainable population that supports recreation uses.</p> <ul style="list-style-type: none"> • DWR shall fund habitat placement and fish monitoring in Lake Perris for three years, once the lake level is restored to Elevation 1588, under an agreement with CDFG. • DWR shall continue to coordinate and work with CDFG on appropriate activities to restore fish levels after reservoir restoration for a three year period. These efforts may include additional habitat placement and/or fish stocking. 	Less than Significant
<p>Impact 3.3-9: Implementation of the proposed project would result in the loss of shallow water habitat (3 to 10 feet) on the northeastern end of the lake which could impact spawning and rearing habitat for the non-native warm-water game fish and food resources for resident and migratory winter waterfowl.</p>	<p>Mitigation Measure 3.3-9a: In order to minimize impacts to shallow water breeding and rearing habitat for the non-native warm water fish and waterfowl resources around the eastern reservoir edge, the borrow area shall be established with a 125-foot no disturbance buffer zone between the inside reservoir edge of the riparian habitat and the edge of the borrow area. The 125-foot buffer would create a shallow bench around the reservoir edge and promote aquatic plant growth that would provide habitat for invertebrates and cover for fishes. Variable size rocks and rip rap shall be placed along portions of the borrow area in areas that would not generate hazards to boats. Gravel shall be placed on the shelf areas created by new excavation and maintained shallow water habitat, to promote spawning areas. Rootwads or other habitat enhancement structures intended to provide cover for fishes and generate foraging and spawning habitat, shall be placed within the rip rap and rocks where they do not present a hazard to boating.</p> <p>Mitigation Measure 3.3-9b: DWR shall minimize the borrow area size to the extent feasible, leaving as much of the previous shallow water shoreline as possible. The final designs given to the contractor will include a detailed construction zone limitation that identifies a minimum shoreline buffer zone.</p> <p>Implement Mitigation Measure 3.3-8.</p>	Less than Significant

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
Impact 3.3-10: Implementation of the proposed project would result in the temporary and permanent impacts to southern willow woodland and scrub, freshwater marsh and other waters of the U.S. and waters of the State within Lake Perris under the jurisdiction of the Corps pursuant to the Clean Water Act and CDFG pursuant to Section 1602 of the Fish and Game Code (Streambed Alteration Agreements).	None required.	--
Impact 3.3-11: Implementation of the proposed project would conflict with the provisions of the Western Riverside MSHCP or the Long-Term Stephens' Kangaroo Rat HCP.	Mitigation Measure 3.3-11: In order to comply with the Stephens' Kangaroo Rat HCP, the project shall be reviewed by the RCHCA. If occupied habitat is permanently affected by the project, DWR shall acquire compensation lands adjacent to a potential habitat reserve site at a 1:1 ratio or pay the \$500 per acre mitigation fee set out by Riverside County Ordinance 663.10 or as required by the RCHCA. Implement Mitigation Measures 3.3-1a through 3.3-1c, 3.3-3a, 3.3-6a through 3.3-6e, 3.3-7a, and 3.3-9a	Less than Significant
Cultural Resources		
Impact 3.4-1: Project construction could adversely affect known or unknown cultural resources, including unique archaeological resources and historic resources.	Mitigation Measure 3.4-1: In the event that prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, all work within 50 feet of the resources shall be halted and DWR shall consult with a qualified archaeologist to assess the significance of the find according to <i>CEQA Guidelines</i> Section 15064.5. If any find is determined to be significant, DWR and the archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation. DWR (as applicable) shall make the final determination. All significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. In considering any suggested mitigation proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, DWR shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is being carried out.	Less than Significant
Impact 3.4-2: The proposed project could adversely affect unidentified paleontological resources.	Mitigation Measure 3.4-2: DWR shall develop and implement a Paleontological Resource Monitoring and Mitigation Plan (PRMMP) prior to the onset of construction-related earth moving activities in order to either avoid or mitigate to a less-than-significant effect on these resources. The PRMMP should be designed by a qualified	Less than Significant

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	<p>paleontologist. During earth-moving construction-related activities, additional fossil sites may be uncovered. The PRMMP must include:</p> <ul style="list-style-type: none"> • Mitigation protocol for all activities; • Special consideration should be made to collect sediment samples for potential fossiliferous locations as per the society of Vertebrate Paleontology standards; • Stratigraphic cross sections must be recorded; • Mapping of the geologic units must be graphed; and • Fossil remains must be cleaned, analyzed, and catalogued to be accepted for curation at a legal repository. <p>All work must be conducted by a qualified Paleontologist and a final Report of Findings must be submitted upon completion of laboratory analysis.</p>	
<p>Impact 3.4-3: Project construction could result in damage to previously unidentified human remains.</p>	<p>Mitigation Measure 3.4-3: If human skeletal remains are uncovered during project construction, DWR (depending upon the project component) shall immediately halt work, contact the Riverside County coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the <i>CEQA Guidelines</i>. If the County coroner determines that the remains are Native American, DWR shall contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). Per Public Resources Code 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section (PRC 5097.98), with the most likely descendents regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.</p>	<p>Less than Significant</p>

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
<p>Geology, Soils, and Seismicity</p> <p>Impact 3.5-1: Earthwork activities could create areas with unstable slopes associated with the existing embankment and the former rock quarry area.</p>	<p>Mitigation Measure 3.5-1a: During the final design phase of the project, DWR shall perform a design-level geotechnical evaluation to ensure the function of the stability berm. The geotechnical evaluation shall prescribe measures to mitigate hazards associated with excavation of the existing embankment. Slope stabilization measures may be identified including slope inclination, CDSM depths and locations, fill compaction, soil reinforcement, surface and subsurface drainage facilities, temporary shoring, and erosion control measures. These measures shall consider the long-term stability of the disturbed areas following construction activities.</p> <p>Mitigation Measure 3.5-1b: Prior to re-activating the quarry, DWR shall conduct a geotechnical evaluation of the quarry and provide recommendations to stabilize the quarry walls. Recommendations will include at a minimum the following, in conformance with hard rock mining and worker safety regulations:</p> <ul style="list-style-type: none"> • Side wall contouring requirements • Shoring requirements • Stabilization requirements • Rock-fall protection mechanisms 	<p>Less than Significant</p>
<p>Impact 3.5-2: Exposure of soils to erosion and loss of topsoil during construction activities related to excavation of existing embankment, soil stockpile management, outlet tower construction, and emergency outlet extension construction.</p>	<p>Mitigation Measure 3.5-2: DWR shall incorporate into contract specifications the requirement that the contractor(s) develop and implement an erosion control plan, in addition to implementing requirements for preventing storm water pollution from construction activities as required by the Storm Water Pollution Prevention Plan (SWPPP). These requirements include developing and implementing erosion control measures for all construction activities including the following:</p> <ul style="list-style-type: none"> • Slope stabilization measures • Haul road surface maintenance • Wind erosion protection measures for stockpiled soil • Storm water runoff control for all construction areas • Post construction restoration plans <p>The final reclamation plan for the borrow area and rock quarry shall include drainage improvements to minimize erosion potential. Regular maintenance of the disturbed areas and stockpiled materials shall also be included in contract specifications for the contractor(s).</p>	<p>Less than Significant</p>

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
Impact 3.5-3: Stockpiled materials from excavation of the embankment could cause subsidence of native materials underneath.	Mitigation Measure 3.5-3: The geotechnical evaluation shall include a review of the surface and near-surface materials in the areas where materials will be stockpiled. The evaluation shall determine if the underlying materials have adequate short-term strength to support the proposed stockpiles and, if not, shall provide recommendations to avoid this hazard. The recommendations shall be incorporated into contract specifications for the contractor(s). Recommendations could include reducing the size of the stockpiles, increasing the number of stockpiles, and finding alternative locations for stockpiles.	Less than Significant
Hazards and Hazardous Materials		
Impact 3.6-1: The proposed project could expose workers and the public to hazards including explosives, fuels, and hazardous materials that could be present in excavated soil.	None required.	--
Impact 3.6-2: The proposed project could expose workers and the public to asbestos-containing building materials that could be present in structures to be demolished by the project.	Mitigation Measure 3.6-2: DWR shall prepare a site safety plan that outlines the procedures necessary to remove potentially asbestos-containing building materials encountered during the excavation activities. The site safety plan shall outline personal protection requirements and training requirements for workers and shall outline removal and disposal methods.	Less than Significant
Impact 3.6-3: Construction of the proposed project could increase risk of wildland fires.	<p>Mitigation Measure 3.6-3: In accordance with the Public Resources Code, the construction contractor shall be required to comply with the following legal requirements during construction activities for the proposed project:</p> <ul style="list-style-type: none"> • Earthmoving and portable equipment with internal combustion engines shall be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC Section 4442). • Appropriate fire suppression equipment shall be maintained during construction – from April 1 to December 1 (PRC Section 4428). • On days during the year when a burning permit is required, flammable materials shall be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor shall maintain the appropriate fire suppression equipment (PRC Section 4427). • On days during the year when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines shall not be used within 25 feet of any flammable materials (PRC Section 4431). <p>These measures shall be included in the contractor's contract specifications. The contractor shall be responsible for the</p>	Less than Significant

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	implementation and monitoring of these safety measures and regular reporting to DWR.	
Hydrology and Water Quality		
<p>Impact 3.7-1: Construction activities could promote soil erosion or result in chemical spills that could pollute storm water runoff and adversely affect local receiving water quality.</p>	<p>Mitigation Measure 3.7-1a: DWR shall prepare a SWPPP for each construction activity associated with the proposed project. The SWPPP shall be maintained at the construction site for the entire duration of construction. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of storm water discharge and to implement BMPs to reduce pollutants in storm water discharges during construction and post construction. SWPPPs shall include the following:</p> <ul style="list-style-type: none"> • Source identification; • Preparation of a site map; • Description of construction materials, practices, and equipment storage and maintenance; • List of pollutants likely to contact storm water; • Estimate of the construction site area and percent impervious area; • Erosion and sedimentation control practices, including soils stabilization, revegetation, and runoff control to limit increases in sediment in storm water runoff, such as detention basins, fiber rolls, silt fences, check dams, geofabrics, drainage swales, and sandbag dikes; • Proposed construction dewatering plans; • List of provisions to eliminate or reduce discharge of materials to storm water; • Description of waste management practices; • Spill prevention and control measures; • Maintenance and training practices; and • Sampling and analysis strategy and sampling schedule for discharges from construction activities. <p>Mitigation Measure 3.7-1b: DWR shall incorporate into contract specifications the requirements that:</p> <ul style="list-style-type: none"> • The construction staging areas shall be graded to contain surface runoff so that contaminants such as oil, grease, and fuel products do not drain towards receiving waters. • If heavy-duty construction equipment is stored overnight at the construction staging areas, drip pans or plastic lines with edges 	<p>Less than Significant</p>

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	<p>shall be placed beneath the machinery engine block and hydraulic systems to prevent any leakage from entering runoff or receiving waters.</p> <ul style="list-style-type: none"> • No pesticides or herbicides will be used to maintain vegetation clearing during construction. • Vehicle fueling will be conducted a minimum of 500 feet from Lake Perris. • The haul road over the Bernasconi Hills shall be designed with a drainage system that prevents runoff scouring and rutting. Runoff from the sloping roadway shall be conveyed to drainages at lower elevations with minimal velocity to prevent scouring. • Any grout waste or spills will be cleaned up immediately and disposed of off-site. • Spill kits capable of containing hazardous spills will be stored on-site. Required materials will be specified in contractor specifications. 	
Impact 3.7-2: The dam remediation could interfere with groundwater recharge.	None required.	--
Impact 3.7-3: The emergency outlet extension could exceed the capacity of the Perris Valley Storm Drain during a rain event.	None required.	--
Land Use		
Impact 3.8-1: Construction of the proposed project would impact existing land uses.	<p>Mitigation Measure 3.8-1a: If the underground emergency outlet extension alternative is selected, DWR shall restore the motocross facility and parking area to their pre-construction condition.</p> <p>Mitigation Measure 3.8-1b: DWR shall reduce the construction zone of the emergency outlet extension to the minimum width necessary to accommodate the channel.</p> <p>Mitigation Measure 3.8-1c: DWR shall coordinate with the Perris Fairgrounds to minimize construction during major events.</p>	Significant and Unavoidable for open channel alternative; Less than Significant for underground alternative
Impact 3.8-2: Construction and operation of the proposed project could conflict with an existing habitat conservation plan.	Implement Mitigation Measures Biology 3.3-1a through 3.3-1c, 3.3-3a, 3.3-6a through 3.3-6e, 3.3-7a, 3.3-9a, and 3.3-11.	Less than Significant
Impact 3.8-3: Project implementation would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.	None required.	--

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
<p>Noise and Vibration</p> <p>Impact 3.9-1: Project construction could substantially increase ambient noise levels or generate noise levels in excess of standards established in the local general plans or noise ordinances, or applicable standards of other agencies.</p>	<p>Mitigation Measure 3.9-1a: Nighttime work shall not include blasting or sheet pile-driving.</p> <p>Mitigation Measure 3.9-1b: Construction contractors shall implement the following:</p> <ul style="list-style-type: none"> • Signs shall be posted at the construction sites that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number in the event of problems. • An on-site complaint and enforcement manager shall respond to and track complaints and questions related to noise. <p>Mitigation Measure 3.9-1c: To reduce noise impacts due to construction, DWR shall require construction contractors to implement the following measures:</p> <ul style="list-style-type: none"> • During construction, the contractor shall outfit all equipment, fixed or mobile, with properly operating and maintained exhaust and intake mufflers, consistent with manufacturers' standards. • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. External jackets on the tools themselves shall be used where feasible. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible. • Stationary noise sources that could affect adjacent receptors shall be located as far from adjacent receptors as possible. • Daytime construction activities would be limited to the times of 7:00 a.m. and 7:00 p.m. • Residents and park visitors shall be notified in advance of the night work schedule. <p>Mitigation Measure 3.9-1d: A Blasting Plan for construction shall be prepared and followed that includes the following:</p> <ul style="list-style-type: none"> • Primary components of the Blasting Plan shall include: <ul style="list-style-type: none"> – Identification of blast officer; – Scaled drawings of blast locations, and neighboring buildings, streets, or other locations which could be inhabited; 	<p>Significant and Unavoidable</p>

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	<ul style="list-style-type: none"> - Blasting notification procedures, lead times, and list of those notified. Public notification to potentially affected vibration and nuisance noise receptors describing the expected extent and duration of the blasting; - Description of means for transportation and on-site storage and security of explosives in accordance with local, state and federal regulations; - Minimum acceptable weather conditions for blasting and safety provisions for potential stray current (if electric detonation); - Traffic control standards and traffic safety measures (if applicable); - Required personal protective equipment; - Minimum standoff distances and description of blast impact zones and procedures for clearing and controlling access to blast danger; - Procedures for handling, setting, wiring, and firing explosives. Also procedures for handling misfires per Federal code; - Type and quantity of explosives and description of detonation device. Sequence and schedule of blasting rounds, including general method of excavation, lift heights, etc.; - Methods of matting or covering of blast area to prevent flyrock and excessive air blast pressure; - Description of blast vibration and air blast monitoring programs; - Dust control measures in compliance with applicable air pollution control regulations (to interface with general construction dust control plan); - Emergency Action Plan to provide emergency telephone numbers and directions to medical facilities. Procedures for action in the event of injury; - Material Safety Data Sheets for each explosive or other hazardous materials to be used; - Evidence of licensing, experience, and qualifications of blasters; and - Description of insurance for the blasting work. • A sound attenuation plan shall be prepared outlining sound control measures that would include the use of blasting mats or sound walls. • If vibration results in damage to any nearby structures or utilities, or scenic rock faces, blasting shall immediately cease. The stability of 	

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	<p>segmental retaining walls, existing slopes, creek canals, etc. shall be monitored and any evidence of instability due to blasting operations shall result in immediate termination of blasting.</p> <ul style="list-style-type: none"> Explosive materials shall be delivered in specially built vehicles marked with United Nations (UN) hazardous materials placards. Explosives and detonators shall be delivered in separate vehicles or be separated in compartments meeting U.S. Department of Transportation (DOT) rules within the same vehicle. Vehicles shall have at least two 10-pound Class-A fire extinguishers and all sides of the vehicles display placards displaying the UN Standard hazard code for the onboard explosive materials. Drivers shall have commercial driver licenses (CDL) with Hazmat endorsements, and drivers shall carry bill-of-lading papers detailing the exact quantities and code dates of transported explosives or detonators. The contractor must comply with U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) table-of-distance requirements (CFR 27, U.S. Department of Justice, Alcohol, Tobacco, Firearms and Explosives Division Part 555) that restrict explosive quantities based on distance from occupied buildings and public roadways. Employees must also comply with the security requirements of the Safe Explosives Act (Title XI, Subtitle C of Public Law 107-296, Interim Final Rule), implemented in March 2003. These requirements require background checks for all persons that use, handle or have access to explosive materials; and responsible persons on a now required federal explosives license must submit photographs and fingerprints with the application to ATF. The contractor shall provide 24-hour security and/or the use of motion-detector and alarmed double wire fencing security measures around the stored explosives. 	
<p>Impact 3.9-2: Construction activities including blasting could damage structures from groundborne vibration.</p>	<p>Implement Mitigation Measure 3.9-1d</p>	<p>Less than Significant</p>
<p>Public Safety</p>		
<p>Impact 3.10-1: Construction of the proposed project could expose Lake Perris SRA visitors to hazards from construction activities.</p>	<p>Mitigation Measure 3.10-1a: DWR will incorporate into contract specifications the requirements that:</p> <ul style="list-style-type: none"> Fencing shall be maintained around the perimeter of the construction zone including at the lake shore at all times during construction. Fencing at the lake shore would be designed to prevent any vessel from reaching the shoreline within the construction zone. 	<p>Less than Significant</p>

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	<ul style="list-style-type: none"> • Signs shall be posted in English and Spanish on the fence warning visitors to stay outside the construction zones. • Construction equipment and trailers shall be secured each day in order to prevent items from being stolen or damaged. • Construction contractors shall be provided training to be aware of park visitors. Any visitors seen within the construction zone shall be immediately escorted out. <p>Mitigation Measure 3.10-1b: DWR shall coordinate with California State Parks personnel to develop a site safety plan for the construction activities. The plan would identify construction zone access including fencing and gate control, routine patrolling, and signage.</p>	
Public Services and Utilities		
Impact 3.11-1: The proposed project may cause a short-term increase in the demand for police and fire services.	None required.	--
Impact 3.11-2: Construction would require a short-term increase in energy demand.	None required.	--
Impact 3.11-3: Construction of the emergency outlet extension could encounter buried utilities.	None required.	--
Recreation		
Impact 3.12-1: Drawdown of Lake Perris could cause or accelerate physical deterioration of the recreational facilities at the Lake Perris SRA.	<p>Mitigation Measure 3.12-1a: DWR shall assist Lake Perris SRA in conducting promotional and public outreach efforts to improve public awareness that the park is open during the drawdown period. The public outreach effort shall include making brochures available and posting of informational signs throughout the park describing the work being conducted and to advertise the facilities and activities currently available in order to promote recreational use at Lake Perris.</p> <p>Mitigation Measure 3.12-1b: At the conclusion of the project, DWR shall work cooperatively with DPR to assess physical deterioration to the marina, if any, directly related to the project. DWR shall develop an action plan with DPR and mitigate for those impacts.</p>	Less than Significant
Impact 3.12-2: Construction activities would result in temporary disruption of recreational activities at Lake Perris SRA.	Mitigation Measure 3.12-2: DWR shall include in construction contractor specifications that construction would avoid the Big Rock rock-climbing area and that construction of the haul road would not alter the appearance of the rock cliff. Closed climbing structures would be identified for public awareness.	Significant and Unavoidable during the temporary construction period

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
Impact 3.12-3: Drawdown of Lake Perris, the excavation of the borrow area, and the construction of the new outlet tower would adversely affect the Lake Perris SRA sport fishery and waterfowl hunting opportunities.	Implement Mitigation Measure 3.3-8, 3.3-9a through 3.3-9c.	Significant and Unavoidable
Impact 3.12-4: Construction activities would result in temporary disruption of recreational activities at the Perris Fairgrounds. The open channel emergency outlet extension alternative would permanently impact activities at the Perris Fairgrounds.	Mitigation Measure 3.12-4: DWR shall prepare a parking plan for the fairgrounds and implement improvements to regain the lost parking spaces caused by the construction of the emergency outlet extension. Implement Mitigation Measure 3.8-1a and 3.8-1b.	Less than Significant for the underground alternative; Significant and Unavoidable for the open channel alternative
Traffic and Circulation		
Impact 3.13-1: Construction activities would result in short-term increases in vehicle trips by construction workers and construction vehicles.	Mitigation Measure 3.13-1: The following requirements shall be incorporated into contract specifications for the project: <ul style="list-style-type: none"> • The contractor(s) shall prepare and implement a traffic safety / traffic management plan, which would establish, at a minimum, the process for notification of construction activity and the means for people to report problems during construction. The plan will be made available to the public. Elements of the contractor's plan will include, but are not necessarily limited to, the following: <ul style="list-style-type: none"> – Provide a schedule of deliveries over the construction period showing the estimated number of trucks traveling to and from the project site during the different phases of the work. Provide updates of estimated truck traffic volumes as construction proceeds. Encourage off-peak hour deliveries. – Comply with roadside safety protocols. Provide advance "Road Work Ahead" (and other appropriate) warning signs to achieve required speed reductions for safe traffic flow (including turning movements between the Ramona Expressway and the main access roads) into and out of the work site. – Promote carpooling and use of public transportation for workers traveling to the construction site. 	Less than Significant
Impact 3.13-2: Construction activities could affect traffic on Ramona Expressway, Evans Road and Lake Perris Drive as well as on roads within the Lake Perris SRA. Some road closures would occur within the Lake Perris SRA for the duration of construction.	Mitigation Measure 3.13-2a: DWR shall post signs at closed roads indicating the closure schedule and alternate routing for recreational and regular access. In addition, closure notification shall be posted on the DWR and Lake Perris SRA websites.	Less than Significant

**TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance after Mitigation
	<p>Mitigation Measure 3.13-2b: DWR shall prepare a traffic control plan that identifies specific traffic control measures to ensure safety on the local roadway network and within the Lake Perris SRA. Control measures shall include use of flaggers within Lake Perris SRA if construction vehicles utilize Lake Perris SRA roads and trails outside the construction exclusion zone.</p> <p>Mitigation Measure 3.13-2c: Peak travel periods shall be avoided when scheduling road closures.</p>	
Impact 3.13-3: The construction activity is located within the March Air Reserve Base Safety Zone Area III that could pose air traffic safety conflicts.	None required.	--
Cumulative Effects		
Impact 4-1: Construction of the proposed project in conjunction with other projects in the area could result in cumulative short-term impacts associated with construction activities. The short-term impacts associated with cumulative construction projects include impacts related to aesthetics, air quality, biological resources, hazardous materials, geology and soils, hydrology and water quality, land use, noise, and public services and utilities, and traffic. Construction-related impacts would be short-term. With measures identified in Chapter 3 to mitigate project impacts, the contribution of the proposed project to most cumulative, construction-related impacts would not be cumulatively considerable. However, the project's contribution to air quality impacts would be cumulatively considerable.	None required.	Cumulative air emissions would be Significant and Unavoidable; other cumulative impacts would be Less than Significant