

EXECUTIVE SUMMARY

ES.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 with information about the potential effects, both beneficial and adverse, on the local and regional environment associated with implementation of the Perris Dam Emergency Release Facility (proposed project). This Draft EIR has been prepared pursuant to the California Environmental Quality Act (CEQA) of 1970 (amended), codified at California Public Resources Code Sections 21000 et seq., and the CEQA Guidelines in the Code of Regulations, Title 14, Division 6, Chapter 3.

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.

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ES.2 Background

DWR operates the State Water Project (SWP), which supplies water to 29 contracting agencies across the State. The SWP includes an extensive system of aqueducts and pipelines that convey water from the Feather River and Sacramento River watersheds through the Central Valley into its terminus at Lake Perris in Riverside County. The proposed project is located in an unincorporated portion of western Riverside County approximately 15 miles south of the city of Riverside and partially within the city of Perris. The proposed project would be constructed partially within the Lake Perris State Recreation Area (SRA) and the Lake Perris Fairgrounds and would connect to the Perris Valley Channel.

The Perris Dam's original and current emergency release facility consists of a 12.5-foot-diameter steel-lined concrete pipe that transitions to a rectangular concrete outlet, where flow is controlled by a 12-foot-tall by 6-foot-wide slide gate. Downstream of the slide gate, the outlet is capped off by a bolted steel bulkhead. The release facility's design flow capacity is 3,800 cubic feet per

second (cfs), which could be released in the event of an eminent dam emergency. If released, the water would form its own overland channel and result in an inundation area of approximately 715 acres to the southwest of the dam. Over time, the land that would potentially be affected by an emergency release from Perris Dam has become developed with primarily residential properties.

The emergency release structure would most likely be used in the aftermath of a seismic event that renders the dam structurally unsound. A seismic event of sufficient magnitude to impair the dam has only a small chance of occurring. The dam is being retrofitted to survive a Maximum Credible Earthquake, which further reduces the risk that the reservoir would need to be drained. Nevertheless, the possibility exists that an emergency release of water from the Perris Reservoir might be necessary, and if so, could inundate downstream properties. The Emergency Release Facility Project is being proposed to reduce that risk.

ES.3 Project Objectives

The objectives of the proposed project are to:

- Construct improvements to reduce the risk to public safety and property resulting from the execution of an emergency operation to drawdown Lake Perris;
- Reduce the risk to DWR Operations and Maintenance staff from operating the emergency release structure; and
- Improve the emergency release structure such that it can be reliably operated to drawdown Lake Perris to meet Division of Safety of Dams (DSOD) emergency drawdown requirements.

ES.4 Project Description

DWR is proposing to modify the existing emergency release structure, and construct a water conveyance facility that would release and convey emergency flows from the Perris Reservoir in the event of an emergency drawdown.

The proposed project would modify the existing emergency release structure by removing the existing bulkhead and replacing it with an automated valve(s), which adds flexibility and redundancy to the system, and makes the emergency release facility safer to operate. The new release structure would integrate with the old design, and ensure that a release would not damage the critical portions of the structure. The emergency release structure would maintain a maximum design capacity of 3,800 cfs, but would be operated in accordance to DWR's Perris Dam Emergency Release Facility Operations Plan to not exceed the capacity of the downstream Perris Valley Channel when operationally possible.

The proposed project is composed of three distinct sections (SRA Segment, Fairgrounds Segment, and Western Segment). If water were released during an emergency, the released water would be directed by a levee system across the open SRA land between the dam and Ramona Expressway (SRA Segment), toward a channel across the southern end of the Lake Perris

Fairgrounds (Fairgrounds Segment), and finally conveyed in a channel north of Ramona Expressway to the Perris Valley Channel (Western Segment).

SRA Segment

Two levees, the Main Levee and North Training Levee, would be constructed as part of the emergency release conveyance facility along the SRA Segment. The Main Levee would be approximately 6,000 feet long, up to 10 feet high, and up to 87 feet wide at the bottom with 3:1 slopes. The North Training Levee would be approximately 685 feet long, up to 8 feet high and up to 60 feet wide at the bottom with 3:1 slopes. A training levee is designed to help constrain and guide discharged water toward a desired location in a more controlled manner. The two levees would direct flow from the emergency release structure downhill toward the northwest, and would funnel the water toward a new drainage basin and concrete weir located at the edge of the SRA and the Fairgrounds. The flattened drainage basin upstream of the weir would cover approximately 1.5 acres. The concrete weir would be approximately 1 foot high, 5 feet wide, and 130 feet long.

All levees within the SRA would be constructed from native soil. If improvements to the soils under the levees are needed, it is likely that a temporary trench would be excavated and then backfilled to improve the foundation. A layer of rock on the water side would be placed on the levees to protect the embankment from erosion during an emergency release. The rock would be overlain by a minimum of two feet of native soil, to provide habitat for the Stephens' kangaroo rat and Los Angeles pocket mouse. This form of levee construction is atypical and has been designed in coordination with a small mammal biologist to serve both its primary function as a water conveyance system and secondarily provide suitable burrowing habitat for small mammals. The design and function of the levees will not be compromised by use of wildlife for habitat; the rock layer would maintain the levee's stability during a flow event. The levees would be revegetated with native grasses and forbs to replace habitat that was temporarily disturbed during construction. A 20-foot-wide dirt access road would be constructed on top of each levee for periodic maintenance checks of the levee system. To compensate for additional roadway surfaces created on top of the levees, an equal quantity of existing roadways would be decommissioned and restored with native vegetation.

Fairgrounds Segment

The Fairgrounds Segment would receive water from the drainage basin in the SRA Segment and deliver it to the Western Segment. Water would be conveyed from this segment through an unlined trapezoidal channel. The channel would be designed for dual function, and would allow for the channel area to be used for designated Lake Perris Fairground activities. Because emergency releases from the dam are extremely unlikely, it would be possible to alter the side slopes of the unlined trapezoidal channel to develop a joint-use area with the Lake Perris Fairgrounds. This would create a ditch that is 320 feet wide, while preserving the majority of the existing parking area. Further, side slopes (4:1) on the eastern area currently leased to the motocross track could allow motocross activities within the conveyance channel after construction. The channel would be 25 feet deep on the east end to 11 feet deep on the west end. Side slopes would be consistent with existing conditions. The channel would cover an area of

approximately 13 acres, but 10 of those acres could be used by the fairgrounds post construction. A permanent access road would be required on the southern side, and the Lake Perris Fairgrounds sign located along the property's southwest corner would need to be relocated to accommodate the channel.

Within the Fairgrounds Segment, the conveyance channel would cross under two roads: one at the Lake Perris Fairgrounds' eastern entrance at Avalon Parkway and the other at Lake Perris Drive. Partial or full road closures may be necessary during the construction of both under-crossings. Access to the Lake Perris SRA and the Lake Perris Fairgrounds would be maintained during any such closures via either the Avalon Parkway entrance or the Lake Perris Drive entrance. The conveyance channel in this segment would be constructed below grade.

Western Segment

The Western Segment would be developed as an unlined, earthen, trapezoidal channel. The channel would be approximately 2,500 feet long, with a 120-foot top width and 80-foot bottom, and nine feet deep with 2:1 side slopes. The side slopes would be stabilized rock slope protection. The earthen channel would occupy approximately 24 acres. A permanent 15-foot access road would be required on both sides of the channel.

The earthen channel would connect the Fairgrounds Segment to the Perris Valley Channel. The channel would parallel Ramona Expressway and would be constructed within and adjacent to an existing right-of-way (ROW). Similar to the other two road crossings in the Fairgrounds Segment, this segment would cross Evans Road and a bridge would need to be constructed. A control structure at the connection to the Perris Valley Channel would be constructed to control the flow depth within the channel. Either a concrete weir or a series of box culverts and an embankment across the channel would be constructed. Scour protection would be provided at the junction to protect the Perris Valley Channel from erosion damage.

ES.5 Project Alternatives

An EIR must describe a range of reasonable alternatives to the proposed project or alternative project locations that could feasibly attain most of the basic project objectives and would avoid or substantially lessen any of the significant environmental impacts to the proposed project. The alternatives analysis must include the "No Project Alternative" as a point of comparison. The No Project Alternative includes existing conditions and reasonably foreseeable future conditions that would exist if the proposed project were not approved (CEQA Guidelines §15126.6).

This EIR evaluates five alternatives to the proposed project, Channel Only Alternative, Fairgrounds Segment – Concrete-lined Channel, Fairgrounds Segment – Unlined Channel, Fairgrounds Segment – Fully-covered Channel, and No Project Alternative. These alternatives are discussed further in Chapter 6, Analysis of Alternatives. The EIR concludes that the proposed project is the environmentally preferred alternative.

ES.6 Summary of Impacts

Table ES-1, at the end of this chapter, presents a summary of the impacts and mitigation measures identified for the proposed project. The complete impact statements and mitigation measures are presented in Chapter 3. 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 ES-1** indicates the measures that will avoid, minimize, or otherwise reduce significant impacts to a less-than-significant level if implemented.

The EIR finds four significant and unavoidable impacts of the proposed project: 1) construction activities will likely impact the visual character of the area, 2) construction activities will likely generate noise levels in excess of established standards during nighttime construction, 3) construction activities will likely create a temporary increase in ambient noise levels, and 4) construction activities will likely cause delays to heavy commuter routes. All other potentially significant impacts identified would be reduced to less than significant levels with proposed mitigation measures.

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

**TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE DWR PERRIS DAM EMERGENCY RELEASE FACILITY**

Environmental Impact	Mitigation Measures	Significance Determination
Aesthetics		
3.1-1: The project could have a significant impact if it would have a substantial adverse effect on a scenic vista	None required	No Impact
3.1-2: The project could have a significant impact if it would substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	None required	No Impact
3.1-3: The project could have a significant impact if it would substantially degrade the existing visual character or quality of the site and its surroundings.	No feasible mitigation measures beyond adherence to local, State and federal requirements	Significant and Unavoidable during construction
3.1-4: The project could have a significant impact if it would create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.	None required	Less than Significant
Air Quality		
3.2-1: The proposed project could have a significant impact if it would conflict with or obstruct implementation of the applicable air quality plan.	None required	Less than Significant
3.2-2: The project could have a significant impact if it would violate an air quality standard or contribute substantially to an existing or projected air quality violation.	AQ-1: The haul truck trips transporting rock material from the Perris Dam quarry in the Bernasconi Hills to the staging area below the Perris Dam shall be limited to a maximum of 74 round trips daily. AQ-2: Construction equipment and vehicles greater than 50 hp shall either have EPA Tier 4 engines or have engines that are retrofitted to include emissions reduction features that reduce emissions to the level of EPA Tier 4 interim levels.	Less than Significant with Mitigation
3.2-3: The project could have a significant effect if it resulted in a cumulatively considerable net increase of any criteria pollutant for which the project region is at non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	Implement AQ-1 and AQ-2	Less than Significant with Mitigation
3.2-4: The project could have a significant effect if it would expose sensitive receptors to substantial pollutant concentrations.	None required	Less than Significant
3.2-5: The project could have a significant impact if it would create objectionable odors affecting a substantial number of people.	None required	Less than Significant

TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Mitigation Measures	Significance Determination
Biological Resources		
<p>3.3-1a: The proposed project could have a significant impact if it would have a substantial adverse impact, either directly or through habitat modifications, on any [plant] species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS.</p>	<p>BIO-1: DWR shall conduct preconstruction rare plant surveys during the blooming period of the plants with potential to occur on-site. If rare plants are found to be present within or near the project impact area, the construction zone limits shall be staked, flagged, fenced, or otherwise clearly delineated by a qualified biologist to ensure that the construction zone is limited to minimize impacts on special-status plant species. These limits shall be identified in the construction drawings. No earth-moving equipment shall be allowed outside demarcated construction zones unless preapproval is obtained from a qualified biologist and in coordination with the USFWS and CDFW.</p>	Less than Significant with Mitigation
<p>3.3-1b: The proposed project could have a substantial adverse impact, either directly or through habitat modifications, on any [ground-dwelling wildlife] species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS.</p>	<p>BIO-2: 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 preconstruction 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 nondisturbance buffer zone approved by USFWS and CDFW. • Where avoidance of confirmed Stephens' kangaroo rat precincts is infeasible, DWR shall purchase credits at an approved Stephens' kangaroo rat mitigation bank or replace occupied-habitat at a 1:1 ratio, or as approved by the RCHCA. • If an emergency drawdown inundates grasslands within the SRA, DWR shall coordinate with the RCHCA to determine the appropriate compensation or remediation, if necessary. The consultation shall consider known and potential Stephen's kangaroo rat occurrences at the time of the drawdown event. 	Less than Significant with Mitigation
<p>3.3-1c: The proposed project could have a significant impact if it would have a substantial adverse impact, either directly or through habitat modifications, on any [avian wildlife] species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS.</p>	<p>BIO-3: DWR shall have a qualified biologist conduct a preconstruction spring/summer active season reconnaissance survey for nesting migratory bird species, burrowing owls, and other nesting birds within 300 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>BIO-4: If potential burrowing owl habitat or signs of owls are found to be present, appropriate protocol surveys must be conducted no more than 1 year prior to project implementation between February 1 and August 31 in accordance with the 2012 CDFW Staff Report on</p>	Less than Significant with Mitigation

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance Determination
	<p>Burrowing Owl Mitigation. Avoidance of burrowing owls during the nesting season shall be required, and if burrowing owls are found outside of the nesting season, either passive or active relocation shall be required in consultation with CDFW. If CDFW determines that burrowing owl relocation is required, a qualified biologist shall prepare a burrowing owl relocation plan for approval by CDFW, and a qualified biologist with the appropriate handling permit shall implement the relocation activities and procedures described in the relocation plan.</p> <p>BIO-5: DWR shall avoid direct impacts on any nesting birds located within the limits of construction by removing plant material outside of the typical breeding season (which is February 1 through August 31).</p> <p>BIO-6: If construction and vegetation removal is proposed during the bird nesting period (February 1 through August 31) then active nest sites located during the preconstruction surveys shall be avoided and a nondisturbance buffer zone established dependent on the species. The type and intensity of buffer will be determined in the field by the qualified biologist. Nest sites shall be avoided with nondisturbance 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>3.3-2: The proposed project could have a significant impact if it would have a substantial adverse impact on riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or the USFWS.</p>	None required	Less than Significant
<p>3.3-3: The project could have a significant impact if it would have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.</p>	None required	Less than Significant
<p>3.3-4: The projects could have a significant impact if it would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.</p>	None required	Less than Significant
<p>3.3-5: The project could have a significant effect on the environment if it conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</p>	None required	No Impact
<p>3.3-6: The project could have a significant impact if it would conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat</p>	Implement BIO-2	Less than Significant with Mitigation

TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Mitigation Measures	Significance Determination
conservation plan.		
Cultural Resources		
<p>3.4-1: The project could have a significant impact if it would cause a substantial adverse change in the significance of a historical or archaeological resource, as defined in <i>CEQA Guidelines</i> Section 15064.5.</p>	<p>CUL-1: Construction personnel shall be trained in the identification of cultural resources. Prior to earthmoving activities, cultural resources sensitivity training shall be presented to all construction personnel. Construction personnel shall be informed of the types of archaeological resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. DWR shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.</p> <p>CUL-2: An archaeological monitor (working under the direct supervision of a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archeology [U.S. Department of the Interior, 2008]) shall be present during initial ground-disturbing activities to assess subsurface conditions. A Native American monitor shall be invited to be present. Based on observations made by the archaeological and Native American monitors, monitoring activities may be modified at the recommendation of the qualified archaeologist in coordination with DWR.</p> <p>CUL-3: In the event of the unanticipated discovery of archaeological materials, DWR shall immediately cease all work activities in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool-making debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone or concrete footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. Construction shall not resume until the qualified archaeologist has conferred with DWR on the significance of the resource.</p> <p>If it is determined that the discovered archaeological resource constitutes a historical resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place maintains the important relationship between artifacts and their archaeological context and also serves to avoid conflict with traditional and religious values of groups who may</p>	<p>Less than Significant with Mitigation</p>

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance Determination
	<p>ascribe meaning to the resource. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, a Cultural Resources Treatment Plan shall be prepared and implemented by a qualified archaeologist in consultation with DWR that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. DWR shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered.</p>	
<p>3.4-2: The project could have a significant impact if it would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.</p>	<p>CUL-4: During ground excavation greater than 5 feet, construction activities will be monitored for paleontological resources. DWR shall retain a qualified paleontologist to oversee the monitoring effort and determine the appropriate duration of monitoring needed. In the event of the discovery of fossils or fossil-bearing soils during construction of the project, the contractor shall immediately report the finding to DWR. The qualified paleontologist will evaluate the finding and establish further collection and monitoring protocols. Construction in the vicinity of the finding will be halted until the qualified paleontologist has evaluated the finding.</p>	<p>Less than Significant with Mitigation</p>
<p>3.4-3: The project could have a significant impact if it would disturb any human remains, including those interred outside of formal cemeteries.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Energy</p>		
<p>3.5-1: The project could have a significant impact if it would require additional energy use that could result in wasteful consumption, affect local and regional energy supplies, or conflict with applicable energy efficiency policies or standards.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Geologic and Mineral Resources</p>		
<p>3.6-1: The project could have a significant impact if it would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides.</p>	<p>None required</p>	<p>No Impact</p>

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance Determination
3.6-2: The project could have a significant impact if it would result in substantial soil erosion or the loss of topsoil.	None required	Less than Significant
3.6-3: The project could have a significant impact if it would be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.	None required	Less than Significant
3.6-4: The project could have a significant impact if it would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	None required	No Impact
3.6-5: The project could have a significant impact if it would include soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	None required	No Impact
3.6-6: The project could have a significant impact if it would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	None required	No Impact
3.6-7: The project could have a significant impact if it would result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	None required	No Impact
Greenhouse Gas Emissions		
3.7-1: The proposed project could have a significant impact if it would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	None required	Less than Significant
3.7-2: The proposed project could have a significant impact if it would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	None required	Less than Significant
Hazards and Hazardous Materials		
3.8-1: The project could have a significant impact if it would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	None required	Less than Significant
3.8-2: The project could have a significant impact if it would create a significant hazard to the public or the environment through foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	None required	Less than Significant
3.8-3: The proposed project could have a significant impact if it would result in hazardous emission or the handling of hazardous or acutely hazardous	None required	No Impact

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance Determination
materials, substances, or waste within one-quarter mile of an existing or proposed school.		
3.8-4: The project could have a significant impact if it would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.	None required	Less than Significant
3.8-5: The project could have a significant impact if it would be located within an area covered by an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and could result in a safety hazard for people residing or working in the project area.	None required	No Impact
3.8-6: The project could have a significant impact if it would be located within the vicinity of a private airstrip and would result in a safety hazard for people residing or working in the project area.	None required	No Impact
3.8-7: The project could have a significant impact if it would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	None required	Less than Significant
3.8-8: The project could have a significant impact if it would expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	None required	Less than Significant
3.8-9: Construction of the project could expose Lake Perris SRA visitors and Lake Perris Fairgrounds visitors to hazardous conditions related to construction activities.	HAZ-1: DWR shall coordinate with California State Parks and Lake Perris Fairgrounds management 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.	Less than Significant with Mitigation
Hydrology , Water Quality, and Groundwater		
3.9-1: The project could have a significant impact if it would violate water quality standards or waste discharge requirements.	None required	Less than Significant
3.9-2: The project could have a significant impact if it would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.	None required	Less than Significant
3.9-3: The project could have a significant impact if it would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.	None required	Less than Significant

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance Determination
3.9-4: The project could have a significant impact if it would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.	None required	Less than Significant
3.9-5: The project could have a significant impact if it would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	None required	Less than Significant
3.9-6: The project could have a significant impact if it would otherwise substantially degrade water quality.	None required	Less than Significant
3.9-7: The project could have a significant impact if it would place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.	None required	No Impact
3.9-8: The project could have a significant impact if it would place within a 100-year flood hazard area structures which would impede or redirect flood flows.	None required	No Impact
3.9-9: The project could have a significant impact if it would expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or from an emergency drawdown of Lake Perris.	None required	No Impact
3.9-10: The project could have a significant impact if it would contribute to inundation by a seiche, tsunami, or mudflow.	None required	No Impact
3.9-11: The project could have a significant impact if it would result in the exposure of people or structures not currently within the Perris Dam inundation zone to a significant risk of loss, injury, or death involving flooding resulting from a drawdown of Lake Perris.	None required	Less than Significant
Land Use and Planning / Agriculture and Forestry Resources		
3.10-1: The project could have a significant impact if it would physically divide an established community	None required	No Impact
3.10-2: The project could have a significant impact if it would conflict with applicable land use plans, policies, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	None required	Less than Significant
3.10-3: The project could have a significant impact if it would conflict with a habitat conservation plan or natural community conservation plan.	Implement BIO-2 .	Less than Significant with Mitigation

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance Determination
3.10-4: The project could have a significant impact if it would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.	None required	No Impact
3.10-5: The project could have a significant impact if it would conflict with existing zoning for agricultural use, or a Williamson Act contract.	None required	No Impact
3.10-6: The project could have significant impact if it would conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104 [g]).	None required	No Impact
3.10-7: The project could have a significant impact if it would result in the loss of forest land or conversion of forest land to non-forest use.	None required	No Impact
3.10-8: The project could have a significant impact if it would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.	None required	Less than Significant
Noise		
3.11-1: The project could have a significant impact if it would expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	<p>NOISE-1: Nighttime work shall not include blasting or sheet pile driving.</p> <p>NOISE-2: In coordination with DPR at Lake Perris SRA, 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>NOISE-3: 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 	Significant and Unavoidable due to elevated noise levels in County open space and due to nighttime construction

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance Determination
	<p>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.</p> <ul style="list-style-type: none"> • 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>NOISE-4: 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; ○ 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 	

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance Determination
	<p>explosives; and procedures for handling misfires per Federal code;</p> <ul style="list-style-type: none"> o Type and quantity of explosives and description of detonation device. • Sequence and schedule of blasting rounds, including general method of excavation, lift heights, etc.; o Methods of matting or covering of blast area to prevent flyrock and excessive air blast pressure; o Description of blast vibration and air blast monitoring programs; o Dust control measures in compliance with applicable air pollution control regulations (to interface with general construction dust control plan); o Emergency Action Plan to provide emergency telephone numbers and directions to medical facilities. Procedures for action in the event of injury; o Material Safety Data Sheets for each explosive or other hazardous materials to be used; o Evidence of licensing, experience, and qualifications of blasters; o 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 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. • 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 DOT rules within the same vehicle. Vehicles shall have at least two ten-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 	

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance Determination
	<p>shall carry bill-of-lading papers detailing the exact quantities and code dates of transported explosives or detonators.</p> <ul style="list-style-type: none"> 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>3.11-2: The project could have a significant impact if it would expose persons to or generate excessive groundborne vibration or groundborne noise levels.</p>	<p>Implement NOISE-4</p>	<p>Less than Significant with Mitigation</p>
<p>3.11-3: The project could have a significant impact if it would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>3.11-4: The project could have a significant impact if it would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.</p>	<p>Implement NOISE-1 through NOISE-3</p>	<p>Significant and Unavoidable during construction</p>
<p>3.11-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project could have a significant impact if it would expose people residing or working in the project area to excessive noise levels.</p>	<p>None required</p>	<p>No Impact</p>
<p>3.11-6: For a project within the vicinity of a private airstrip, the project could have a significant impact if it would expose people residing or working in the project area to excessive noise levels.</p>	<p>None required</p>	<p>No Impact</p>
<p>Public Services, Utilities, and Service Systems</p>		
<p>3.12-1: The project could have a significant impact if it would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered</p>	<p>UTIL-1: DWR shall create a temporary emergency access road for use only by emergency responders on an as-needed basis. This road would connect Evans Road and Lake Perris Drive during full</p>	<p>Less than Significant</p>

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance Determination
government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, or other public facilities.	closure (Option B) of the bridge construction at Evans Road. If Option B is chosen, DWR shall provide the location of the temporary road to appropriate emergency responders within the local area.	
3.12-2: The project could have a significant impact if it would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.	None required	No Impact
3.12-3: The project could have a significant impact if it would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	None required	No Impact
3.12-4: The project could have a significant impact if it would require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	None required	Less than Significant
3.12-5: The project could have a significant impact if it would not have sufficient water supplies available to serve the project from existing entitlements and resources, or if new or expanded entitlements are needed.	None required	Less than Significant
3.12-6: The project could have a significant impact if it would result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	None required	No Impact
3.12-7: The project could have a significant impact if it would not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.	None required	Less than Significant
3.12-8: The project could have a significant impact if it would not comply with federal, state, and local statutes and regulations related to solid waste.	None required	Less than Significant
3.12-9: The project could have significant impact if it would encounter buried utilities.	UTIL-2: During design and prior to construction, an underground utilities search will be conducted to compile available information on utility locations.	Less than Significant with Mitigation
Recreation		
3.13-1: The project could have a significant impact if it would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial deterioration of the facility would occur or be accelerated.	None required	Less than Significant
3.13-2: The project could have a significant impact if it would include recreational facilities or require the construction or expansion of recreational	None required	Less than Significant

**TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Significance Determination
facilities which might have an adverse physical impact on the environment.		
Transportation and Traffic		
<p>3.14-1: The project could have a significant impact if it would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.</p>	<p>TRANS-1: For proposed bridge construction at Evans Road (Option A or Option B), DWR shall implement the following measures for each designated intersection.</p> <ol style="list-style-type: none"> 1. <i>Perris Boulevard and Iris Avenue</i> Create a new northbound right-turn overlap phase; change westbound, northbound, and southbound left-turn phasing to protected-permissive. 2. <i>Lasselle Street and Iris Avenue</i> At all approaches, change left-turn phases to protective-permissive. 3. <i>Perris Boulevard and Krameria Avenue</i> Restripe westbound approach to provide two left-turn lanes and a shared thru-right lane. Change westbound left-turn phase to protective permissive with eastbound phase remaining as permissive. 4. <i>Lasselle Street and Krameria Avenue</i> At all approaches, change left-turn phased to protected-permissive. 7. <i>Perris Boulevard and Harley Knox Boulevard</i> At northbound, southbound, and eastbound approaches, change left-turn phases to protected-permissive. 10. <i>Perris Boulevard and Ramona Expressway</i> At all approaches, change left-turn phasing to protected-permissive. Restripe northbound lanes to provide two left-turn lanes, two thru-lanes and one shared thru-right lane. 11. <i>Redlands Avenue and Ramona Expressway (Option B only)</i> At southbound and east bound approaches, change left-turn phase to protected-permissive. At northbound and southbound approaches change right-turn phase to permissive-overlap. 	<p align="center">Significant and Unavoidable during construction</p>
<p>3.14-2: The project could have a significant impact if it would conflict with an applicable congestion management program including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.</p>	<p>None Required.</p>	<p align="center">Less than Significant</p>

TABLE ES-1 (continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Mitigation Measures	Significance Determination
3.14-3: The project could have a significant impact if it would result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	None required.	No Impact
3.14-4: The project could have a significant impact if it would substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment).	None required	Less than Significant
3.14-5: The project could have a significant impact if it would result in inadequate emergency access.	None required	Less than Significant
3.14-6: The project could have a significant impact if it would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	None required	Less than Significant