Prado Basin Feasibility Study

Initial Study/Notice of Preparation
Environmental Impact Report/Environmental Impact Statement

Orange County Water District
18700 Ward Street
Fountain Valley, CA 92708
Contact: Daniel Bott

April, 2016
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SECTION 1.0 INTRODUCTION

1.1 Purpose of Initial Study

Pursuant to the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), the U.S. Army Corps of Engineers (USACE) and the Orange County Water District (OCWD) propose to prepare a joint Environmental Impact Statement (EIS) and Environmental Impact Report (EIR) for the implementation of the Prado Basin Feasibility Study (Project). The USACE is the Lead Agency for NEPA and the OCWD is the Lead Agency for CEQA. The environmental document is referred to as the EIR/EIS.

This document is an Initial Study that evaluates the potential environmental impacts associated with the implementation of the Project. The Initial Study has been prepared in accordance with the CEQA, Public Resources Code Section 21000 et seq., State CEQA Guidelines, and the Orange County Water District CEQA Environmental Procedures. The Initial Study identifies environmental issues that do not require further evaluation and potentially significant environmental issues that require further evaluation. Based on the environmental review contained in this Initial Study it has been determined that implementation of the Project could have the potential to result in significant impacts to the environment and that the preparation of an environmental impact report is required to comply with the California Environmental Quality Act. A preliminary evaluation of the potential impacts to the environment is presented in Sections 3 and 4 of this Initial Study.

In accordance with Section 15082 of the CEQA Guidelines a Notice of Preparation (NOP) of an EIR shall be prepared and circulated to trustee agencies, responsible agencies and interested organizations and members of the public for a 30-day review period to help identify issues that require evaluation in the EIR/EIS. At this time we are requesting your comments on the scope of the Project and the identification of issues that should be evaluated in the EIR/EIS. Due to time limits mandated by state law, your response must be submitted no later than 30 days after receipt of this notice. The public review period for the NOP will extend from April 5, 2016 to May 5, 2016.

Pursuant to the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), the U.S. Army Corps of Engineers (USACE) and the Orange County Water District (OCWD) propose to prepare a joint Environmental Impact Statement (EIS) and Environmental Impact Report (EIR) for the implementation of the Prado Basin Feasibility Study (Project). The USACE is the Lead Agency for NEPA and the OCWD is the Lead Agency for CEQA.
This document is an Initial Study that evaluates the potential environmental impacts associated with the implementation of the Project. The Initial Study has been prepared in accordance with the CEQA, Public Resources Code Section 21000 et seq., State CEQA Guidelines, and the Orange County Water District CEQA Environmental Procedures.

Based on the environmental review contained in this Initial Study it has been determined that implementation of the Project could have the potential to result in significant impacts to the environment and preparation of an EIR is required to comply with the CEQA. A preliminary evaluation of the Project and its associated impacts to the environment is presented in Sections 3 and 4 of this Initial Study.
SECTION 2.0 PROJECT DESCRIPTION

2.1 Study Area
The study area is situated within the Prado Basin in western Riverside County and San Bernardiño County and along the Lower Santa Ana River (LSAR) in eastern Orange County. As shown in Figure 1, Prado Basin is bordered to the south by State Route 91 and to the west by State Route 71. The most significant structure in the Prado Basin is Prado Dam. The dam provides flood risk management for 2,225 square miles of the Santa Ana River Watershed. There are four major water bodies that drain into the Prado Basin; Santa Ana River, Chino Creek, Cucamonga Creek/Mill Creek and Temescal Creek. All of these water bodies converge and are impounded behind Prado Dam in a flood risk management pool during storm flow conditions. The primary function of Prado Dam is flood risk management and depending on the elevation of the impounded water and forecasted weather conditions, the USACE operates Prado Dam by providing controlled condition releases from the buffer pool to the LSAR for use by OCWD to replenish the Orange County Groundwater Basin. The water surface elevation of the impounded pool in Prado Basin varies depending on the time of year, basin inflow and basin outflow, while taking into account flood risk management, water conservation and natural resource objectives. The flood risk management activities at Prado Dam require that vast portions of Prado Basin be inundated with water for periods of time. These periods of inundation influence vegetation and wildlife at Prado Basin and has created the largest riparian forest in southern California. The periods of inundation also significantly restricts access and activities occurring in the Prado Basin.

2.2 Project Activities
The Prado Basin Feasibility Study proposes a combination of sediment management, water conservation and ecosystem restoration measures within the Prado Basin and along the Santa Ana River both downstream and upstream of Prado Dam. The project activities would help to reverse negative impacts associated with damming a river while preserving the benefits of flood risk management and water conservation. Below is a description of the measures proposed within the Prado Basin Feasibility Study.

Water Conservation Measure
The proposed water conservation measure would increase the surface water elevation of the Prado Dam buffer pool from the currently approved elevation of 498 feet during the flood season to elevation 505 feet during the flood season in a manner that would not have any adverse impact on the flood risk management function or operations of the dam. This measure would provide approximately 10,000 acre-feet of additional temporary storm water capture capacity during the flood season. The water conservation measure would on average result in an additional 6,200 acre-feet per year of water for conservation and groundwater recharge.
**Sediment Management Measure**

The proposed sediment management program would remove sediment from Prado Basin and re-entrain it into the lower Santa Ana River in a controlled manner thereby restoring natural sediment transport processes to the LSAR. The lack of sediment in the LSAR has caused the channel to incise which has resulted in lost and degraded riparian habitat throughout the Santa Ana Canyon. Restoring sediment transport to the LSAR would help to reverse the channel incision and restore habitat along the LSAR. The sediment management program would increase water conservation, enhance sediment migration along the Santa Ana River and preserve groundwater recharge facilities in Orange County. In addition to increasing local water supply reliability, the renewed sediment transport to the LSAR would provide a large scale approach to preserve civil infrastructure in and near the LSAR. This approach would help prevent future environmental impacts from projects which aim to mitigate sediment transport issues through a discrete repair based approach. Future projects such as mass excavations from Prado Basin, future raisings of Prado Dam, relocation of utilities that are in or near the LSAR, river invert/slope stabilization and bridge foundation stabilization could be minimized or avoided through restored sediment transport to the LSAR. The proposed sediment management program would also provide a renewed source of sand for beach replenishment for coastal communities.

**Chino Creek Restoration Measures**

Chino Creek is a concrete lined channel above Prado Basin which enters the Basin from the north-west. Chino Creek drains large areas that provide relatively little sediment inflow to Prado Basin. Storm flows lacking sediment in Chino Creek have created an incised channel condition which has degraded habitat. The proposed restoration measures would include the construction of bio-engineered invert stabilizers to halt, and in some places reverse, channel incision. These measures also include the re-construction of floodplains adjacent to Chino Creek, the construction of braided streams to help restore and sustain native floodplain habitat, removal of non-native vegetation and planting of native vegetation and the construction of trails and rest areas.

Several areas along Chino Creek contain low-value non-native vegetation. Removal of non-native vegetation and planting of native vegetation in these areas would complement channel stabilization activities to restore high value habitat to this area of the Prado Basin. A number of invasive aquatic species would also be targeted for removal from Chino Creek. The strategic placement of corridors and trails would be included in the restoration activities. Trails and corridors would allow for wildlife movement and provide access for natural resource monitoring and management, which are critical to sustaining long term support for ecosystem restoration policies.
Mill Creek Restoration Measures

Cucamonga Creek is a concrete lined channel above Prado Basin which enters the Basin from the north and is named Mill Creek in the Prado Basin. Mill Creek activities include similar improvements as Chino Creek aimed at halting channel incision and restoring natural flood plain processes. The Mill Creek measures include; widen the existing creek, construction of wildlife corridor and fences, construction of bio-engineered invert stabilizers, construction of trails and stop areas and the removal of non-native wildlife and habitat in order to promote ecosystem restoration.

Ecosystem Restoration Measures Up Stream of Prado Dam

Sedimentation upstream of Prado Dam has caused the loss of Santa Ana Sucker habitat and has degraded high-value habitat areas. The proposed ecosystem restoration measures up stream of Prado Dam include; construction Santa Ana Sucker groins, expansion of the Pheasant Field floodplain, construction of trails and stop areas and removal of non-native vegetation and invasive wildlife species.

Sediment management activities in conjunction with construction of river bed groins would help to restore habitat for the endangered Santa Ana Sucker. The strategic placement of groins (rock structures that re-direct flow) would promote localized sediment transport resulting in the development of aquatic habitat preferred by the Santa Ana Sucker.

The removal of sediment along with floodplain reconstruction, non-native vegetation removal and native vegetation planting would help to restore high value riparian habitat for special status species. Removal of Arundo from the Prado Basin and the construction of wildlife corridors and trails would allow movement within the Basin and provide natural resource management and recreation benefits. Implementing a sediment management plan would help to preserve ecosystem restoration activities upstream of Prado Dam.

Ecosystem Restoration Measures Down Stream of Prado Dam Activities

Restoration activities downstream of Prado Dam include the controlled re-entrainment of sediment into the LSAR. Sediment re-entrainment would be planned, controlled and measured to achieve the benefit of reversing channel incision and restoring riparian habitat along the river channel and in the flood plain. An adaptive management approach would be used to adjust the timing and rate of re-entrainment to aggrade the channel bottom as to not jeopardize the flood risk management function of the river. The proposed ecosystem restoration activities downstream of Prado Dam include; placement of large boulders along the low flow.
SECTION 3.0 ENVIRONMENTAL CHECK LIST EVALUATIONS

The following is the OCWD Environmental Checklist Form that was prepared for the Prado Basin Feasibility Study. The Environmental Checklist Form is consistent with Environmental Checklist form provided in Appendix G of the CEQA Guidelines.

Environmental Determination On the basis of this initial evaluation, I find that:

a) □ The proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.

b) □ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.

c) ☒ The proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.

d) □ Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR (EIR No. - ) pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

e) □ Pursuant to Section 15164 of the CEQA Guidelines, an EIR (EIR No. - ) has been prepared earlier and only minor technical changes or additions are necessary to make the previous EIR adequate and these changes do not raise important new issues about the significant effects on the environment. An ADDENDUM to the EIR shall be prepared.

f) □ Pursuant to Section 15162 of the CEQA Guidelines, an EIR (EIR No. - ) has been prepared earlier; however, subsequent proposed changes in the project and/or new information of substantial importance will cause one or more significant effects no previously discussed. A SUBSEQUENT EIR shall be prepared.

Daniel Bott

Date
### V. Issues & Supporting Information Sources

<table>
<thead>
<tr>
<th>Potential Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
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<tbody>
<tr>
<td><strong>I. AESTHETICS –</strong> Would the project:</td>
<td></td>
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<tr>
<td>a) Have a substantial adverse effect on a scenic vista?</td>
<td>☒</td>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Damage scenic resources, including but not limited to, trees, rock outpourings and historic buildings within a state highway?</td>
<td>☒</td>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td>☒</td>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
<td>☒</td>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td><strong>II. AGRICULTURAL AND FOREST RESOURCES:</strong> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model prepared by the California Department of Conservation as an optional model to use in assessing impacts on agricultural farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</td>
<td></td>
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<tr>
<td>a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland) to non-agricultural use? (The Farmland Mapping and Monitoring Program in the California Resources Agency, Department of Conservation, maintains detailed maps of these and other categories of farmland.)</td>
<td>☒</td>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Conflict with existing zoning for agricultural use or a Williamson Contract?</td>
<td>☒</td>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) 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))</td>
<td>☐</td>
<td></td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>d) Result in the loss of forest land or conversion of forest land to non-forest use?</td>
<td>☒</td>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e) Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural use or conversion of forest land to non-forest use?</td>
<td>☒</td>
<td></td>
<td>☐</td>
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</table>
### V. ISSUES & SUPPORTING INFORMATION SOURCES

<table>
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<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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**III. AIR QUALITY** – Where available, the significance criteria established by the applicable air quality management or pollution control district may be relied upon to make the following determinations. Would the project:

- **a)** Conflict with or obstruct implementation of applicable Air Quality Attainment Plan? ☒ ☐ ☐ ☐
- **b)** Violate any stationary source air quality standard or contribute to an existing or projected air quality violation? ☒ ☐ ☐ ☐
- **c)** Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? ☒ ☐ ☐ ☐
- **d)** Expose sensitive receptors to substantial pollutant concentrations? ☒ ☐ ☐ ☐
- **e)** Create objectionable odors affecting a substantial number of people? ☐ ☐ ☐ ☒

**IV. BIOLOGICAL RESOURCES** – Would the project:

- **a)** Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Services? ☒ ☐ ☐ ☐
- **b)** Have a substantial adverse impact on any riparian habitat or natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ☒ ☐ ☐ ☐
- **c)** Adversely impact federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling hydrological interruption, or other means? ☒ ☐ ☐ ☐
- **d)** 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 native wildlife nursery sites? ☒ ☐ ☐ ☐
- **e)** Conflict with any local policies or ordinances protecting biological resources, such as tree ☒ ☐ ☐ ☐
<table>
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<tr>
<th>V. ISSUES &amp; SUPPORTING INFORMATION SOURCES</th>
<th>POTENTIALLY SIGNIFICANT IMPACT</th>
<th>LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED</th>
<th>LESS THAN SIGNIFICANT IMPACT</th>
<th>NO IMPACT</th>
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<tr>
<td>preservation policy or ordinance?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
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<td>V. CULTURAL RESOURCES – Would the project:</td>
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<tr>
<td>a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to define Section 15064.5?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Directly or indirectly disturb or destroy a unique paleontological resource or site?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>d) Disturb any human remains, including those interred outside of formal cemeteries?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>VI. GEOLOGY AND SOILS – Would the project:</td>
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<td></td>
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<tr>
<td>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
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<tr>
<td>1. Rupture of a known earthquake fault, as delineated on the most recent 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?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>2. Strong seismic ground shaking?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>3. Seismic-related ground failure, including liquefaction?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>4. Landslides?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Would the project result in substantial soil erosion or the loss of topsoil?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) 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?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d) 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?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of wastewater?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
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### V. Issues & Supporting Information Sources

#### VII. GREENHOUSE GAS EMISSIONS — Would the project?

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<thead>
<tr>
<th></th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>❌</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b)</td>
<td>Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>❌</td>
<td>☐</td>
<td>☐</td>
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</table>

#### VIII. HAZARDOUS AND HAZARDOUS MATERIALS – Would the project:

<table>
<thead>
<tr>
<th></th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b)</td>
<td>Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c)</td>
<td>Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance or waste within one-quarter mile of an existing or proposed school?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d)</td>
<td>Be located on a site which is located on a list of hazardous materials sites compiled pursuant to Government Code Section 659662.5 and, as a result, would it create a significant hazard to the public or the environment?</td>
<td>❌</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e)</td>
<td>For a project located within an airport land use plan or where such a plan has not been adopted, within two miles where of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>❌</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f)</td>
<td>For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>❌</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>g)</td>
<td>Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>❌</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>h)</td>
<td>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?</td>
<td>❌</td>
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</tr>
<tr>
<td>V. ISSUES &amp; SUPPORTING INFORMATION SOURCES</td>
<td>POTENTIALLY SIGNIFICANT IMPACT</td>
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<tr>
<td><strong>VI. HYDROLOGY AND WATER QUALITY</strong> – Would the project:</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>a) Violate any water quality standards or waste discharge requirements?</td>
<td>☒</td>
<td>☐</td>
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</tr>
<tr>
<td>b) 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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</td>
<td>☐</td>
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<tr>
<td>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</td>
<td>☒</td>
<td>☐</td>
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<tr>
<td>d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</td>
<td>☒</td>
<td>☐</td>
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</tr>
<tr>
<td>e) 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?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>f) Otherwise substantially degrade water quality?</td>
<td>☒</td>
<td>☐</td>
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<tr>
<td>g) 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?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</td>
<td>☒</td>
<td>☐</td>
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</tr>
<tr>
<td>i) 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 dam?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>j) Inundation by seiche, tsunami, or mudflow?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td><strong>X. LAND USE AND PLANNING</strong> – Would the project:</td>
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<td></td>
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<tr>
<td>a) Physically divide an established community?</td>
<td>☒</td>
<td>☐</td>
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<tr>
<td>b) Conflict with any applicable land use plan, policy, or regulation of an agency with</td>
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<tr>
<td>V. ISSUES &amp; SUPPORTING INFORMATION SOURCES</td>
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<tr>
<td>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?</td>
<td>☒</td>
<td>☐</td>
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<tr>
<td>c) Conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
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</tbody>
</table>

**XI. MINERAL RESOURCES** – Would the project:

a) 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? | ☐ | ☐ | ☒ | ☐ |

**XII. NOISE** – Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☒ | ☐ | ☐ | ☐ |

b) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☐ | ☒ |

c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project? | ☒ | ☐ | ☐ | ☐ |

d) 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, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☒ | ☐ |

e) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☒ | ☐ |

f) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |

**XIII. POPULATION AND HOUSING** – Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ |

b) Displace substantial numbers of existing | ☐ | ☐ | ☐ | ☒ |
<table>
<thead>
<tr>
<th>V. ISSUES &amp; SUPPORTING INFORMATION SOURCES</th>
<th>POTENTIALLY SIGNIFICANT IMPACT</th>
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<tr>
<td>housing, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
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<tr>
<td>c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
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</table>

**XIV. PUBLIC SERVICES**

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for any of the public service:

- Fire protection? ☐ ☐ ☐ ☒
- Police protection? ☐ ☐ ☐ ☒
- Schools? ☐ ☐ ☐ ☒
- Parks? ☐ ☐ ☐ ☒
- Other public facilities? ☐ ☐ ☐ ☒

**XV. RECREATION**

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? ☒ ☐ ☐ ☒

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? ☒ ☐ ☐ ☒

**XVI. TRANSPORTATION/TRAFFIC**

Would the project:

a) 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? ☐ ☐ ☒ ☒

b) Conflict with an applicable congestion management program, including but limited to level of service standards and travel ☐ ☐ ☒ ☒
<table>
<thead>
<tr>
<th>V. ISSUES &amp; SUPPORTING INFORMATION SOURCES</th>
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<tr>
<td>demand measures, or other standards established by the county congestion management agency for designated roads or highways?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>c) 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?</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>d) Substantially increase hazards to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
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<tr>
<td>e) Result in inadequate emergency access?</td>
<td>☐</td>
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<td>☐</td>
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<tr>
<td>f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</td>
<td>☐</td>
<td>☐</td>
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</table>

XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☒ | ☐ |

b) 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? | ☐ | ☐ | ☒ | ☐ |

c) 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? | ☐ | ☐ | ☒ | ☐ |

d) Are sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed? | ☐ | ☐ | ☒ | ☐ |

e) Result in the determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments? | ☐ | ☐ | ☒ | ☐ |

f) Is the project served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs? | ☐ | ☐ | ☒ | ☐ |
### V. ISSUES & SUPPORTING INFORMATION SOURCES

<table>
<thead>
<tr>
<th>Issue</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>g) Comply with federal, state and local statutes and regulations related to solid waste?</td>
<td>□</td>
<td>□</td>
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</tbody>
</table>

### XVIII. MANDATORY FINDINGS OF SIGNIFICANCE –

<table>
<thead>
<tr>
<th>Finding</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<tr>
<td>b) Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects and the effects of probable future projects).</td>
<td>□</td>
<td>□</td>
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<tr>
<td>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Note: Authority cited: Sections 21083, 21083.05, Public Resources Code. Reference: Section 65088.4
SECTION 4.0 ENVIRONMENTAL ANALYSIS

The following environmental analysis responds to the environmental issues listed on the OCWD CEQA Checklist Form. The analysis identifies the level of anticipated impact that could occur from the construction and operation of the Prado Basin Feasibility Study.

4.1 Aesthetics

A. Would the project have a substantial adverse effect on a scenic vista?

Potential Significant Impact: The Prado Basin contains the largest riparian forest in southern California. The Basin provides open space relief to a regional area that is predominantly urbanized. Potential public views into Prado Basin are currently provided from Chino Hills State Park, Prado Regional Park, Santa Ana River Regional Park and from the future alignment of the Santa Ana River Trail. During construction and operation of the Project public views into the Prado Basin could be interrupted with construction equipment and construction activities. The EIR/EIS would evaluate potential impacts to scenic vistas into Prado Basin.

B. Would the project damage scenic resources, including but limited to trees, rock outpourings, and historic buildings within a State Highway?

Potential Significant Impact: According to the California Department of Transportation Scenic Highways Program, both State Route 71 and State Route 91 are Eligible State Scenic Highways. During the construction and operation of the Project existing views into Prado Basin and areas downstream and upstream of Prado Dam would be temporarily replaced with construction equipment and construction activity. The EIR/EIS would evaluate potential Project impacts to scenic resources along State Route 91 and State Route 71.

C. Would the project substantially degrade the existing visual character or quality of the site and its surrounding?

Potential Significant Impact: The visual character of the study area is natural open space. During construction operations the existing natural open space visual character of the study area would be replaced with construction equipment and construction activities. The EIR/EIS would evaluate potential impacts to the existing aesthetic character of the study area as a result of the construction and operation of the Project.

D. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Potential Significant Impact: The implementation of the Project could require sediment re-entrainment during the night. To ensure safe working conditions and proper
operation of equipment during the night time, floodlights would be used. Sensitive receptors within the line of sight of the flood lights during the nighttime construction activities could potentially be impacted from spill-over lighting impacts. The EIR/EIS would evaluate potential light and glare impacts associated with night time construction activities.

4.2 Agricultural Resources/Forest Resources

A. Would the project 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 California Resources Agency, to non-agricultural use?

Potential Significant impact: Within the study area are existing agriculture land uses which could be classified as Prime Farmland, Unique Farmland or Farmland of Statewide Importance. The EIR/EIS would determine the significance of the farmland and evaluate potential impacts that could occur from the implementation of the Project.

B. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Potential Significant Impact: Within the study area are existing agriculture land uses which could be classified as Prime Farmland, Unique Farmland or Farmland of Statewide Importance. The EIR/EIS would determine the significance of the farmland and evaluate potential impacts that could occur from the implementation of the project.

C. Would the project be in conflict with existing zoning for, or cause rezoning of forest land or timberland.

No Impact: The Riverside County General Plan designates the study area open space. The study area is not zoned for timberland production. The Project would not rezone the study area from open space to a different land use. This issue would not be evaluated in the EIR/EIS.

D. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Potential Significant Impact: According to the California Department of Forestry, the study area is not on State Forest Lands. The Project would not permanently convert forest land to non-forest land uses. Potential temporary impacts to riparian forest lands at Prado Basin would be evaluated in the EIR/EIS, as part of the evaluation of impacts to biological resources.
E. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?

**Potential Significant Impact:** The Project would not permanently convert forest land to non-forest land uses. Potential temporary impacts to riparian forest lands at Prado Basin would be evaluated in the EIR/EIS, as part of the evaluation of impacts to biological resources.

### 4.3 Air Quality

A. Would the project be in conflict with or obstruct implementation of the applicable air quality plan or congestion management plan?

**Potential Significant Impact:** The study area is located within the South Coast Air Basin (basin). The air pollution control agency for the basin is the South Coast Air Quality Management District (SCAQMD). The construction and operation of the Project could emit criteria air quality pollutant emissions that could exceed SCAQMD thresholds and could result in potentially significant air quality impacts that could potentially be in conflict with SCAQMD Air Quality Management Plan. This issue would be evaluated in the EIR/EIS.

B. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

**Potential Significant Impact:** The construction and operation of the Project could emit criteria air quality pollutant emissions that could exceed SCAQMD thresholds and could result in potentially significant regional and local air quality impacts. This issue would be evaluated in the EIR/EIS.

C. Would the project result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

**Potential Significant Impact:** The construction and operation of the Project could emit criteria air quality pollutant emissions that together with other cumulative projects in the study area could exceed SCAQMD thresholds and could result in potentially significant air quality impacts. This issue would be evaluated in the EIR.

D. Would the project expose sensitive receptors to substantial pollutant concentrations?

**Potential Significant Impact:** The construction and operation of the Project could emit criteria air quality pollutant emissions that could exceed SCAQMD thresholds and result
in potentially significant localized air quality impacts. This issue would be evaluated in the EIR/EIS.

E. Would the project create objectionable odors affecting a substantial number of people?

**Less than Significant Impact:** Land uses typically associated with odors include; wastewater treatment facilities, waste-disposal facilities, or agricultural operations. The Project does not contain land uses typically associated with emitting objectionable odors. Diesel exhaust would be emitted during construction of the Project, which could be objectionable to some individuals. However, the emissions would disperse rapidly from the study area and should not reach an objectionable level at the nearest sensitive receptors. Potential construction related odor impacts would be less than significant. This issue would not be evaluated in the EIR/EIS.

**4.4 Biological Resources**

A. Would the project have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies or regulations or by the California Department of Fish and Game or U.S. Fish and wildlife Services?

**Potential Significant Impact:** Based on review of the California Department of Fish and Wildlife Natural Diversity Database and the U.S. Department of Interior Information, Planning and Conservation System Database, there would be a high potential that special status wildlife species and plant species could occur within the study area. The EIR/EIS would evaluate if construction and operation of the Project would have the potential to result in adverse impacts to sensitive wildlife and plant species and their habitat.

B. Would the project have a substantial adverse impact on any riparian habitat or natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

**Potential Significant Impact:** Implementation of the Project would result in the loss of riparian habitat and coastal sage scrub habitat which are both considered a sensitive vegetation communities by California Department of Fish and Wildlife. The EIR/EIS would evaluate potential impacts to riparian habitat, coastal sage scrub habitat and other sensitive communities that could be impacted by the construction and operation of the Project.
C. Would the project have a substantially adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling hydrological interruption, or other means?

Potential Significant Impact: The construction and operation of the Project would have the potential to impact wetland Waters and non-wetland Waters of the United States and State of California. The EIR/EIS would evaluate potential impacts to wetland Waters and non-wetland waters of the United States and State of California.

D. Would the project 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 native wildlife nursery sites?

Potential Significant Impact: The Prado Basin and the tributaries in the Basin function as wildlife corridors. Additionally, Prado Basin contains a high migratory bird population. The EIR/EIS would evaluate potential wildlife corridor impacts and impacts to migratory birds associated with the construction and operation of the Project.

E. Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?

Potential Significant Impact: The EIR/EIS would evaluate if the Project would conflict with local policies and ordinances that provide for the protection of biological resources.

F. Would the project be in conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Potential Significant Impact: The study area is included within the Western Riverside County Multiple Species Habitat Conservation Plan and the Orange County Santa Ana Canyon Habitat Management Plan. The EIR/EIS would evaluate if the construction and operation of the Project would be in conflict with policies and programs provided in the Western Riverside County Multiple Species Habitat Conservation Plan and the Orange County Santa Ana Canyon Habitat Management Plan.

4.5 Cultural Resources

A. Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines?

Potential Significant Impact: The study area is known to contain sensitive historical resources. The EIR/EIS would evaluate the potential for the construction of the Project to result in adverse impacts to historical resources.

B. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines?
**Potential Significant Impact:** The study area is known to contain sensitive archeological resources. The EIR/EIS would evaluate if the Project would result in adverse impacts to archaeological resources.

**C. Would the project directly or indirectly disturb or destroy a unique paleontological resource or site?**

**Less than Significant Impact:** Based on paleontological overview of the Prado Basin prepared for the U.S. Army Corps of Engineers, the study area is immediately underlain by non-marine sedimentary deposits of Quaternary age. The area along the Santa Ana River is floored by unconsolidated stream alluvium of Holocene age (less than 10,000 years B.P.), which because of their geologically young age, are not considered to be fossiliferous and the paleontological sensitivity is considered low. However, there would be some potential that unknown paleontological resources could be present and encountered during earthwork activities. The potential for the discovery of unknown paleontological resources would be evaluated in the EIR/EIS.

**D. Would the project disturb any human remains including those interred outside of formal cemeteries?**

**Potential Significant Impact:** The study area is known to contain Native American cultural resources. The EIR/EIS would evaluate the potential for the construction of the Project to result in adverse impacts to Native American cultural resources.

**4.6 Geology/Soils**

**A1. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving rupture of an unknown earthquake fault, as delineated on the most Alququist-Priolo Earthquake Fault Zoning Map?**

**Potential Significant Impact:** According to the State of California Special Studies Zones Map Prado Dam Quadrangle, the Elsinore Fault Zone extends through Prado Basin and along the LSAR study areas. The EIR/EIS would evaluate potential fault rupture impacts and how they may affect the Project.

**A2. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking?**

**Potential Significant Impact:** The study area is located in a seismically active region that could be subject to seismic shaking impacts from earthquakes generated from several surrounding active faults in the region. The EIR/EIS would evaluate potential
seismic impacts and how they might impact the construction and operation of the Project.

A3. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving liquefaction?

**Potential Significant Impact:** The California Geologic Survey Seismic Hazard Zone Map for the Prado Dam Quadrangle indicates that the study area is located within a Liquefaction Hazard Zone. The EIR/EIS would evaluate potential liquefaction impacts and how they might impact the construction and operation of the Project.

A4. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving landslides?

**Less Than Significant Impact:** The California Geologic Survey Seismic Hazard Zone Map for the Prado Dam indicates that the study area is not located within a landslide hazard zone. The EIR/EIS would not evaluate potential landslide impacts.

B. Would the project result in substantial soil erosion or the loss of topsoil?

**Potential Significant Impact:** Construction activities associated with the Project could result in erosion impacts. The EIR/EIS would evaluate potential erosion impacts that might result from the construction of the Project.

C. Would the project 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?

**Liquefaction**

The EIR/EIS would evaluate potential liquefaction impacts and how they might impact the construction and operation of the Project.

**Seismically induced Settlement**

Settlement is characterized as a sinking of the ground surface relative to surrounding areas and could generally occur where deep alluvial soil deposits are present in valley and basin areas. Subsidence could potentially result in ground fractures that could cause damage to surface improvements. At the Prado Basin the estimated settlement would be approximately 12 to 30 inches. The Project does not propose any habitable or permanent structures that would be subject to seismically induced settlement impacts. The EIR/EIS would not evaluate seismically induced settlement impacts.
Landslides

The California Geologic Survey Seismic Hazard Zone Map for the Prado Dam indicates that the Prado Basin site is not located within a landslide hazard zone. The EIR/EIS would not evaluate potential landslide impacts.

D. Would the project be located on expansive soil, as defined in Table 18-1-B of the uniform Building Code, creating substantial risks to life or property?

Less than Significant Impact: The near surface soils within the study area are predominantly comprised of loose silty sands and sands with varying amounts of silt and clay. The sandy soils are typically non-expansive. However, the silty clay soil are typically moderately to highly expansive. The Project does not propose the construction of any foundations or structures that would be subject to expansive soil conditions. Potential risks associated with expansive soils would be less than significant. The EIR/EIS would not evaluate potential impacts from expansive soils.

E. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The Project does not propose the use of septic tanks or other alternative wastewater disposal systems. This issue would not be evaluated in the EIR/EIS.

4.7 Greenhouse Gas Emissions

A. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Potential Significant Impact: The construction and operation of the Project would generate greenhouse gas emissions. The EIR/EIS would evaluate potential impacts associated with greenhouse gas emissions and conflicts with relevant greenhouse gas planning programs.

B. Would the project be in conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Potential Significant Impact: The Orange County Water District and the South Coast Air Quality Management District both do not have an applicable plan, policy or regulation adopted to reduce the emissions of greenhouse gases. The State has prepared a draft scoping plan to reduce greenhouse gas emissions to 1990 levels by the year 2020. The EIR/EIS would evaluate the Project for consistency with the State scoping plan.
4.8 Hazards/Hazardous Materials

A. Would the project create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Less than Significant Impact: The operation of the Project would not involve the routine transportation, disposal or emission of hazardous materials or waste. The operation of the Project would involve the handling of incidental amounts of hazardous materials, such as fuels and oil. The Project would be required to comply with local, state and federal laws and regulations regarding the handling and storage of hazardous materials. Compliance with the required local, state and federal laws and regulations would reduce potential hazards associated with the handling of the incidental amounts of hazardous materials to a less than significant level. This issue would not be evaluated in the EIR/EIS.

B. Would the project create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact: The construction and operation of the Project would not create a substantial risk to release hazardous materials into the environment. Construction operations associated with the Project would involve the handling of incidental amounts of hazardous materials. The compliance with federal, state and local laws and regulations would reduce potential impacts associated with the handling of these incidental amounts of hazardous materials to a less than significant level. This issue would not be evaluated in the EIR/EIS.

C. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substance or waste within one-quarter mile of an existing or proposed school.

Less than Significant Impact: The operation of the Project would not emit hazardous emissions, or involve the handling of acutely hazardous substances within one quarter mile of a school. This issue would not be evaluated in the EIR/EIS.

D. Would the project be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and as a result, would create significant hazard to the public or the environment?

Potential Significant Impact: Historically, portions of the Prado Basin were used for oil and gas exploration. A total of 13 oil wells were drilled between 1965 and 1993. During this period, the wells were submerged numerous times and several oil spills were known to have occurred. There is some potential that hazards substances could be present in the areas where the former oil wells were located. Additionally, over the
years a high amount of incoming sediment has buildup in the Prado Basin and there could be the potential that the incoming sediment into Prado Basin could contain elevated levels of hazardous substances. The EIR/EIS would evaluate the potential for hazardous substances to present within the study area.

E. 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, would the project the result in a safety hazard for people residing or working within the project area?

F. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Potential Significant Impact: According to Riverside County General Plan Safety Element, the study area is located within the planning area for the Corona Airport. The EIR/EIS would evaluate aircraft related safety hazards associated with implementation of the Project.

G. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Potential Significant Impact: Implementation of the Project would occur within the reservoir area of Prado Dam. The EIR/EIS would evaluate potential flood risks and if the Project would interfere with emergency evacuation plans or emergency responses to the study area.

H. Would the project expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?

Potential Significant Impact: The Riverside County General Plan identifies that the Prado Basin has a moderate potential for wild land fire susceptibility. The EIR/EIS would evaluate potential wild land fire risks.

4.9 Hydrology/Water Quality

A. Would the project violate Regional Water Quality Control Board Water Quality standards or waste discharge standards?

Potential Significant Impact: The EIR/EIS would evaluate potential water quality impacts associated with the construction and operation of the Project, as well as compliance with regulations and standards provided in the Santa Ana Region Regional Water Quality Control Board Basin Plan.
B. Would the project 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?

**Potential Significant Impact:** The Project would not involve any activities that would involve the extraction of groundwater. The EIR/EIS would not evaluate potential impacts the Project could have on groundwater supplies within the study area.

C. Would the project 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?

**Potential Significant Impact:** The Project involves the removal of sediment from the Prado Basin and the re-entrainment of the sediment back into the Santa Ana River. The EIR/EIS would evaluate potential erosion and sedimentation impacts within the Prado Basin and along the Santa Ana River.

D. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite?

**Potential Significant Impact:** The Project would be implemented within the reservoir area of Prado Dam. The EIR/EIS would evaluate potential impacts to the flood risk capacity of Prado Dam and along the Santa Ana River associated with the construction and operation of the Project. Additionally, the EIR/EIS would evaluate potential project conflicts with the operation of Prado Dam.

E. Would the project create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

**Potential Significant Impact:** The Project involves the construction of impervious that could increase existing rates of surface water runoff within the study area. Additionally, the construction activities for the Project could generate degraded surface water impacts. The EIR/EIS would evaluate the potential for increased surface water runoff impacts and reduced water quality impacts.

F. Would the project otherwise degrade water quality?

**Potential Significant Impact:** The construction and operation of the Project could have the potential to increase turbidity in the Santa Ana River and could result in adverse water quality impacts. The EIR/EIS would evaluate potential water quality impacts associated with implementation of the Project.
G. Would the project place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood insurance Rate map or other flood hazard delineation map?

Potential Significant Impact: The EIR/EIS would evaluate potential impacts to the flood risk capacity of the dam and potential flood impacts to residential areas located downstream of the project area.

H. Would the project place within a 100-year floodplain structures which impedes or redirect flows?

Potential Significant Impact: The EIR/EIS would evaluate potential impacts to the flood control capacity of the dam and to the flood control capacity of the Santa Ana River.

I. Would the project 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 dam?

Potential Significant Impact: The Project would be implemented in the reservoir area of Prado Dam. The EIR/EIS would evaluate potential flood risks associated with the construction and operation of the Project in the reservoir.

J. Could the project site be inundated by seiche, tsunami, or mudflow?

Less than Significant impact: The potential for the study area to be inundated by a seiche, tsunami or mudflow is very low. The implementation of the Project would not increase the risk for these impacts. This issue would not be evaluated in the EIR/EIS.

4.10 Land Use/Planning

A. Would the project physically divide an established community?

Potential Significant Impact: The Project would have the potential to impact existing land uses within the study area. The EIR/EIS would evaluate the potential for the Project to impact existing land uses.

B. Would the project be in conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?

Potential Significant Impact: The Project would be located in area that is included in the planning areas of several different local, state and federal agencies. The EIR/EIS would evaluate potential conflicts with relevant planning programs, policies and regulations that apply to the study area.
C. Would the project be in conflict with any applicable habitat conservation plan or natural community conservation plan?

**Potential Significant Impact:** The study site is included within the Western Riverside County Multiple Species Habitat Management Plan and the Orange County Santa Ana Canyon Habitat Management Plan. The EIR/EIS would evaluate if the Project would be in conflict with policies and programs provided in the Western Riverside County Multiple Species Habitat Management Plan and the Orange County Santa Ana Canyon Habitat Management Plan.

### 4.11 Mineral Resources

A. Would the project 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?

**Less Than Significant Impact:** According to the County of Riverside General Plan, Prado Basin is designated MRZ-3, areas where the available geologic information indicates that mineral deposits are likely to exist. However, because of the high amount of sediment build up in the basin it is unlikely any important mineral resources would be encountered. This issue would not be evaluated in the EIR/EIS.

### 4.12 Noise

A. Would the project expose persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

**Potential Significant Impact:** The construction and operation of the Project would result in temporary noise impacts. The EIR/EIS would evaluate potential temporary noise impacts on sensitive receptors and compliance with local noise standards and policies.

B. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

**No Impact:** The Project would not generate long term noise impacts. The EIR/EIS would not evaluate long term operational noise impacts generated by the Project.

C. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

**Potential Significant Impact:** The EIR/EIS would evaluate temporary noise impacts to sensitive receptors impacted by the Project.
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D. 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, would the project expose people residing or working in the project area to excessive noise levels?

E. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Less than Significant Impact: According to the County of Riverside General Plan, the study area would be impacted with elevated noise levels from the Corona Municipal Airport. The Project does not involve the construction of any sensitive land uses that would be significantly impacted by aircraft noise. This issue would not be evaluated in the EIR/EIS.

F. Would the project expose persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact: The construction and operation of the Project would involve the use of heavy equipment which might cause localized vibration impacts. The study area does not contain any structures that could be adversely affected from heavy equipment vibration impacts. The EIR/EIS would not evaluate potential vibration impacts associated with the construction and operation of the Project.

4.13 Population/Housing

A. Would the project induce substantial population growth in an area, either directly or indirectly?

No Impact: The Project would not involve the extension of new infrastructure into existing undeveloped areas that would not induce new population growth into the study area. This issue would not be evaluated in the EIR/EIS. As part of the EIR/EIS, potential environmental justice impacts would be evaluated.

B. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

C. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact: The Project would not displace existing housing or people and would not necessitate the need for replacement housing. This issue would not be evaluated in the EIR/EIS.

4.14 Public Services

A. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for
new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection police protection, schools, parks or other public facilities.

**No Impact:** The implementation of the Project would not generate any long term demands for additional public services beyond the current levels of demand within the study area or increase emergency response times to the study area. This issue would not be evaluated in the EIR/EIS.

4.15 Recreation

A. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

**Potential Significant Impact:** The Project proposes new recreation trails within the Prado Basin. The proposed trails could increase recreation usage in the Prado Basin including increase usage of existing trial and recreations facilities. The EIR/EIS would evaluate potential impacts to existing recreation facilities associated with the operation of the Project.

B. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

**Potential Significant Impact:** The Project proposes the construction of recreation trails. The EIR/EIS would evaluate potential impacts associated with the construction and operation of the proposed recreation trails.

4.16 Transportation/Traffic

A. Would the project be in 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, pedestrians and bicycle paths and mass transit?

**Potential Significant Impact:** The Project would not generate long-term traffic trips. The construction activities for the Project would export a substantial amount of sediment material, would generate off-site construction related traffic trips associated with the mobilization and demobilization of construction equipment, hauling of green waste, and daily worker traffic. The EIR/EIS would evaluate construction traffic impacts generated by the Project.
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B. Would the project be in 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’s congestion management agency for designated roads or highways?

**Potential Significant Impact:** The Project would not generate long-term traffic trips. The project would generate construction related traffic trips associated with the mobilization and demobilization of construction equipment, hauling of green waste, and worker traffic. The EIR/EIS would evaluate construction traffic impacts generated by the Project.

C. Would the project 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?

**No Impact.** Implementation of the Project would not increase the level of air traffic within the regional area. The Project does not include any component that would encroach into navigable air space causing a change to air traffic patterns. This issue would not be evaluated in the EIR/EIS.

D. Would the project increase hazards to a design feature or incompatible uses or equipment?

**Less than Significant Impact:** The Project would require the mobilization and demobilization of large pieces of construction equipment. The EIR/EIS would evaluate construction traffic impacts generated by the Project.

E. Would the project result in inadequate emergency access?

**Less than Significant Impact:** The Project would not cause any road way closures that would inhibit emergency access into the study area. As part of the Project, emergency access would be maintained at all times. This issue would not be evaluated in the EIR/EIS.

F. Would the project be in conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities?

**Less than Significant Impact:** The Project would be implemented within the Prado Basin. The Project would have less than significant impacts on public transit systems within the study area. This issue would not be evaluated in the EIR/EIS.

4.17 Utilities/Service Systems

A. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
No Impact: Implementation of the Project would not generate new wastewater flows. Therefore, implementation of the Project would not exceed any treatment requirements established by the Regional Water Quality Control Board. This issue would not be evaluated in the EIR/EIS.

B. Would the project 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?

No Impact: The Project would not involve construction of new water facilities, new wastewater treatment facilities or the expansion of existing wastewater treatment facilities. Therefore, implementation of the Project would not result in significant environmental impacts in regards to the construction of new water or wastewater treatment facilities or the expansion of existing facilities. This issue would not be evaluated in the EIR/EIS.

C. Would the project 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?

No Impact: The Project would not require the construction of any new drainage facilities or require the expansion of any existing drainage facilities. Therefore, implementation of the Project would not result in significant environmental impacts in regards to the construction of new storm drain facilities or the expansion of existing storm drain facilities. This issue would not be evaluated in the EIR/EIS.

D. Are sufficient water supplies available to serve the project from existing entitlements and resources or new or expanded entitlements needed?

No Impact: The Project would remove sediment from the Prado Basin and re-entrain it back into the Santa Ana River. The Project would utilize existing flows of the Santa Ana River to re-entrain the sediment. The implementation of the Project would not require new water supplies. This issue would not be evaluated in the EIR/EIS.

E. Would the project result in the determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the providers existing commitments.

No Impact. The construction and operation of the Project would not generate any wastewater treatment demands or involve the operation of any facilities that involve treated wastewater. Therefore, the implementation of the Project would not have any adverse impact on the capacity of wastewater treatment providers to the area. This issue would not be evaluated in the EIR/EIS.
F. Is the project served by a landfill with sufficient permitted capacity to accommodate the project solid waste disposal need?

Less than Significant Impact: Implementation of the Project would not generate long term demands for solid waste disposal, beyond the exiting level of demands. This issue would not be evaluated in the EIR/EIS.

G. Would the project comply with federal, state and local statutes and regulations related to solid waste?

Less than Significant Impact: The Project would not involve any activities that would be conflict with federal, state and local statutes and regulations related to solid waste disposal. This issue would not be evaluated in the EIR/EIS.

MANDATORY FINDINGS OF SIGNIFICANCE

A. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

Potentially Significant Impact: The study area is known to contain special status plant and wildlife species, sensitive vegetation communities and sensitive cultural resources. The EIR/EIS would evaluate the potential for special status species and sensitive cultural resources to occur within the study area and the potential for the construction and operation of the Project to adversely impact them.

B. Does the project have impacts that are individually limited but cumulatively considerable?

Potentially Significant Impact: The construction and operation of the Project could generate air quality emissions that could result in significant cumulative air quality impacts. The EIR/EIS would evaluate potential cumulative air quality impacts and other potential cumulative impacts that might be associated with the construction and operation of the Project.

C. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact: The Project has the potential to result in significant impacts in regards to air quality, water quality and noise which could have adverse impacts on human beings. The EIR/EIS would evaluate the potential for impacts to the environment to result in adverse effects to human beings.
SECTION 5.0 REFERENCES

California Department Fish and Game Natural Diversity Database, Accessed April 2016.

California Department of Transportation (Caltrans). Scenic Highways Program Web Site Access, April 2016.


California Environmental Quality Act, State CEQA Guidelines, 2016

California Geologic Survey Seismic Hazard Zone Map Prado Dam Quadrangles, Accessed April 2016.

California Native Plant Society Inventory of Rare and Endangered Plants Database, Accessed April 2016.

City of Corona General Plan, 2016


County Riverside General Plan Web Site Access April 2016.

County of Riverside Noise Ordinance, 2016
