# Appendix J Mitigation Monitoring and Reporting Program

#### Introduction<sup>1</sup>

Public Resources Code Section §21081.6(a)(1)) and the California Environmental Quality Act (CEQA) Guidelines Section 15097 require public or lead agencies to establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of either a mitigated negative declaration or specified environmental findings related to environmental impact reports.

A public or lead agency adopting measures to mitigate or avoid the significant impacts of a proposed project is required to ensure that the measures are fully enforceable, through permit conditions, agreements, or other means (Public Resources Code Section 21081.6(b)). The mitigation measures required by a public or lead agency to reduce or avoid significant project impacts may be incorporated into the design or program for the project, or made conditions of project approval as set forth in a Mitigation Monitoring and Reporting Program (MMRP). The program must be designed to ensure project compliance with mitigation measures during project implementation.

The following is the MMRP for the State Water Resources Control Board (State Water Board) Order for Clean Water Act Section 401 Water Quality Certification and Waste Discharge Requirements for Restoration Projects Statewide (Order). The MMRP includes the mitigation measures identified in the Consolidated Final Program Environmental Impact Report (PEIR) that are required to address the significant impacts associated with the Order.

Restoration projects authorized under the Order must comply with applicable general protection measures, species protection measures, and mitigation measures listed in the impact section for each resource area. The State Water Board or Regional Water Quality Control Board's (Regional Board) will include applicable measures as conditions of the Notice of Applicability (NOA) issued for an individual project under the Order. The applicability of the general protection measures, species protection measures, and mitigation measures would depend on the restoration activities, project location, and the potentially significant impacts of the individual restoration project.

The required mitigation measures are summarized in Table 1-1; the full text of the impact analysis and mitigation measures are presented in Chapter 3 of the Consolidated Final PEIR.

#### Format of the MMRP

The MMRP is organized in a table format (Table 1-1) by resource. The column headings in the table are defined as follows:

- **Resource:** This column identifies the impacted resource.
- **Mitigation Measures:** This column identifies the mitigation measures associated with the impacts identified in the PEIR.

<sup>&</sup>lt;sup>1</sup> This Appendix is entirely new and was not included in the Draft EIR. However, double underline is not used to denote the entire appendix for ease of reading.

- **Monitoring Responsibility:** This column provides a reporting area for assignment of responsibility of each monitoring and reporting task (for future individual restoration projects).
- **Monitoring Compliance Record (Name/Day):** This column provides a reporting area for identifying who completed the mitigation measure and/or monitoring compliance and the date of completion (for future individual restoration projects).

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Aesthetics	<ul> <li>Mitigation Measure AES-1: Minimize Degradation of Visual Quality</li> <li>Use compatible colors for proposed structural features, such as fish screens and storage tanks. Use earth tone paints and stains with low levels of reflectivity.</li> <li>Minimize the vertical profile of proposed structures as much as possible.</li> <li>Use vegetation plantings on proposed facility walls, such as climbing plants, espaliers, and other forms that soften the appearance of structures.</li> <li>Provide vegetative screening to soften views of structures. Landscaping should complement the surrounding landscape.</li> </ul>		
	<b>Mitigation Measure AES-2: Avoid Effects of Project Lighting</b> Proposed lighting facilities shall use shields, and lighting shall be directed downward and inward toward the facilities.		
Agriculture and Forestry	<ul> <li>Mitigation Measure AG-1: Minimize and Avoid Loss of Special Designation Farmland</li> <li>The following measures shall be implemented before and during construction of restoration projects permitted under the Order to minimize and avoid loss of Special Designation Farmland, as applicable.</li> <li>Restoration projects shall be designed to minimize, to the greatest extent feasible, the loss of agricultural land with the highest values.</li> <li>Restoration projects that will result in permanent conversion of Special Designated Farmland shall preserve other Special Designation Farmland in perpetuity by acquiring an agricultural conservation easement, or by contributing funds to a land trust or other entity qualified to preserve Special Designation Farmland in perpetuity (at a target ratio of 1:1, depending on the nature of the conversion and the characteristics of the Special Designated Farmland to be</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Agriculture and Forestry (cont.)	<ul> <li>converted, to compensate for the permanent loss). Based upon the cost and availability of farmland, whether the landowner is sponsoring the project, and other factors, the CEQA lead agency for the individual restoration project should consider whether a 1:1 ratio is appropriate and feasible on a case-by-case basis. For example, contributions to a program such as the California Farmland Conservancy Program, which establishes conservation easements to preserve existing farmland in California, may be prohibitively expensive at a 1:1 ratio where there is a significant amount of affected Special Designated Farmland because it is based on a farm real estate average value per acre. For example, the farm real estate average value per acre in 2019 was \$10,000 [USDA 2019].</li> <li>Restoration project features shall be designed to minimize fragmentation or isolation of Special Designation Farmland. Where a project involves acquiring land or easements, the remaining nonproject area shall be of a size sufficient to allow viable farming operations. The project proponents shall be responsible for acquiring easements, making lot line adjustments, and merging affected land parcels into units suitable for continued commercial agricultural management.</li> <li>Any utility or infrastructure serving agricultural uses shall be reconnected if it is disturbed by project construction. If a project temporarily or permanently cuts off roadway access or removes utility lines, irrigation features, or other infrastructure, the project proponents shall be responsible for restoring access as necessary to ensure that economically viable farming operations are not interrupted.</li> <li>Where applicable to a project site, buffer areas shall be established between restoration projects and adjacent agricultural land. The buffers shall be sufficient to protect and maintain land capability and flexibility of ongoing agricultural</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Agriculture and Forestry (cont.)	operations and reduce the effects of construction-related or operational activities (including the potential to introduce special-status species in the agricultural areas) on adjacent or nearby properties. Buffers shall also serve to protect restoration areas from noise, dust, and the application of agricultural chemicals. The width of each buffer shall be determined on a project-by-project basis to account for variations in prevailing winds, crop types, agricultural practices, ecological restoration, or infrastructure. Buffers can function as drainage swales, trails, roads, linear parkways, or other uses compatible with ongoing agricultural operations.		
	Mitigation Measure AG-2: Minimize Impacts on Lands Protected by Agricultural Zoning or Williamson Act Contract Restoration projects shall be designed to minimize, to the greatest extent feasible, conflicts and inconsistencies with land protected by agricultural zoning or a Williamson Act contract and the terms of the applicable zoning/contract.		
	Mitigation Measure GEO-6: Implement Measures for Waterway Construction Activities See Section 3.9.4, Impacts and Mitigation Measures, in Section 3.9, Geology and Soils.		
Air Quality	<ul> <li>Mitigation Measure AIR-1: Minimize Conflicts with Applicable Air Quality Plans         Proponents of restoration projects permitted under the Order and their construction             contractors shall implement the following measures to minimize conflicts between             project construction and applicable air quality plans:         <ul> <li>Use equipment and vehicles that comply with CARB requirements and emission             standards for on-road and off-road fleets and engines. New engines and retrofit             control systems should reduce NOX and PM emissions from diesel-fueled on-             road and off-road vehicles and equipment.</li> </ul> </li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Air Quality (cont.)	<ul> <li>Minimize idling times, either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure, Title 13, Section 2485 of the California Code of Regulations). Clear signage should be posted for construction workers at all entrances to the site.</li> <li>Maintain all equipment in proper working condition according to the manufacturer's specifications.</li> <li>Use electric equipment when possible. Use lower emitting alternative fuels to power vehicles and equipment where feasible.</li> <li>Use low–volatile organic compound (VOC) coatings and chemicals; minimize chemical use.</li> </ul>		
	<ul> <li>Mitigation Measure AIR-2: Minimize Construction Air Pollutant Emissions</li> <li>Air quality analyses prepared for future restoration projects shall evaluate human health risks from potential exposures of sensitive receptors to substantial pollutant concentrations from the projects. The need for a human health risk analysis should be evaluated using approved screening tools, and discussed with the local air quality management district or air pollution control district during the preparation of the air quality analysis.</li> <li>If the project's health risk is determined to be significant, control measures should be implemented to reduce health risks to levels below the applicable air district threshold.</li> <li>Implementation of one or more of the following requirements, where feasible and appropriate, would reduce the effects of construction:</li> <li>Use equipment with diesel engines designed or retrofitted to minimize DPM emissions, usually through the use of catalytic particulate filters in the exhaust.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Air Quality (cont.)	<ul> <li>Use electric equipment to eliminate local combustion emissions.</li> <li>Use alternative fuels, such as compressed natural gas or liquefied natural gas. If the restoration project would result in significant emissions of airborne, naturally occurring asbestos, or metals from excavation, hauling, blasting, tunneling, placement, or other handling of rocks or soil, a dust mitigation and air monitoring plan shall identify individual restoration project measures to minimize emissions and ensure that airborne concentrations of the TACs of concern do not exceed regulatory or risk-based trigger levels.</li> </ul>		
	<ul> <li>Mitigation Measure AIR-3: Minimize GHG Emissions</li> <li>Restoration projects permitted under the Order shall implement the GHG mitigation measures listed in the most recent air district guidance documents (e.g., CAPCOA 2010; BAAQMD 2011), as appropriate for the project site and conditions. Current versions of such guidance documents list the following for construction of projects:</li> <li>Use alternative fuels for construction equipment.</li> <li>Use electric and hybrid construction equipment.</li> <li>Limit construction equipment idling beyond regulatory requirements.</li> <li>Institute a heavy-duty off-road vehicle plan.</li> <li>Implement a construction vehicle inventory tracking system.</li> <li>Use local building materials for at least 10 percent of total materials.</li> <li>Recycle or reuse at least 50 percent of construction waste or demolition materials.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Air Quality (cont.)	<ul> <li>In addition, the California Attorney General's Office has developed a list of measures and strategies to reduce GHG emissions at the individual project level. As appropriate, the measures can be included as design features of a restoration project, required as changes to the project, or imposed as mitigation (whether undertaken directly by the project proponent or funded by mitigation fees). The measures are examples; the list is not intended to be exhaustive. The following are best management practices to consider and implement (as applicable) during design, construction, and O&amp;M of project facilities.</li> <li><i>Transportation and Motor Vehicles</i></li> <li>Limit idling time for commercial vehicles, including delivery and construction vehicles.</li> <li>Use low- or zero-emission vehicles, including construction vehicles.</li> <li>Institute a heavy-duty off-road vehicle plan and a construction vehicle inventory tracking system for construction projects.</li> <li>Prowide the necessary facilities and infrastructure to encourage the use of low- or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).</li> <li>Provide a shuttle service to public transit/work sites.</li> <li>Provide information on all options for individuals and businesses to reduce transportation-related emissions.</li> </ul>		

Table 1-1Summary of Mitigation Measures (PEIR Chapter 3)

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Air Quality (cont.)	SmartWay Truck Efficiency This strategy involves requiring existing trucks/trailers to be retrofitted with the best available "SmartWay Transport" and/or CARB-approved technology. Technologies that reduce GHG emissions from trucks include devices that reduce aerodynamic drag and rolling resistance. Aerodynamic drag may be reduced using devices such as cab roof fairings, cab side gap fairings, cab side skirts, and on the trailer side, skirts, gap fairings, and trailer tail. Rolling resistance can be reduced using single wide tires or low-rolling resistance tires and automatic tire inflation systems on both the tractor and the trailer.		
	<i>Tire Inflation Program</i> The strategy involves actions to ensure that vehicle tire pressure is maintained to manufacturer specifications.		
	Blended Cements The strategy to reduce CO <sub>2</sub> emissions involves the addition of blending materials such as limestone, fly ash, natural pozzolan, and/or slag to replace some of the clinker in the production of Portland cement.		
	Anti-Idling Enforcement The strategy guarantees emissions reductions as claimed by increasing compliance with anti-idling rules, thereby reducing the amount of fuel burned through unnecessary idling. Measures include enhanced field enforcement of anti-idling regulations, increased penalties for violations of anti-idling regulations, and restriction on registrations of heavy-duty diesel vehicles with uncorrected idling violations.		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Biological - Terrestrial	Mitigation Measure TERR-1: Coordinate with CDFW, USFWS, and Permittees Regarding HCPs, NCCPs, and Other Conservation Plans If the site for a restoration project permitted under the Order is within the planning area for any adopted HCP, NCCP, or similar conservation plan, the CEQA lead agency for the project shall consult with the plan permittee(s), CDFW and/or USFWS, as applicable, to identify any potential conflicts with the plan's goals, objectives, or conservation measures. As part of this consultation, the CEQA lead agency shall seek input regarding potential design features, conservation measures, or other mitigation strategies to avoid potential conflicts and achieve substantial conformance with the objectives of the HCP, NCCP, or similar conservation plan. The CEQA lead agency shall implement these elements as applicable to ensure that the restoration project conforms to applicable goals and policies set forth in the adopted conservation plan.		
Cultural	<ul> <li>Mitigation Measure CUL-1: Conduct Inventory and Significance Evaluation of Architectural Resources</li> <li>Before implementation of any project permitted under the Order, the need for an inventory and significance evaluation of architectural resources in the project area shall be assessed, and, if necessary based upon the type of restoration activity conducted and potential for built features to be present or disturbed. The assessment should consist of a review of maps and aerial photos to see if existing buildings dams, levees, roads, or other built features are in the CEQA project area. If so, and the age of these features is either unknown or is known to be older than 45 years old, then an inventory and evaluation should be completed by, or under the direct supervision of, a qualified architectural historian, defined as one who meets the U.S. Secretary of the Interior's Professional Qualifications Standards for Historical History or History. This inventory and evaluation shall include the following:</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Cultural (cont.)	<ul> <li>Map(s) and verbal description of the project CEQA Area of Potential Effects (C-APE) for cultural resources that delineates both the horizontal and vertical extents of where a project could result in impacts, including both direct and indirect, on cultural resources.</li> </ul>		
	<ul> <li>A records search at the appropriate repository of the California Historical Resources Information System for the C-APE and vicinity (typically areas within 0.25 or 0.5 mile, based on setting) to acquire records on previously recorded cultural resources in the C-APE and vicinity and previous cultural resources studies conducted for the C-APE and vicinity.</li> </ul>		
	<ul> <li>Background research on the history of the C-APE and vicinity for all projects determined to need additional historical architecture assessment.</li> </ul>		
	• If, after review, features of the built environment are determined to be less than 45 years old, a summary statement of their age and references for this determination will be included in the project area description. No further analysis is necessary.		
	• If historic-era built resources are determined to likely be present, an architectural field survey of the C-APE, unless previous architectural field surveys no more than two years old have been conducted for the C-APE, in which case a new field survey is not necessary. Any architectural resources identified in the C-APE during the survey shall be recorded on the appropriate California Department of Parks and Recreation 523 forms (i.e., site record forms).		
	• An evaluation of any architectural resources identified in the C-APE for California Register eligibility (i.e., whether they qualify as historical resources, as defined in State CEQA Guidelines Section 15064.5).		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Cultural (cont.)	<ul> <li>An assessment of potential project impacts on any historical resources identified in the C-APE. This should include an analysis of whether the project's potential impacts on the historical resource would be consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties and applicable guidelines.</li> <li>A technical report meeting U.S. Secretary of the Interior's Standards for architectural history technical reporting This report will document the mitigation measures taken and any study results, and following CEQA lead agency review and approval, completes the requirements of this mitigation measure.</li> <li>If potentially significant impacts on historical resources are identified, an approach for reducing such impacts shall be developed before project implementation and in coordination with interested parties (e.g., historical societies, local communities).</li> <li>Typical measures for reducing impacts on historical resources.</li> <li>Documentation of historical resources, to the standards of and to be included in the Historic American Building Survey, Historic American Engineering Record, or Historic American Landscapes Survey, as appropriate. As described in the above standards, the documentation shall be conducted by a qualified architectural historian, defined above, and shall include large-format photography, measured drawings, written architectural descriptions, and historical narratives. The completed documentation shall be submitted to the U.S. Library of Congress.</li> <li>Relocation of historical resources in conformance with the U.S. Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.</li> <li>Monitoring construction-related and operational vibrations at historical resources.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Cultural (cont.)	<ul> <li>For historical resources that are landscapes, preservation of the landscape's historic form, features, and details that have evolved over time, in conformance with the U.S. Secretary of the Interior's Guidance for the Treatment of Cultural Landscapes.</li> <li>Development and implementation of interpretive programs or displays, and community outreach.</li> </ul>		
	<ul> <li>Mitigation Measure CUL-2: Conduct Inventory and Significance Evaluation of Archaeological Resources</li> <li>Before implementation of any project permitted under the Order that includes ground disturbance, an archaeological records search and sensitivity assessment, inventory and significance evaluation of archaeological resources identified in the C-APE shall be conducted. The inventory and evaluation should be done by or under the direct supervision of a qualified archaeologist, defined as one who meets the U.S.</li> <li>Secretary of the Interior's Professional Qualifications Standards for Archeology, and shall include the following:</li> <li>Map(s) and verbal description of the project C-APE for cultural resources that delineates both the horizontal and vertical extents of where a project could result in impacts, including both direct and indirect, on cultural resources.</li> </ul>		
	• A records search at the appropriate repository of the California Historical Resources Information System (CHRIS) for the C-APE and vicinity (typically areas within 0.25 or 0.5 mile, based on setting) to acquire records on previously recorded cultural resources in the C-APE and vicinity and previous cultural resources studies conducted for the C-APE and vicinity. This task can be performed by either the qualified archaeologist or the appropriate local CHRIS center staff.		

Table 1-1Summary of Mitigation Measures (PEIR Chapter 3)

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Cultural (cont.)	<ul> <li>Outreach to the California Native American Heritage Commission, including a request of a search of the Sacred Lands File for the C-APE, to determine if any documented Native American sacred sites could be affected by the project.</li> <li>Consultation with California Native American Tribes pursuant to PRC Section 21080.3 to determine whether any indigenous archaeological resource or tribal cultural resources could be affected by the project. Project proponents shall submit a Sacred Lands File &amp; Native American Contacts List Request to the Native American Heritage Commission (NAHC) at the initial stages of project development (or as early as practicable) to determine if a project would have an impact on Native American cultural resources. The project proponent shall coordinate with the approving Water Board or other CEQA lead agency, if applicable, as soon as possible whenever tribes that are traditionally and culturally affiliated to a project area are identified. Any tribe identified by the NAHC will require notification of the proposed project by the lead agency as soon as practicable during early design. Tribes will be consulted if a request is received after initial notification. Construction of the project will not commence until the approving Water Board or other CEQA lead agency and any other tribal concern. Construction of the project will not commence with the California Environmental Protection Agency Tribal Consultation Protocol (April 2018).</li> <li>If the C-APE is in or adjacent to navigable waterways, outreach to the California State Lands Commission to request a search of their Shipwrecks Database, to determine whether any submerged archaeological resources may be present in the C-APE.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Cultural (cont.)	<ul> <li>Background research on the history, including ethnography and indigenous presence, of the C-APE and vicinity.</li> <li>An archaeological sensitivity analysis of the C-APE based on mapped geologic formations and soils, previously recorded archaeological resources, previous archaeological studies, and Native American consultation.</li> <li>If an archaeological study is not warranted based on the above review, a summary of the assessment and justification of the determination will be prepared. If the CEQA lead agency agrees with the determination, no further study is needed.</li> <li>If a study is warranted, as a result of these archival studies and consultations, an archaeological field survey of the C-APE will be conducted. The field survey shall include, at a minimum, a pedestrian survey. If the archaeological sensitivity analysis suggests a high potential for buried archaeological resources in the C-APE, a subsurface survey shall also be conducted. If previous archaeological field surveys no more than two years old have been conducted for the C-APE, a new field survey is not necessary, unless their field methods do not conform to those required above (e.g., no subsurface survey was conducted but C-APE has high potential for buried archaeological resources identified in the C-APE during the survey shall be recorded on the appropriate California Department of Parks and Recreation 523 forms (i.e., site record forms).</li> <li>An evaluation of any archaeological resources identified in the C-APE for California Register eligibility (i.e., as qualifying as historical resources, as defined in State CEQA Guidelines Section 15064.5) as well as whether they qualify as unique archaeological resources, pursuant to PRC Section 21083.2. Such evaluation may require archaeological testing (excavation), potentially including laboratory analysis, and consultation with relevant Native American representatives (for indigenous resources).</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Cultural (cont.)	<ul> <li>An assessment of potential project impacts on any archaeological resources identified in the C-APE that qualify as historical resources (per State CEQA Guidelines Section 15064.5) and/or unique archaeological resources (per PRC Section 21083.2). This shall include an analysis of whether the project's potential impacts would materially alter a resource's physical characteristics that convey its historical significance and that justify its inclusion (or eligibility for inclusion) in the California Register or a qualified local register.</li> <li>A technical report meeting U.S. Secretary of the Interior's Standards for archaeological technical reporting. This report will document the mitigation measures taken and any study results, and, following CEQA lead agency review and approval, completes the requirements of this mitigation measure.</li> <li>If potentially significant impacts on archaeological resources that qualify as historical resources (per State CEQA Guidelines Section 15064.5) and/or unique archaeological resources (per PRC Section 21083.2) are identified, develop, before project implementation and in coordination with interested or consulting parties (e.g., Native American representatives [for indigenous resources], historical societies [for historic-rea resources], local communities) an approach for reducing such impacts. If any such resources are on or in the tide and submerged lands of California, this process shall also include coordination with the California State Lands Commission. Typical measures for reducing impacts include:</li> <li>Modify the project to avoid impacts on resources.</li> <li>Plan parks, green space, or other open space to incorporate the resources.</li> <li>Develop and implement a detailed archaeological resources management plan to recover the scientifically consequential information from archaeological resources before any excavation at the resource's location. Treatment for most</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Cultural (cont.)	<ul> <li>archaeological resources consists of (but is not necessarily limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the resource to be affected by the project.</li> <li>Develop and implement interpretive programs or displays, and conduct community outreach.</li> </ul>		
	Mitigation Measure CUL-3: Implement Measures to Protect Archaeological Resources during Project Construction or Operation If archaeological resources are encountered during project construction or operation of any project permitted under the Order, all activity within 100 feet of the find shall cease and the find shall be flagged for avoidance. The lead agency and a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology, shall be immediately informed of the discovery. The qualified archaeologist shall inspect the discovery and notify the lead agency of their initial assessment. If the qualified archaeologist determines that the resource is or is potentially indigenous in origin, the lead agency shall consult with culturally affiliated California Native American Tribes to assess the find and determine whether it is potentially a tribal cultural resource. If the lead agency determines, based on recommendations from the qualified archaeologist and culturally affiliated California Native American Tribes, that the resource is indigenous, that the resource may qualify as a historical resource (per State CEQA Guidelines Section 15064.5), unique archaeological resource (per PRC Section 21083.2), or tribal cultural resource (per PRC Section 21074), then the resource shall be avoided if feasible. If avoidance of an identified indigenous		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Cultural (cont.)	<ul> <li>culturally affiliated California Native American Tribes, and other appropriate interested parties to determine treatment measures to minimize or mitigate any potential impacts on the resource pursuant to PRC Section 21083.2 and State CEQA Guidelines Section 15126.4. If any such resources are on or in the tide and submerged lands of California, this process shall also include coordination with the California State Lands Commission. Once treatment measures have been determined, the lead agency shall prepare and implement an archaeological (and/or tribal cultural) resources management plan that outlines the treatment measures for the resource. Treatment measures typically consist of the following steps:</li> <li>Determine whether the resource qualifies as a historical resource (per State CEQA Guidelines Section 15064.5), unique archaeological resource (per PRC Section 21083.2), or tribal cultural resource (per PRC Section 21074) through analysis that could include additional historical or ethnographic research, evaluative testing (excavation), or laboratory analysis.</li> <li>If it qualifies as a historical resource (per PRC Section 21083.2), implement measures for avoiding or reducing impacts such as the following:</li> <li>Modify the project to avoid impacts on resources.</li> <li>Plan parks, green space, or other open space to incorporate resources.</li> <li>Recover the scientifically consequential information from the archaeological resource before any excavation at the resource's location. This typically consists of (but is not necessarily limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the resource to be affected by the project.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Cultural (cont.)	<ul> <li>Develop and implement interpretive programs or displays.</li> <li>If it qualifies as a tribal cultural resource (per PRC Section 21074) implement measures for avoiding or reducing impacts such as the following:</li> <li>Avoid and preserve the resource in place through measures that include but are not limited to the following: <ul> <li>Plan and construct the project to avoid the resource and protect the cultural and natural context.</li> <li>Plan greenspace, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria.</li> </ul> </li> <li>Treat the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, through measures that include but are not limited to the following: <ul> <li>Protect the cultural character and integrity of the resource.</li> <li>Protect the confidentiality of the resource.</li> </ul> </li> <li>Implement permanent conservation easements or other interests in real property, with cultural appropriate management criteria for the purposes of preserving or using the resource or place.</li> </ul>		
	Mitigation Measure CUL-4: Implement Measures to Protect Human Remains during Project Construction or OperationIf human remains are encountered during construction or operation and maintenance of any project permitted under the Order, all work shall immediately halt within 100 feet of the find and the lead agency shall contact the appropriate county coroner to evaluate the remains and follow the procedures and protocols set		

Table 1-1Summary of Mitigation Measures (PEIR Chapter 3)

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Cultural (cont.)	forth in State CEQA Guidelines Section 15064.5(e)(1). If human remains encountered are on or in the tide and submerged lands of California, the lead agency shall also contact the California State Lands Commission. If the coroner determines that the remains are Native American in origin, the appropriate county shall contact the California Native American Heritage Commission, in accordance with California Health and Safety Code Section 7050.5(c) and PRC Section 5097.98. Per PRC Section 5097.98, the project's lead agency shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the lead agency has discussed and conferred, as prescribed PRC Section 5097.98, with the most likely descendants and the property owner regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.		
Geology and Soils	Mitigation Measure GEO-1: Include Geotechnical Design RecommendationsTo minimize potential impacts from seismic events and the presence of adverse soilconditions, lead agencies shall ensure that geotechnical design recommendationsare included in the design of facilities and construction specifications.Recommended measures to address adverse conditions shall conform to applicabledesign codes, guidelines, and standards.		
	Mitigation Measure GEO-2: Comply with the Alquist-Priolo Act For construction in an Alquist-Priolo Earthquake Fault Zone, a determination must be made by a licensed practitioner (California Certified Engineering Geologist) that no fault traces are present within structures, such as setback levees. The standard of care for such determinations includes direct examination of potentially affected subsurface materials (soil and/or bedrock) by logging of subsurface trenches. Levee		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Geology and Soils (cont.)	<ul> <li>structures may also be required to have heavier reinforcement against strong ground motion, in compliance not only with California regulations but, in many cases, with additional federal regulations. Costs necessary to prepare and identify collected fossils, and for any curation fees charged by the paleontological repository. The SJECCD shall ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means.</li> </ul>		
	Mitigation Measure GEO-3: Conduct Individual Restoration Project Geotechnical Investigation and Report		
	<ul> <li>An individual restoration projects geotechnical investigation shall be performed and a geotechnical report prepared for any restoration project that would result in potentially significant grading activities. The geotechnical report shall include a quantitative analysis to determine whether excavation or fill placement would result in a potential for damage due to soil subsidence during and/or after construction. Project designs shall incorporate measures to reduce the potential damage to a less-than-significant level. Measures shall include but not be limited to:</li> <li>Removal and recompaction of existing soils susceptible to subsidence</li> <li>Ground improvement (such as densification by compaction or grouting, soil</li> </ul>		
	<ul> <li>cementation)</li> <li>Reinforcement of structural components to resist deformation due to subsidence</li> <li>The assessment of subsidence for specific projects shall analyze the individual restoration projects potential for and severity of cyclic seismic loading. A geotechnical investigation shall also be performed by an appropriately licensed professional engineer and/or geologist to determine the presence and thickness of potentially liquefiable sands that could result in loss of bearing value during seismic</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Resource(s) Geology and Soils (cont.)	<ul> <li>shaking events. Project designs shall incorporate measures to mitigate potential damage to a less-than-significant level. Measures shall include but not be limited to:</li> <li>Ground improvement (such as grouting or soil cementation)</li> <li>Surcharge loading by placement of fill, excavation, soil mixing with non-liquefiable finer-grained materials, and replacement of liquefiable materials at shallow depths</li> <li>Reinforcement of structural components to resist deformation due to liquefaction An analysis of individual restoration projects probable and credible seismic acceleration values, conducted in accordance with current applicable standards of care, shall be performed to provide for a suitable project design. Geotechnical investigations shall be performed and geotechnical reports shall be prepared in the responsible care of California licensed geotechnical professionals including professional civil engineers, certified geotechnical engineers, professional geologists, certified engineering geologists, and certified hydrogeologists, all of whom practice within the current standards of care for such work.</li> </ul>		
	<b>Mitigation Measure GEO-4: Adhere to International Building Code</b> Constructed facilities shall be required to adhere to the current approved version of the International Building Code (IBC), and to comply with the IBC for critical structures (e.g., levees).		
	<b>Mitigation Measure GEO-5: Conduct Expansive Clay Investigation</b> In areas where expansive clays exist, a licensed professional engineer or geologist shall perform a hydrogeological/geotechnical investigation to identify and quantify the potential for expansion, particularly differential expansion of clayey soils caused by leakage and saturation beneath new improvements. Measures could include but are not limited to removing and recompacting problematic expansive soils, stabilizing soils, and/or reinforcing the constructed improvements to resist deformation from expansion of subsurface soils.		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Geology and Soils (cont.)	<ul> <li>Mitigation Measure GEO-6: Implement Measures for Waterway Construction Activities</li> <li>For projects that involve the engineered subsurface structural components (e.g., of surface impoundments, levees, bridge footings/abutments) project design shall provide for protection from leakage to the subsurface. Measures could include but are not limited to rendering concrete less permeable by specifying concrete additives such as bentonite, designing impermeable liner systems, designing leakage collection and recovery systems, and constructing impermeable subsurface cutoff walls.</li> <li>For restoration projects that could cause subsurface seepage of nuisance water onto adjacent lands, the following measures shall be implemented:</li> <li>Perform seepage monitoring studies by measuring the level of shallow groundwater in the adjacent soils, to evaluate baseline conditions. Continue monitoring for seepage during and after project implementation.</li> <li>Develop a seepage monitoring plan if subsurface seepage constitutes nuisance water on the adjacent land.</li> <li>If adjacent land is not usable, implement seepage control measures, such as installing subsurface agricultural drainage systems to avoid raising water levels into crop root zones. Cutoff walls and pumping wells can also be used to mitigate the occurrence of subsurface nuisance water.</li> </ul>		
	Mitigation Measure GEO-7: Implement Measures for Levee Construction and Other Fill Embankment DesignsFor projects that involve the construction of setback levees, surface impoundments, and other fill embankments, the project design shall place fill in accordance with state and local regulations and the prevailing standards of care for such work.		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Geology and Soils (cont.)	Measures could include but are not limited to blending the soils most susceptible to landsliding with soils that have higher cohesion characteristics; installing slope stabilization measures; designing top-of-slope berms or v-ditches, terrace drains, and other surface runoff control measures; and designing slopes at lower inclinations.		
	<ul> <li>Mitigation Measure GEO-8: Assess the Presence of Highly Organic Soils</li> <li>For projects that would result in a significant or potentially significant risk to structures because of the presence of highly organic soils, the lead agencies shall require a geotechnical evaluation before construction to identify measures to mitigate organic soils. The following measures may be considered: <ul> <li>Over-excavation and import of suitable fill material.</li> <li>Structural reinforcement of constructed works to resist deformation.</li> <li>Construction of structural supports below the depth of highly organic soils into materials with suitable bearing strength.</li> </ul> </li> </ul>		
	<ul> <li>Mitigation Measure GEO-9: Conduct a General Project-Level Analysis</li> <li>Restoration projects implemented by other public proponents under the Order would be required to do a desktop search on whether the project site would be located in a paleontological sensitive unit. If the project site was determined to be located on a paleontological sensitive unit, then Mitigation Measure GEO-9 (and Mitigation Measure GEO-10, below, as applicable) would be implemented. If restoration projects implemented under the Order fall outside a paleontological sensitive unit, GEO-9 (and Mitigation Measure GEO-10, below) would be not required.</li> <li>During project development and project-level analysis, a paleontological resource monitoring and recovery plan shall be developed and implemented for all actions determine by the project proponent to be located on a paleontological sensitive unit.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Geology and Soils (cont.)	<ul> <li>The plan shall include protocols for paleontological resources monitoring in areas where construction-related excavation would affect sediment with moderate to high paleontological sensitivity.</li> <li>The paleontological resource monitoring and recovery plan shall provide guidelines for the establishment of a yearly or biannual monitoring program led by a qualified paleontologist to determine the extent of fossiliferous sediment being exposed and affected by erosion, and determine whether paleontological resources are being lost. If the loss of scientifically significant paleontological resources is documented, then a recovery program should be implemented.</li> </ul>		
	<b>Mitigation Measure GEO-10: Conduct Worker Training</b> For projects that are determined to have moderate to high paleontological sensitivity, before the start of any ground-disturbing activity (e.g., excavation or clearing), a qualified paleontologist shall prepare paleontological resources sensitivity training materials for use during project worker environmental training or equivalent. This training shall be conducted by a qualified environmental trainer under the supervision of the qualified paleontologist. For restoration projects that involve construction crew phases, additional trainings shall be conducted for new construction personnel. The paleontological resource sensitivity training shall focus on the types of resources that could be encountered within the individual restoration project site and the procedures to follow if they are found. Project proponents and/or project contractors shall retain documentation demonstrating that all construction personnel attended the paleontological resource sensitivity training before the start of work on the site, and shall provide documentation to the project manager upon request.		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Hazards and Hazardous Materials	<ul> <li>Mitigation Measure HAZ-1: Prepare and Implement a Health and Safety Plan and Provide Qualified Oversight of Fill Removal Related to Earthmoving Activities</li> <li>The following measures shall be implemented before and during construction of any restoration project permitted under the Order: <ul> <li>A health and safety plan for the project shall be developed and implemented. This plan shall clearly notify all workers of the potential to encounter hazardous materials during ground-disturbing work and other construction activities. The plan shall identify proper handling and disposal procedures for contaminants expected to be on-site and shall provide maps and phone numbers for local hospitals and other emergency contacts. Construction workers shall comply with all protocols outlined in the health and safety plan throughout project implementation.</li> </ul> </li> <li>Any hazardous materials being stored in the project area and not needed for construction activities shall be removed and disposed of at appropriately permitted locations before construction. A qualified professional (e.g., geologist or engineer) shall oversee fill excavation activities and work in potential project areas that contain abandoned underground storage tanks requiring removal, to properly identify any contaminated soils that may be present. Excavation of underground storage tanks must comply with county ordinances and policies. If contaminated soils are found, Mitigation Measure HAZ-2 shall be implemented.</li> <li>Removal of underground storage tanks associated with the restoration project shall include measures to ensure their safe transport and disposal. Remediation actions, if necessary, shall be defined in consultation with the local Regional Board and implemented during construction.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Hazards and Hazardous Materials (cont.)	<ul> <li>Mitigation Measure HAZ-2: Notify Appropriate Federal, State, and Local Agencies If Contaminated Soils Are Identified, and Complete Recommended Remediation Activities</li> <li>The following measures shall be implemented before construction of any restoration project permitted under the Order if contaminated soils are found on the project site:</li> <li>The appropriate federal, state, and local agencies shall be notified if evidence of previously undiscovered soil or groundwater contamination (e.g., stained soil, odorous groundwater) is encountered during construction activities. Any contaminated areas shall be cleaned up in accordance with the recommendations of the Regional Board, DTSC, or other appropriate federal, state, or local regulatory agencies.</li> <li>A site plan shall be prepared for the remediation activities appropriate for the proposed land uses, including excavation and removal of on-site contaminated soils, and needed redistributions of clean fill material on the situal area. The plan shall include measures to ensure the safe transport, use, and disposal of contaminated soil and building debris removed from the site. If ground-disturbing activities encounter contaminated groundwater, the construction contractor shall report the contamination to the appropriate agencies, dewater the area, and treat the groundwater to remove the contaminants before discharge into the sanitary sewer system. The construction contractor shall comply with the plan and applicable federal, state, and local laws. The plan shall outline specific procedures for handling and reporting of hazardous materials, and for disposing of hazardous materials removed from the site at an appropriate off-site facility.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Hazards and Hazardous Materials (cont.)	Mitigation Measure HAZ-3: Notify Appropriate Federal, State, and Local Agencies If Accidental Discharges of Hazardous Materials Following an accidental discharge of a reportable quantity of a hazardous material or an unknown material, the appropriate federal, state, and local agencies shall be notified. Any contaminated areas shall be cleaned up in accordance with the recommendations of the Regional Board, DTSC, or other appropriate federal, state, or local regulatory agencies.		
	<b>Mitigation Measure HAZ-4: Establish Airport Operation Area Buffer Zones</b> Restoration projects permitted under the Order shall avoid creating hazardous wildlife attractants within a distance of 10,000 feet of a designated Airport Operations Area.		
	<ul> <li>Mitigation Measure HAZ-5: Coordinate with Applicable Federal, State, and Local Agencies and Districts</li> <li>Before construction, project proponents implementing restoration projects permitted under the Order shall coordinate with the appropriate federal, state, and local government agencies, districts, and emergency response agencies regarding the timing of construction projects that would occur near the project sites. Specific measures to mitigate potentially significant impacts shall be determined during the interagency coordination, and shall include measures to achieve the following performance standards:</li> <li>Reduce potential traffic impacts so that no more than 30 trucks per hour will be added to any road (e.g., by scheduling construction truck trips and designating alternate haul routes to disperse truck trips).</li> <li>Reduce potential traffic safety impacts (e.g., by employing flaggers to manage traffic flow at conflict locations).</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Hazards and Hazardous Materials	• Provide outreach and community noticing (e.g., via the web, utility bill inserts, and other methods) for locations where multiple projects will create construction traffic simultaneously.		
(cont.)	<ul> <li>Mitigation Measure HAZ-6: Prepare and Implement a Vector Management Plan The following measures shall be implemented by restoration projects permitted under the Order to prevent public health hazards posed by vector habitat as applicable (e.g., restoration projects that result in standing water and are located near populated areas):</li> <li>Freshwater habitat management shall include management of water control structures, vegetation management, mosquito predator management, drainage improvements, and other best management practices. The agency implementing the restoration project shall coordinate with the California Department of Fish and Wildlife and local mosquito and vector control agencies regarding these strategies and specific techniques to help minimize mosquito production.</li> <li>Permanent ponds shall be maintained to increase the diversity of waterfowl yet decrease the introduction of vectors through constant circulation of water, vegetation control, and periodic draining of ponds.</li> <li>The project shall avoid ponding in tidal marsh habitat or in areas within the waterside of setback levees. Restoration projects shall be designed with methods to reduce mosquito breeding.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Hazards and Hazardous Materials (cont.)	<ul> <li>Mitigation Measure MIN-1: Minimize Potential Impacts from Loss of a Known Mineral Resource</li> <li>The following measures shall be implemented during construction of restoration projects permitted under the Order: <ul> <li>Project proponents shall ensure land use compatibility between existing mineral resource extraction activities and restoration projects.</li> <li>An adequate buffer (to be determined on an individual project basis in coordination with appropriate regulatory agencies) shall be maintained between future projects and designated MRZ-2 sectors.</li> <li>Project proponents shall ensure that future land use changes in designated mineral resource extraction areas recognize mineral resource extraction as a compatible use.</li> <li>The use of construction aggregate shall be limited to local sources with sufficient capacity to meet the needs of both restoration projects and future local development, to the extent possible.</li> <li>Project construction shall use recycled aggregate where possible, to decrease the demand for new aggregate.</li> </ul> </li> </ul>		
Mineral	<ul> <li>Mitigation Measure MIN-2: Minimize Potential Impacts from the Loss of a Locally-Important Mineral Resource Recovery Site</li> <li>The following measures shall be implemented during and after construction of restoration projects permitted under the Order:</li> <li>Access to existing, active mineral resource extraction sites that have been identified in local general plans, specific plans, or other land use plans shall be maintained both during and after project construction.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Mineral (cont.)	<ul> <li>Projects shall implement the most current recommendations identified in the California Department of Conservation (DOC) Geologic Energy Management Division (formerly Division of Oil, Gas, and Geothermal Resources) construction site well review program (DOC 2021), such as:</li> <li>Identify all existing natural gas well sites and oil production facilities in or near the project area.</li> <li>Identify any oil or natural gas well within 100 feet of any navigable body of water or watercourse perennially covered by water or any officially recognized wildlife preserve as a "critical well" (California Code of Regulations Title 14, Chapter 4, Article 2, Sections 1720[a][2][B] and 1720[a][2][C]). DOC requires that "critical wells" include equipment capable of meeting more stringent blowout prevention requirements than noncritical wells, based on pressure testing and ratings.</li> <li>Identify safety measures to prevent unauthorized access to equipment.</li> <li>Include safety shutdown devices on oil and natural gas wells and other equipment, as appropriate.</li> <li>Notify DOC of new oil or natural gas wells or changes in oil or natural gas well operations or physical conditions, receive written approval of the changes from DOC, and receive written notification of DOC's inspection of new or changed equipment. The approvals will be related primarily to the ability to: <ul> <li>Protect the environment.</li> <li>Use adequate blowout prevention equipment.</li> </ul> </li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Mineral (cont.)	<ul> <li>If any plugged/abandoned or unrecorded oil and natural gas wells are uncovered during construction, notify DOC, complete remedial well plugging actions, and avoid constructing any structures over the abandoned oil and natural gas wells.</li> <li>If oil and natural gas wells are under the jurisdiction of or a lease from the State Lands Commission, provide additional plans and environmental documentation as required before modifying the oil or natural gas wells.</li> </ul>		
Noise	<ul> <li>Mitigation Measure NOISE-1: Minimize Noise Conflicts</li> <li>The following measures shall be implemented during construction of any restoration project permitted under the Order:</li> <li>Noise-generating activities shall follow the applicable general plan and/or noise ordinances for the jurisdiction located within the vicinity of the project.</li> <li>Construction equipment shall be located away from sensitive receptors, to the extent feasible, to reduce noise levels below applicable local standards.</li> <li>Construction equipment shall be maintained to manufacturers' recommended specifications, and all construction vehicles and equipment shall be equipped with appropriate mufflers and other approved noise-control devices.</li> <li>Idling of construction equipment shall be limited to the extent feasible to reduce the time that noise is emitted.</li> <li>An individual traffic noise analysis of identified haul routes shall be conducted and mitigation, such as reduced speed limits, shall be provided at locations where noise standards cannot be maintained for sensitive receptors.</li> <li>The project shall incorporate the use of temporary noise barriers, such as acoustical panel systems, between construction activities and sensitive receptors if it is concluded that they would be effective in reducing noise exposure to sensitive receptors.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Noise (cont.)	<ul> <li>Mitigation Measure NOISE-2: Minimize Operations and Maintenance Noise Conflicts</li> <li>The following measures shall be implemented during O&amp;M activities for any restoration project permitted under the Order:</li> <li>Noise-sensitive receptors in the vicinity of project activities shall be identified and projects shall be designed to minimize exposure of sensitive receptors to long-term, operational noise sources (for example, water pumps) to reduce noise levels below applicable local standards.</li> <li>The hours of operation at noise generation sources near or adjacent to noise-sensitive areas shall be limited, wherever practicable, to reduce the level of</li> </ul>		
	<ul> <li>exposure to meet applicable local standards.</li> <li>Mitigation Measure NOISE-3: Prepare Preconstruction Safety Plans</li> <li>To reduce potential impacts on people residing or working in the vicinity of a private airstrip, an airport land use plan, or where such a plan has not been adopted within 2 miles of a public airport or public use airport, construction contracts shall include requirements for the contractor to prepare a construction safety plan. The plan shall be developed before construction activities begin, in collaboration with aviation base personnel, to coordinate construction activities including a schedule, coordination of personnel with aviation radios, and notice requirements. Furthermore, the contractor shall coordinate with emergency service personnel.</li> </ul>		
Recreation	Mitigation Measure REC-1: Minimize Impairment, Degradation, or Elimination of Recreational Resources         If restoration projects permitted under the Order result in the substantial impairment, degradation, or elimination of recreational facilities, replacement facilities of equal capacity and quality shall be developed and installed.		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Recreation (cont.)	Mitigation Measure REC-2: Minimize Impacts on Existing Recreational Resources If a restoration project results in substantial temporary or permanent impairment, degradation, or elimination of recreational facilities that causes users to be directed toward other existing facilities, the project proponent shall coordinate with affected public and private recreation providers to direct the displaced users to underused recreational facilities. The project proponent shall conduct additional operations and maintenance work at existing facilities to prevent them from deteriorating. If possible, temporary replacement facilities shall be provided. If the increase in use is temporary, once use levels have decreased back to existing conditions, the degraded facilities shall be rehabilitated or restored. Where impacts on existing facilities are unavoidable, the project proponent shall compensate for impacts through mitigation, restoration, or preservation off-site or creation of additional permanent new replacement facilities.		
Transportation	<b>Mitigation Measure TRA-1: Prepare Construction Traffic Management Plan</b> Before construction begins, the construction manager shall have a qualified professional prepare a construction traffic management plan. The plan shall provide the appropriate measures to reduce potential traffic obstructions or service level degradation at affected traffic facilities. The scope of the construction traffic management plan will depend on the type, size, and duration of the specific qualifying restoration project under the Order. The plan could include such measures as construction signage, flaggers for lane closures, and construction schedule and/or delivery schedule restrictions. The plan shall be submitted to the local public works department and implemented as appropriate throughout construction.		

Table 1-1Summary of Mitigation Measures (PEIR Chapter 3)

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
	Mitigation Measure TCR-1: Conduct Inventory and Significance Evaluation of Tribal Cultural Resources with Tribes that are Culturally and Geographically Affiliated with the Project Vicinity		
Tribal Cultural	<ul> <li>Before implementation of any project permitted under the Order, the following shall be conducted: consultation with California Native American Tribes pursuant to PRC Section 21080.3; a cultural resources records search; a California Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search; and an inventory and significance evaluation of tribal cultural resources identified that could be impacted by the project. These tasks shall be conducted as follows.</li> <li>Project proponent shall submit an NAHC SLF &amp; Native American Contacts List Request at the initial stages of project development (or as early as practicable) to determine if a project would have an impact on tribal cultural resources.</li> <li>Project proponent shall coordinate with the approving Water Board or other CEQA lead agency, if applicable, as soon as possible to identify California Native American Tribes that are traditionally and culturally affiliated to a project area. The CEQA lead agency shall then conduct Tribal consultation, pursuant to PRC Section 21080.3, and as soon as practicable during early design, with such Tribes to determine whether any tribal cultural resources, protocols for construction monitoring, and any other Tribal concerns. Construction of the project will not commence until the approving Water Board or other CEQA lead agency scheves compliance with the California Environmental Protection Agency Tribal Consultation Protocol (April 2018) and consultation pursuant to PRC Section 21080.3 has been concluded. If potential tribal cultural resources</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Tribal Cultural (cont.)	<ul> <li>that may be impacted by the project are identified through consultation with California Native American Tribes that are traditionally and culturally affiliated to a project area, the following shall be conducted:</li> <li>Documentation of any tribal cultural resources identified in the project area, which may require additional tasks such as ethnographic research and interviews.</li> <li>If tribal cultural resources are identified in a project area, develop, before project implementation and in coordination California Native American Tribes that are traditionally and culturally affiliated to a project area, an approach for reducing such impacts. If any such tribal cultural resources are on or in the tide and submerged lands of California, this process shall also include coordination with the California State Lands Commission.</li> </ul>		
	Mitigation Measure TCR-2: Implement Measures to Protect Tribal Cultural Resources during Project Construction or Operation. These measures include, but are not limited to, those outlined in PRC Section 21084.3. If tribal cultural resources or indigenous archaeological resources that may qualify as tribal cultural resources are encountered during project construction or operation of any project permitted under the Order, all activity within 100 feet of the find shall cease and the find shall be flagged for avoidance. The lead agency, a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology, and California Native American Tribes that are traditionally and culturally affiliated to a project area shall be immediately informed of the discovery. The qualified archaeologist and representatives from the notified Native American Tribes shall inspect the discovery and notify the lead agency of their initial assessment.		

Table 1-1Summary of Mitigation Measures (PEIR Chapter 3)

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Tribal Cultural (cont.)	<ul> <li>If the lead agency determines, based on recommendations from the qualified archaeologist and California Native American Tribes that are traditionally and culturally affiliated to a project area, that the resource may qualify as a tribal cultural resource (per PRC Section 21074), then the resource shall be avoided if feasible. If avoidance of the resource is not feasible, the lead agency shall consult California Native American Tribes that are traditionally and culturally affiliated to a project area to determine treatment measures to minimize or mitigate any potential impacts on the resource pursuant to PRC Section 21083.2 and State CEQA Guidelines Section 15126.4. If any such resources are on or in the tide and submerged lands of California, this process shall also include coordination with the California State Lands Commission. Once treatment measures have been determined, the lead agency shall prepare and implement a tribal cultural resources management plan that outlines the treatment measures for the resource. Treatment measures typically consist of the following steps:</li> <li>Determine whether the resource qualifies as a tribal cultural resource (per PRC Section 21074) through analysis that could include additional ethnographic research, archaeological investigations, or laboratory analysis.</li> <li>If it qualifies as a tribal cultural resource (per PRC Section 21074) implement measures for avoiding or reducing impacts such as the following:</li> <li>Avoid and preserve the resource in place through measures that include but are not limited to the following:</li> <li>Plan and construct the project to avoid the resource and protect the cultural and natural context.</li> <li>Plan greenspace, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Tribal Cultural (cont.)	<ul> <li>Treat the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, through measures that include but are not limited to the following:         <ul> <li>Protect the cultural character and integrity of the resource.</li> <li>Protect the traditional use of the resource.</li> <li>Protect the confidentiality of the resource.</li> <li>Implement permanent conservation easements or other interests in real property, with cultural appropriate management criteria for the purposes of preserving or using the resource or place.</li> </ul> </li> </ul>		
	<b>Mitigation Measure TRA-2: Prepare Waterway Traffic Control Plan</b> A waterway traffic control plan shall be prepared before project construction begins. The plan shall be followed throughout construction to ensure that vessels can navigate safely and efficiently during construction. The plan shall identify vessel traffic control measures to reduce congestion and navigation hazards to the extent feasible. Construction zones in waterways shall be barricaded or guarded by readily visible barriers or other effective measures to warn boaters of their presence and restricted access. Warning devices and signage shall comply with the California Uniform State Waterway Marking System and shall be operational during nighttime hours and periods of dense fog.		
	<b>Mitigation Measure TRA-3: Develop Channel Closure Plan for Affected Facilities</b> Before construction begins in areas where temporary partial waterway closure is necessary, a temporary channel closure plan shall be developed. The plan shall identify alternative detour routes and procedures for notifying boaters of construction activities and partial closures including coordination with the U.S. Coast Guard, local boating organizations, and marinas. The channel closure plan shall be implemented as appropriate throughout construction.		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Tribal Cultural (cont.)	<ul> <li>Mitigation Measure TRA-4: Reduce Project Effects on Boat Passage and Transit Facilities</li> <li>To the extent feasible, the following actions shall be implemented to reduce impacts of project construction on boat passage and transit facilities:</li> <li>To the extent feasible, ensure that safe boat access to public launch and docking facilities, businesses, and residencies is maintained.</li> <li>Coordinate with transit system operators, as appropriate, to establish alternative transit system routes to be rerouted during construction.</li> <li>Provide boat passage as an integral component of operable gate facilities, and design such facilities to provide uninterrupted boat passage when the gates are in the "up" position. Floating docks with mooring bits shall be provided along the shoreline on both sides of the boat passage facilities for boaters to use while waiting.</li> </ul>		
	<ul> <li>Before construction begins in areas where bridge closure may be necessary, develop a traffic plan that identifies traffic control measures to reduce congestion and provide alternative routes.</li> <li>Mitigation Measure TRA-5: Minimize Effects on Trails and Bicycle and Pedestrian Circulation and Identify Alternatives</li> <li>To minimize potential impacts of project construction on trails and bicycle and pedestrian circulation, the following actions shall be taken when feasible:</li> <li>Minimize closure of paths.</li> <li>Provide for temporary or permanent relocation of the trails and bicycle pedestrian circulation locations to the extent feasible.</li> <li>Consult with the appropriate public works department to determine the most feasible alignment for facility relocation.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Tribal Cultural	Mitigation Measure TRA-6: Reduce Emissions		
(cont.)	To comply with State CEQA Guidelines Section 15064.3(b), the following measures shall be taken to reduce effects associated with increased VMT:		
	<ul> <li>Limit idling time for commercial vehicles, including delivery and construction activities.</li> </ul>		
	<ul> <li>Use low- or zero-emissions vehicles, including construction vehicles.</li> </ul>		
	<ul> <li>Institute a heavy-duty off-road vehicle plan and a construction vehicle inventory tracking system for construction projects.</li> </ul>		
	<ul> <li>Promote ridesharing.</li> </ul>		
	<ul> <li>Provide the necessary facilities and infrastructure to encourage the use of low- or zero-carbon emissions vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).</li> </ul>		
	<ul> <li>Increase the cost of driving and parking private vehicles, such as by imposing tolls and parking fees.</li> </ul>		
	<ul> <li>Provide a shuttle service to public transit and worksites.</li> </ul>		
	<ul> <li>Provide information on all options for individuals and businesses to reduce transportation-related emissions.</li> </ul>		
	Mitigation Measure TRA-7: Conduct Routine Inspections		
	<ul> <li>An inspection and operation plan shall be developed and implemented, where applicable. The plan shall include procedures for routine inspections and facility operation to allow safe navigation should the facility become damaged or malfunctions. This plan shall include the following specific components:</li> <li>Routine inspections and correction procedures to ensure that facility safety features are in good working order.</li> </ul>		

Resource(s)	Mitigation Measures	Monitoring Responsibility	Monitoring Compliance Record (Name / Date)
Tribal Cultural (cont.)	<ul> <li>Routine inspections and correction procedures for navigational hazards around facilities, including floating or submerged debris and the formation of shoals.</li> </ul>		
	Mitigation Measure TRA-8: Repair Damaged Roadways and Trails Following Construction If damage to roads, sidewalks, trails, and/or medians occur, the construction contractor shall coordinate with the affected project proponents to ensure that any impacts are adequately repaired in accordance with applicable agency standards. Roads and/or driveways disturbed by construction activities or construction vehicles shall be properly restored to ensure long-term protection of road surfaces. Roadside drainage structures and road drainage features (e.g., rolling dips) shall be protected by regrading and reconstructing roads to drain properly. The construction contractor shall work with the applicable agencies to document preconstruction conditions of road features before the start of construction.		
	<ul> <li>Mitigation Measure FIRE-1: Develop and Implement a Fire Prevention Plan The following measures shall be implemented before and during construction of restoration projects permitted under the Order, where applicable:</li> <li>For restoration projects in areas designated as Very High or High Fire Hazard Severity Zones, a project-specific fire prevention plan for construction and operation of the project shall be prepared and submitted to the CEQA lead agency for review before the start of construction.</li> <li>The draft copy of the fire prevention plan shall be provided to each fire agency (e.g., CAL FIRE and county or local municipal fire agencies) before the start of any construction activities in areas designated as Very High or High Fire Hazard Severity Zones.</li> </ul>		