

Mitigation Monitoring and Reporting Program

Western Pacific Interceptor Canal 200-Year Standard Project

Three Rivers Levee Improvement Authority



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Mitigation Monitoring and Reporting Program

Western Pacific Interceptor Canal 200-Year Standard Project

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MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA), the Three Rivers Levee Improvement Authority (TRLIA) has prepared an initial study/proposed mitigated negative declaration (IS/MND) that identifies potentially significant impacts related to the construction and operation of the Western Pacific Interceptor Canal 200-Year Standard Project (proposed project). The IS/MND also identifies mitigation measures that would be implemented to reduce impacts to a less-than-significant level.

Section 21081.6 of the California Public Resources Code, and Sections 15091(d) and 15097 of the State CEQA Guidelines, require public agencies “to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment.” A mitigation monitoring and reporting program (MMRP) is required for the proposed project because the IS/MND identifies potentially significant adverse impacts related to construction and implementation activities, and mitigation measures have been identified to mitigate those impacts.

TRLIA is the lead agency that must adopt the MMRP for the proposed project. Adoption of this MMRP would occur along with approval of the proposed project.

PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed according to schedule and maintained in a satisfactory manner during the construction and operation of the project. The MMRP may be modified by TRLIA during project implementation, as necessary, in response to changing conditions or other refinements. **Table 1** has been prepared to assist the responsible parties in implementing the MMRP. The table identifies individual mitigation measures, monitoring/mitigation timing, the person and/or agency responsible for implementing the measure, the monitoring and reporting procedure, and space to confirm implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the IS/MND.

ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, TRLIA is responsible for taking all actions necessary to implement the mitigation measures according to the specifications provided for each measure, and for demonstrating that the action has been successfully completed. TRLIA, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent as long as TRLIA maintains final responsibility for ensuring that the actions are taken.

TRLIA would be responsible for overall administration of the MMRP and for verifying that TRLIA staff members and/or the construction contractor has completed the necessary actions for each measure.

ANNUAL REPORTING

The project manager for TRLIA shall prepare monitoring reports annually that describe the compliance of the activity with the required mitigation measures. Annual reporting on implementation of these measures will end

when construction is completed. Information regarding inspections and other requirements shall be compiled and explained in each report. The report shall be designed to simply and clearly describe whether mitigation measures have been adequately implemented. At a minimum, each report shall identify the mitigation measures or conditions to be monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required. The monitoring report shall be presented to TRLIA for review and decisions regarding any required action or determination.

MITIGATION MONITORING PLAN

The annual report will verify the implementation of mitigation measures. **Table 1** should guide TRLIA in its evaluation and should be the basis for annual reporting.

The column categories identified in **Table 1** are described below:

- ▶ **Mitigation Number**—This column lists the mitigation measures according to the number in the IS/MND.
- ▶ **Mitigation Measure**—This column provides the text of the mitigation measures identified in the IS/MND.
- ▶ **Mitigation Implementation Timeframe**—This column lists the time frame in which the mitigation will take place.
- ▶ **Monitoring Timeframe**—This column lists the time frame in which mitigation implementation will be monitored.
- ▶ **Responsibility for Verification of Compliance**—This column identifies the entity(ies) responsible for verifying compliance with the requirements of the mitigation measure.
- ▶ **Performance Criteria**—This column describes what action(s) are needed to verify implementation.
- ▶ **Date Compliance Completed**—The “Date Completed” column is to be dated and initialed by the project manager or his/her designee, based on the documentation provided by the construction contractors, its agents (qualified individuals), or through personal verification by TRLIA.

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Mit. No.	Mitigation Measure	Mitigation Implementation Time Frame	Monitoring Time Frame	Responsibility for Verification of Compliance	Performance Criteria	Date Compliance Completed
Air Quality						
AQ-1	<p>Implement FRAQMD Standard Mitigation Measures.</p> <p>As required for all projects located in Feather River Air Quality Management District (FRAQMD) jurisdiction, TRLIA and its construction contractor(s) will implement the following Standard Mitigation Measures:</p> <ol style="list-style-type: none"> 1. Implement the Fugitive Dust Control Plan. 2. Construction equipment exhaust emissions shall not exceed FRAQMD Regulation III, Rule 3.0, Visible Emissions limitations (40% opacity or Ringelmann 2.0). 3. The contractor shall be responsible to ensure that all construction equipment is properly tuned and maintained prior to and for the duration of on-site operation. 4. Limit idling time to 5 minutes-saves fuel and reduced emissions. (State idling rule: Commercial diesel vehicles-13 CCR Chapter 10, Section 2485, effective 02/01/2005; off-road diesel vehicles-13 CCR Chapter 9, Article 4.8, Section 2449, effective 05/01/2008.) 5. Use existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators. 6. Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites. 	Before the start of ground-disturbing activities and during construction	Throughout all construction activities	TRLIA and its construction contractor(s)	FRAQMD standard mitigation measures are implemented such that pollutant emissions are minimized.	
AQ-2	<p>Implement FRAQMD Best Available Mitigation Measures for Construction Phase.</p> <p>In accordance with FRAQMD’s recommendation to implement the Best Available Mitigation Measures for Construction Phases if construction-related emissions continue to exceed FRAQMD thresholds of significance, TRLIA and its construction contractor(s) will implement the following measures:</p>	During construction activities	Throughout all construction activities	TRLIA and its construction contractor(s)	Additional FRAQMD measures are implemented such that pollutant emissions are further minimized.	

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	<ol style="list-style-type: none"> 1. All grading operations on a project should be suspended when winds exceed 20 miles per hour (mph) or when winds carry dust beyond the property line despite implementation of all feasible dust control measures. 2. Construction sites shall be watered as directed by the Department of Public Works or Air Quality Management District and as necessary to prevent fugitive dust violations. 3. An operational water truck should be available at all times. Apply water to control dust as needed to prevent visible emissions violations and off-site dust impacts. 4. On-site dirt piles or other stockpiled particulate matter should be covered, wind breaks installed, and water and/or soil stabilizers employed to reduce windblown dust emissions. Incorporate the use of approved nontoxic soil stabilizer according to manufacturer's specifications to all inactive construction areas. 5. All transfer processes involving a free fall of soil or other particulate matter shall be operated in such a manner as to minimize the free fall distance and fugitive dust emissions. 6. Apply approved chemical soil stabilizers according to the manufacturers' specifications, to all inactive construction areas (previously graded areas that remain inactive for 96 hours), including unpaved roads and employee/equipment parking areas. 7. To prevent track-out, wheel washers should be installed where project vehicles and/or equipment exit onto paved streets from unpaved roads. Vehicles and/or equipment shall be washed prior to each trip. Alternatively, a gravel bed may be installed as appropriate at vehicle/equipment site exit points to effectively remove soil buildup on tires and tracks to prevent/diminish track-out. 8. Paved streets shall be swept frequently (water sweeper with reclaimed water recommended; wet broom) if soil material has been carried onto adjacent paved, public thoroughfares from the project site. 9. Provide temporary traffic control as needed during all phases of construction to improve traffic flow, as deemed appropriate by the Department of Public Works and/or the California Department of 					

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	<p>Transportation (Caltrans) and to reduce vehicle dust emissions. An effective measure is to enforce vehicle traffic speeds at or below 15 mph.</p> <p>10. Reduce traffic speeds on all unpaved surfaces to 15 mph or less and reduce unnecessary vehicle traffic by restricting access. Provide appropriate training, on-site enforcement, and signage.</p> <p>11. Reestablish ground cover on the construction site as soon as possible and prior to final occupancy, through seeding and watering.</p> <p>12. Disposal by Burning: Open burning is yet another source of fugitive gas and particulate emissions and shall be prohibited at the project site. No open burning of vegetative waste (natural plant growth wastes) or other legal or illegal burn materials (trash, demolition debris, et al.) may be conducted at the project site. Vegetative wastes should be chipped or delivered to waste to energy facilities (permitted biomass facilities), mulched, composted, or used for firewood. It is unlawful to haul waste materials offsite for disposal by open burning.</p>					
AQ-3	<p>Use Tier 4 Equipment for All Construction Activities.</p> <p>All heavy-duty construction equipment used for the proposed action shall be Tier 4 engines or achieve comparable emissions standards as those of Tier 4 engines.</p>	During construction activities	Throughout all construction activities	TRLIA and its construction contractor(s)	Heavy-duty construction equipment with Tier 4 engines or alternative means are implemented such that construction-related NO _x emissions are minimized.	
AQ-4	<p>Contribute to FRAQMD Off-Site Mitigation Program.</p> <p>TRLIA shall pay a deposit down payment to FRAQMD, to be determined at the time the project is approved, for the off-site mitigation fee. This deposit shall be held by FRAQMD during construction activities and shall be used against the final off-site mitigation fee following completion of the proposed action.</p> <p>TRLIA and its construction contractor(s) will monitor construction activities throughout all construction phases. Data regarding</p>	Before the start of ground-disturbing activities, during construction, and after construction is complete	Throughout all construction activities	TRLIA and its construction contractor(s)	Off-site mitigation fees are paid, including deposit before construction begins and balance after construction is complete.	

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	<p>construction activities shall be collected and reported to FRAQMD on a monthly basis, and total construction emissions shall be calculated at the end of construction activities. The construction-activities data shall include but shall not be limited to the following items:</p> <ol style="list-style-type: none"> 1. Construction equipment <ol style="list-style-type: none"> a. Equipment type and number of pieces b. Horsepower c. Hours of actual operation 2. Haul trucks (heavy-duty trucks) <ol style="list-style-type: none"> a. Number of heavy-duty haul truck trips b. Trip distance for haul truck trips 3. Construction workers <ol style="list-style-type: none"> a. Number of construction workers per day <p>FRAQMD shall collect the monthly construction activity reports for recordkeeping and shall monitor the progression of the proposed action. After completion of the proposed action (or completion of the construction season if the project extends over one year) the actual construction emissions and corresponding off-site mitigation fees shall be calculated based on actual construction activities. The original deposit down payment shall be subtracted from this total and TRLIA shall be responsible for paying the remaining fee to FRAQMD within an agreed-upon period.</p>					
Biological Resources						
BIO-1	<p>Minimize Potential Indirect Effects on Special-Status Plant Habitat in the Western Pacific Interceptor Canal.</p> <p>TRLIA and its construction contractor(s) will implement the following measure to reduce potential effects on special-status plants:</p> <p>Before on-site construction activities begin, the construction area boundaries shall be fenced to clearly delineate the extent of project activities. Silt fencing shall be used along waterside construction area boundaries and access routes to minimize the potential for indirect effects on aquatic habitat in the WPIC, in which special-status plants could occur.</p>	Before the start of ground-disturbing activities and during construction waterside of the levee	During activities identified under "Mitigation Measure"	TRLIA and its construction contractor(s)	Fencing is installed and maintained such that indirect effects on aquatic habitat in the WPIC are minimized.	

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BIO-2	<p>Avoid and Minimize Impacts on Elderberry Shrubs. TRLIA and its construction contractor(s) will implement the following measures to reduce potential effects on habitat for valley elderberry longhorn beetle:</p> <ol style="list-style-type: none"> 1. A worker awareness training program shall be conducted for all construction personnel before they start work on the project. The program shall summarize relevant laws and regulations that protect biological resources and discuss sensitive habitats and species, the role of biological monitors, applicable avoidance and minimization measures to protect species and habitats, and the penalties for not complying with such measures. Proof of training shall be provided to U.S. Fish and Wildlife Service (USFWS). 2. Before on-site construction activities begin, fencing shall be placed to clearly delineate the extent of project activities and provide a buffer around elderberry shrubs to prevent accidental damage during construction activities. USFWS shall be consulted regarding the appropriate size of the buffers, but to the maximum extent feasible, fencing shall be placed a minimum of 20 feet from the dripline of elderberry shrubs that could be damaged by project activities. 3. A biological monitor shall conduct inspections of the construction area to ensure that impact avoidance and minimization measures are properly implemented. A report of monitoring activities and observations shall be prepared and provided to USFWS upon completion of project activities. 4. Signs shall be placed on fencing in the vicinity of elderberry shrubs, stating: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and it must not be disturbed. This species is protected by the Endangered Species Act. Violators are subject to prosecution, fines, and imprisonment." The signs shall be clearly readable from a distance of 20 feet and shall be maintained throughout the construction period. 5. Dust control measures shall be implemented for all ground-disturbing activities associated with Reach 1B construction activities and along the haul route to Reach 2B. These measures may include applying water to haul routes and other unvegetated areas in which equipment is operating. To avoid attracting 	Before the start of construction activities and during construction in areas adjacent to elderberry shrubs	During activities identified under "Mitigation Measure"	TRLIA and its construction contractor(s)	Worker environmental awareness program is implemented such that impacts on elderberry shrubs are minimized. Barriers and fencing are installed and maintained and other impact minimization measures are implemented to protect elderberry shrubs throughout project construction.	

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	<p>Argentine ants, no water shall be sprayed within the dripline of an elderberry shrub.</p> <p>6. No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant shall be used or stored within 100 feet of elderberry shrubs adjacent to the construction area.</p> <p>7. Areas of ground disturbance within 100 feet of elderberry shrubs shall be restored to pre-project conditions when construction activities are complete.</p>					
BIO-3	<p>Minimize Potential for Indirect Impacts on and Compensate for Fill of Suitable Habitat for Vernal Pool Crustaceans.</p> <p>TRLIA and its construction contractor(s) will implement the following measures to reduce and compensate for potential effects on vernal pool fairy shrimp and vernal pool tadpole shrimp:</p> <ol style="list-style-type: none"> Before on-site construction activities begin, the construction area boundaries shall be fenced to clearly delineate the extent of project activities. Silt fencing shall be used to delineate the boundaries of landside construction areas and the haul route to Reach 2B where suitable habitat for vernal pool crustaceans is present adjacent to the project site. TRLIA shall coordinate with USFWS to develop and implement an appropriate mitigation strategy to compensate for habitat loss. Mitigation would likely include purchasing preserved and restored or created vernal pool habitat at a USFWS-approved mitigation bank. Appropriate mitigation ratios shall be developed during consultation with USFWS but are anticipated to be based on 3 acres of habitat preservation and 1 acre of habitat creation for each acre of habitat loss. TRLIA shall obtain incidental take authorization if deemed necessary by USFWS. 	Before the start of construction activities and during construction adjacent to seasonal wetlands	During activities identified under "Mitigation Measure"	TRLIA and its construction contractor(s)	Fencing is installed and maintained throughout project construction to protect vernal pool crustacean habitat adjacent to construction areas and haul routes. Purchase of mitigation credits is completed such that no net loss of vernal pool habitat occurs.	
BIO-4	<p>Minimize Potential for Take of Giant Garter Snake and Compensate for Loss of Upland Habitat.</p> <p>TRLIA and its construction contractor(s) will implement the following measures to reduce potential effects on giant garter snake:</p> <ol style="list-style-type: none"> Unless specifically authorized by USFWS and California Department of Fish and Wildlife (CDFW), construction activities 	Before the start of construction activities and during construction in or adjacent to giant garter	During activities identified under "Mitigation Measure"	TRLIA and its construction contractor(s)	Construction within 200 feet of suitable giant garter snake aquatic habitat occurs after May 1, and initial ground disturbance is	

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	<p>within 200 feet of aquatic habitat within the WPIC shall not begin before May 1. Initial ground disturbance in all construction areas shall be completed by October 1, and construction activities shall be completed as soon thereafter as possible.</p> <ol style="list-style-type: none"> 2. Before on-site construction activities begin, silt fencing shall be installed along the construction area boundaries and access routes on the waterside of the levee to prevent accidental vehicle incursion, minimize the potential for water quality degradation, and deter snakes from entering construction areas. 3. A worker awareness training program shall be conducted for all construction personnel before they start work on the project. The program shall summarize relevant laws and regulations that protect biological resources and discuss sensitive habitats and species, the role of biological monitors, applicable avoidance and minimization measures to protect species and habitats, and the penalties for not complying with such measures. Proof of training shall be provided to USFWS and CDFW. 4. Construction areas shall be surveyed for giant garter snakes by a qualified biologist within 24 hours before on-site project activities begin. Additional surveys shall be conducted within 24 hours before initial ground disturbance begins. Surveys shall be repeated after any lapse in construction activity of 2 weeks or longer. 5. A biological monitor shall conduct inspections of the construction area to ensure that impact avoidance and minimization measures are being implemented properly. A report of monitoring activities and observations shall be prepared and provided to USFWS and CDFW upon completion of project activities. 6. If deemed appropriate by the biological monitor, an escape ramp shall be placed at each end of any trench left open when construction activities are finished for the day, to allow animals that may have become trapped in the trench to climb out overnight. The ramp may be constructed of dirt fill, wood planking or other suitable material placed at an angle no greater than 30 degrees. 7. No snakes shall be harassed, harmed, or killed, and they shall be allowed to leave the construction area on their own volition. If a possible giant garter snake is observed retreating into an 	snake habitat			<p>completed by October 1. Fencing is installed and maintained throughout project construction to minimize impacts waterside of the levee and deter snakes from entering construction areas. Worker environmental awareness program is implemented such that impacts on giant garter snake are minimized. A qualified biologist completes preconstruction survey to confirm no giant garter snakes are present above ground in the construction area before ground disturbance begins. Biological monitoring is conducted to ensure avoidance and minimization measures are properly implemented. Temporarily disturbed areas are</p>	

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	<p>underground burrow or is otherwise stationary within the construction area, construction activities shall not begin or shall cease immediately in the reach where the snake is present, the biological monitor shall be notified immediately, and appropriate actions shall be taken to minimize potential for harm of the snake.</p> <p>8. After completion of construction activities, all temporary flagging, fencing, and/or barriers shall be removed from the project site. All disturbed soil surfaces shall be revegetated during the same construction season that disturbance occurs. Levee slopes, stability berms, fill areas, and other uplands disturbed during project activities shall be hydroseeded with a quick-growing and sterile mix of at least 30% locally native grass and forb seeds.</p> <p>9. TRLIA shall coordinate with USFWS and CDFW to develop and implement an appropriate mitigation strategy to compensate for habitat loss and potential take of giant garter snake. Mitigation would likely include purchasing created giant garter snake habitat at a USFWS- and CDFW-approved mitigation bank (e.g., Sutter Basin Conservation Bank). Appropriate mitigation ratios shall be developed during consultation with USFWS and CDFW but are anticipated to be based on 3 acres of mitigation habitat for every 1 acre of habitat permanently lost and/or 1 acre of mitigation habitat for every 1 acre of waterside habitat that is disturbed. Mitigation habitat shall include aquatic and upland components at a ratio of 2 acres of upland for each acre of aquatic. TRLIA shall obtain incidental take authorization if deemed necessary by USFWS and/or CDFW.</p>				revegetated and purchase of mitigation credits is completed such that no net loss of giant garter snake habitat occurs.	
BIO-5	<p>Minimize Disturbance and Potential Loss of Active Nests of Special-Status Birds.</p> <p>TRLIA and its construction contractor(s) will implement the following measures to reduce potential effects on nesting special-status birds:</p> <p>1. Focused surveys for Swainson's hawk and other nesting raptors shall be conducted by a qualified biologist before on-site project activities begin. To the extent feasible, surveys shall follow guidelines provided in Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000).</p>	Before the start of construction activities and during construction	During activities identified under "Mitigation Measure"	TRLIA and its construction contractor(s)	A qualified biologist completes preconstruction surveys and verifies absence of active nests, or if active nests are located, protective buffers are established and monitoring is conducted to ensure	

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	<p>A minimum of one survey shall be conducted no more than 14 days before project activities begin. Surveys for Swainson's hawk nests shall include all accessible areas of suitable nesting habitat located within 0.25 mile of areas subject to project disturbance, and surveys for other raptors shall include accessible suitable nesting habitat within 500 feet of project disturbance.</p> <p>2. If active raptor nests are found, appropriate buffers shall be established and maintained around the nest sites to avoid nest failure resulting from project activities. The appropriate size and shape of the buffers shall be determined by a qualified biologist and may vary depending on the species, nest location, nest stage, and construction activity. The buffers may be adjusted if a qualified biologist determines that such an adjustment would not be likely to adversely affect the nest. Monitoring shall be conducted to confirm that project activity is not resulting in detectable adverse effects on nesting birds or their young. No project activity shall begin within the buffer areas until a qualified biologist has determined that the young have fledged or the nest site is otherwise no longer in use.</p> <p>3. Surveys for the colonially nesting tricolored blackbird shall include suitable habitat within up to 1,000 feet of areas subject to project disturbance, depending on the potential extent of indirect impact. Surveys for loggerhead shrike and song sparrow shall include suitable habitat within up to 200 feet of the disturbance areas, depending on the species and potential for impact. Surveys shall be conducted within 10 days before on-site project activities begin in a given area during the migratory bird nesting season (March 1-August 31).</p> <p>4. If any active nests of tricolored blackbird, loggerhead shrike, or song sparrow are observed, or behaviors indicating the presence of active nests are observed, appropriate buffers around the nest sites shall be determined by a qualified biologist and maintained to avoid nest failure resulting from project activities. The size of the buffer shall depend on the species, nest location, nest stage, and specific construction activities to be performed while the nest is active. The buffers may be adjusted if a qualified biologist determines that such an adjustment would not be likely to adversely affect the nest. If buffers are adjusted, monitoring shall</p>				construction activities do no cause nest failure.	

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	be conducted to confirm that project activity is not resulting in detectable adverse effects on nesting birds or their young. No project activity shall begin within the buffer areas until a qualified biologist has determined that the young have fledged or the nest site is otherwise no longer in use.					
BIO-6	<p>Minimize Potential for Indirect Impacts on and Compensate for Fill of Waters of the United States.</p> <p>TRLIA and its construction contractor(s) will implement the following measures to reduce potential effects on federally protected wetlands to “no net loss”:</p> <ol style="list-style-type: none"> 1. Before on-site construction activities begin, the construction area boundaries shall be fenced to clearly delineate the extent of project activities. Silt fencing shall be installed along the construction area boundaries and access routes on the waterside of the levee and shall be used to delineate the boundaries of the landside construction area and the haul route to Reach 2B where seasonal wetlands are present adjacent to the project site. 2. A Section 404 permit for fill of seasonal wetlands along the landside of the levee and Section 401 certification shall be obtained before any groundbreaking activity begins within 50 feet of, or fill or dredged material is discharged into, any wetland or other water of the United States. All requirements for any permits obtained shall be fulfilled in the time frames required by the permits. 3. Permanent fill shall be compensated on a "no-net-loss" basis. The specific acreages, locations, and methods used for such replacement or restoration shall be agreeable to U.S. Army Corps of Engineers (USACE) and the Central Valley Regional Water Quality Control Board (RWQCB) (depending on agency jurisdiction), as determined during the Section 404 and Section 401 permitting processes, respectively. Compensation for loss of seasonal wetlands is anticipated to be partially fulfilled through the purchase of vernal pool credits at a mitigation bank to compensate for loss of vernal pool crustacean habitat, upon USACE approval. Any additional mitigation requirement would likely be fulfilled through purchase of seasonal wetland credits at a USACE-approved mitigation bank (e.g., Colusa Basin). 	Before the start of construction activities and during construction adjacent to seasonal wetlands	During activities identified under “Mitigation Measure”	TRLIA and its construction contractor(s)	Fencing is installed and maintained throughout project construction to protect waters of the United States adjacent to construction areas and haul routes. Authorization for fill of seasonal wetland habitat is obtained, and compensation for permanent fill of waters of the United States is provided such that no net loss of waters of the United States occurs.	

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Cultural Resources						
CUL-1	<p>Avoid Potential Effects on Previously Undiscovered Archaeological Resources.</p> <p>To minimize the potential for destruction of or damage to previously undiscovered archaeological and Tribal Cultural Resources and to identify any such resources at the earliest possible time during project-related earthmoving activities, TRLIA and its construction contractor(s) will implement the following measures:</p> <ol style="list-style-type: none"> 1. Paid Native American Monitors from culturally affiliated Native American Tribes will be invited to monitor the vegetation grubbing, stripping, grading, or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American Representatives from cultural affiliated Native American Tribes act as a representative of their Tribal government and shall be consulted before any cultural studies or ground-disturbing activities begin. 2. Native American Representatives and Native American Monitors have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted, or slowed if such sites or objects are identified within the direct impact area; however, only a Native American Representative can recommend appropriate treatment of such sites or objects. 3. A consultant and construction worker cultural resources awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes. The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program will include relevant information regarding sensitive archaeological resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the 	Before the start of construction activities, during construction, and following discovery of cultural resources	Throughout all ground-disturbing construction activities	TRLIA and its construction contractor(s)	Native American Monitors are provided to monitor construction such that cultural resources are identified and protected and appropriate treatment is determined. Worker cultural resources awareness program is implemented such that impacts on cultural resources are minimized. Inadvertent discovery plan is prepared and implemented, in consultation with Native American Representatives and Monitors, such that cultural resources discovered during construction are delineated and recorded. Resources are preserved in place or, if avoidance is not possible, a Treatment Plan is prepared and implemented, in consultation with	

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	<p>potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.</p> <p>4. TRLIA will include a construction-related inadvertent discovery plan in the construction contractor’s contract conditions, which must be finalized and approved before ground-disturbing construction activities, including excavation or fill, begin. The construction-related inadvertent discovery plan will require the construction contractor to take the following actions if cultural resources such as bone, shell, artifacts, human remains, historic period structural features, architectural elements, bottles, ceramics, bricks, etc. are discovered after ground-disturbing construction activities begin:</p> <p>a. If potential archaeological resources cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists, or other Project personnel during construction activities, work will cease in the immediate vicinity of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from an interested Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. These recommendations will be documented in the project record. For any recommendations made by interested Native American Tribes which are not implemented, a justification for why the recommendation was not followed will be provided in the project record.</p> <p>b. No construction activities will occur within 100 feet of an area under a stop work order. TRLIA will honor all reasonable requests by a Native American Monitor from interested Native American Tribes to stop work in a specified area for 48 hours,</p>				<p>Native American Representatives and Monitors, such that resources are treated with dignity and respect.</p> <p>Following project completion, a report is prepared, in consultation with Native American Representatives and Monitors, to document any cultural resources discovered during project implementation, treatment of the resources, and recommendations for future management.</p>	

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	<p>or until Native American Representatives have provided a reasonable path for work to resume, whichever occurs first.</p> <p>c. Following a finding that the discovery represents a potential historical or cultural resource, an archaeologist who meets the Secretary of Interior’s Standards for a Professional Archaeologist will delineate the resource according to industry-standard methods, taking into consideration recommendations and findings of Native American Representatives or Monitors from interested Native American Tribes. Recordation of Native American resources will be conducted in a respectful manner consistent with the behaviors identified by the Native American Monitor. The delineation will identify and map the full extent of the site. The site boundary will be recorded using GPS and the site boundary will be flagged to include a 100-foot buffer.</p> <p>5. Avoidance and preservation in place is the preferred manner of mitigating impacts to a cultural resource and may be accomplished by several means, including:</p> <p>a. Planning construction to avoid archaeological sites; incorporating sites within parks, green-space, or other open space; covering archaeological sites; deeding a site to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity. Recommendations for avoidance of cultural resources will be reviewed by TRLIA, interested Native American Tribes, and the appropriate agencies, in light of factors such as costs, logistics, feasibility, design, technology, and social, cultural, and environmental considerations and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the project area to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources, or modification or realignment to avoid highly significant features within a cultural resource. Native American Representatives from interested Native American Tribes will be allowed to review and comment on these analyses and shall have the opportunity to meet with TRLIA and its</p>					

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	<p>representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.</p> <p>b. If the resource can be avoided, the construction contractor(s), with paid Native American Monitors from culturally affiliated Native American Tribes present, will install protective fencing outside the site boundary, including a buffer area, before construction restarts. The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining phases of construction. The area will be demarcated as an “Environmentally Sensitive Area.” Native American Representatives from interested Native American Tribes and TRLIA will also consult to develop measures for long term management of the resource and routine operation and maintenance within culturally sensitive areas that retain resource integrity, including tribal cultural integrity, and including archaeological material, Traditional Cultural Properties, and cultural landscapes, in accordance with state and federal guidance including National Register Bulletin 30 (Guidelines for Evaluating and Documenting Rural Historic Landscapes), Bulletin 36 (Guidelines for Evaluating and Registering Archaeological Properties), and Bulletin 38 (Guidelines for Evaluating and Documenting Traditional Cultural Properties); National Park Service Preservation Brief 36 (Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes) and using the Advisory Council on Historic Preservation (ACHP) Native American Traditional Cultural Landscapes Action Plan for further guidance. Use of temporary and permanent forms of protective fencing will be determined in consultation with Native American Representatives from interested Native American Tribes.</p> <p>c. If preservation in place using appropriate covering or capping is the selected approach, the construction contractor(s) and maintenance personnel will install geotechnical fabric as a protective cover to the surface of the resource and then cap or cover the resource with a layer of local or certified clean soil.</p>					

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	<p>A copy of the clean soil certificate will be provided to interested Native American Tribes before a resource is capped or covered. The layer of soil will be thick enough that construction activities will not penetrate the protective cap or otherwise disturb the resource. An archaeologist who meets the Secretary of Interior’s Standards for a Professional Archaeologist and a Native American Monitor must be present during installation of any protective cover and capping of a resource. Native American Representatives and Monitors from interested Native American Tribes will also be invited to attend the installation and capping. Both temporary and permanent forms of resource capping will be determined in consultation with interested Native Americans. The limits of the area to be capped will be demarcated in the field by a Native American Monitor in consultation with a TRLIA representative and cultural resources specialists.</p> <p>6. If avoidance is infeasible, a Treatment Plan that identifies how identified properties that have been determined to be eligible for the CRHR or NRHP will be treated under CEQA shall be prepared and implemented in consultation with TRLIA and Native American Representatives from culturally affiliated Native American Tribes (if the resources are prehistoric or Native American in nature). In all cases, treatment will be carried out with dignity and respect. Interested Native American Tribes will be consulted on the research approach, methods and whether burial or data recovery or alternate mitigation is culturally-appropriate for the find. Alternative mitigation will be considered for cultural resources instead of burial and archaeological data recovery, curation, testing, and analysis. Work may proceed on other parts of the project site while treatment is being carried out, to the extent it does not interfere with respectful treatment. In the formulation of any Treatment Plan, the following considerations shall be made:</p> <p>a. Concerning scientific handling, testing, or field or laboratory analysis of archaeological sites and materials, TRLIA will consult with interested Native American Tribes and USACE to identify an acceptable procedure. TRLIA will assume for the purposes of this project that NHPA Section 106 consultation</p>					

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	<p>will be approached in a manner consistent with the Advisory Council on Historic Preservation letter dated March 31, 2015, regarding resolution of adverse effects in the Feather River West Levee Project matter. However, TRLIA is not the lead agency for Section 106 compliance. TRLIA, as the lead CEQA agency, will not require scientific handling, testing, or field or laboratory analysis, and will consider various types of mitigation including non-traditional approaches to treatment and will recognize the state policy in PRC Section 5097.991 that Native American remains and grave goods shall be repatriated.</p> <p>b. TRLIA and the MLD will implement the Burial Avoidance and Recovery Plan if human remains or burial objects are observed during construction. If human remains are discovered during any phase of the project, TRLIA and the contractors will coordinate with the county coroner and Native American Heritage Council (NAHC) to make the determinations and perform the management steps prescribed in California Health and Safety Code Section 7050.5 and California PRC Section 5097.98.</p> <p>c. For any treatment and plans, TRLIA will assume for the purposes of this project that NHPA Section 106 consultation will be approached in a manner consistent with the ACHP letter dated March 31, 2015, regarding resolution of adverse effects in the Feather River West Levee Project matter. However, TRLIA is not the lead agency for Section 106 compliance. TRLIA, as the lead CEQA agency, will not require scientific handling, testing, or field or laboratory analysis, and will consider various types of mitigation including non-traditional approaches to treatment and will recognize the state policy in PRC Section 5097.991 that Native American remains and grave goods shall be repatriated.</p> <p>7. Following completion of major construction activities, TRLIA and its consultant, in consultation with Native American Representatives from culturally affiliated Native American Tribes, will prepare a report that documents what, if any, cultural resources or human remains were discovered during project implementation, how impacts to each resource (whether</p>					

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	<p>discovered during construction or during inventory and consultation) were avoided or what treatment was instituted, the condition of each resource after project implementation, recommendations for how additional impacts can be avoided, and recommendations for management of each resource. Interested Native American Tribes will be provided reasonable time to review and comment on the draft and draft final confidential report. Any comments made by interested Native American Tribes will be documented in the project record, and recommended revisions will be considered for inclusion in the final reports. For any recommendations made by interested Native American Tribes which are not incorporated into the report, a justification for why the recommendation was not followed will be provided in the report.</p> <p>a. Interested Native American Tribes will be provided reasonable time to review and comment on the draft and draft final reports. Any comments made by interested Native American Tribes will be documented in the project record, and recommended revisions will be considered for inclusion in the final reports. For any recommendations made by culturally affiliated Native American Tribes which are not incorporated into the report, a justification for why the recommendation was not followed will be provided in the report. Records of all Native American consultation conducted under CEQA will be confidentially provided to the lead Federal agency responsible for compliance with NEPA and Section 106 of the NHPA.</p> <p>b. Should any Native American cultural resources be encountered, resource documentation will take into consideration recommendations and comments made by culturally affiliated Native American Tribes. These comments and recommendations will be documented in the project reports and in the resource records. For any recommendations made by culturally affiliated Native American Tribes which are not adopted by TRLIA, a justification for why the recommendation was not followed will be provided in the report.</p> <p>c. TRLIA or a TRLIA representative may request additional information, or notify the appropriate interested Native</p>					

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	American Tribe, if they disagree with identification, recommendations or actions made by a Native American Representative or Monitor from an interested Native American Tribe. Similarly a Native American Representative or Monitor from an interested Native American Tribe may notify or request additional information from TRLIA if they disagree with identification, recommendations, or actions made by TRLIA or one of its representatives.					
CUL-2	<p>Avoid Potential Effects on Previously Undiscovered Paleontological Resources.</p> <p>To minimize the potential for destruction of or damage to potentially unique, scientifically important paleontological resources during project-related earthmoving activities, TRLIA and its construction contractor(s) will implement the following measures:</p> <ol style="list-style-type: none"> 1. Before the start of any project-related earthmoving activities, TRLIA shall retain a qualified archaeologist or paleontologist to train all construction personnel involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered. 2. If paleontological resources are discovered during earthmoving activities, the construction crew shall notify TRLIA and shall immediately cease work in the vicinity of the find. TRLIA shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with Society of Vertebrate Paleontology guidelines (1996). The recovery plan may include but is not limited to a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by TRLIA to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered. 	Before the start of construction activities and during construction	Throughout all ground-disturbing construction activities	TRLIA and its construction contractor(s)	Worker environmental awareness program is implemented such that impacts to important paleontological resources are minimized. Finds of paleontological resources are reported and protected until evaluated by a paleontologist. If important paleontological resources are found, a recovery plan is prepared and implemented.	

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CUL-3	<p>Avoid Potential Effects on Undiscovered Burials.</p> <p>To minimize the potential for destruction of or damage to undiscovered burials during project-related earthmoving activities, TRLIA and its construction contractor(s) will implement the following measures:</p> <ol style="list-style-type: none"> 1. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, all ground-disturbing work potentially damaging excavation in the area of the burial and a 100-foot radius shall halt and the Yuba County Coroner shall be notified immediately. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The NAHC shall designate a Most Likely Descendant for the human remains. After the coroner’s findings have been made, an archaeologist meeting the <i>Secretary of the Interior’s Professional Standards for Archaeologists</i> and the NAHC-designated Most Likely Descendant shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities of Yuba County for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.9. 2. Native American human remains, associated grave goods, and items associated with Native American human remains that are subject to California PRC Section 5097.98 will not be subjected to scientific analysis, handling, testing or field or laboratory analysis without written consent from the Most Likely Descendant. If human remains are present, treatment shall conform to the requirements of state law under California Health and Safety Code Section 7050.5 and PRC Section 5097.87, unless the discovery occurs on federal land. TRLIA agrees to comply with other related state laws, including PRC Section 5097.9. 	During construction activities	Throughout all ground-disturbing construction activities	TRLIA and its construction contractor(s)	Finds of potential human remains are reported and protected until evaluated by the Yuba County Coroner and NAHC. Remains are treated or disposed of in accordance with direction received from the Yuba County Coroner, NAHC, and Native American Representatives.	

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Geology, Soils, and Geomorphology						
GEO-1	Implement Mitigation Measure HYD-1, “Prepare and Implement a Storm Water Pollution Prevention Plan and Associated Best Management Practices.”(See Mitigation Measure HYD-1 below.)					
Greenhouse Gas Emissions						
GHG-1	Implement Mitigation Measure AQ-1, “Implement Feather River Air Quality Management District Standard Mitigation Measures.” (See Mitigation Measure AQ-1 above.)					
GHG-2	Implement Mitigation Measure AQ-2, “Implement Feather River Air Quality Management District Best Available Mitigation Measures for Construction Phase.” (See Mitigation Measure AQ-2 above.)					
GHG-3	Implement Mitigation Measure AQ-3, “Use Tier 4 Equipment for All Construction Activities.” (See Mitigation Measure AQ-3 above.)					
GHG-4	Purchase Carbon Offsets to Reduce Construction Emissions. If the proposed action’s annual construction-related greenhouse gas (GHG) emissions would exceed the applicable, surrogate Sacramento Metropolitan Air Quality Management District threshold of significance (1,100 metric tons of carbon dioxide equivalent per year), TRLIA shall purchase carbon offset credits from an Air Resources Board-approved carbon registry to offset the construction-related greenhouse gas emissions to a less-than-significant level. If the proposed action is implemented over two construction seasons, construction-related GHG emissions would be less than the applicable threshold and no mitigation is required.	Before the start of construction activities	Before the start of construction activities	TRLIA	Carbon offset fees are paid such that net GHG emissions are reduced below 1,100 MT CO ₂ e/year.	
Hazards and Hazardous Materials						
HAZ-1	Implement Mitigation Measure HYD-1, “Prepare and Implement a Storm Water Pollution Prevention Plan and Associated Best Management Practices.” (See Mitigation Measure HYD-1 below.)					

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Hydrology and Water Quality						
HYD-1	<p>Prepare and Implement a Storm Water Pollution Prevention Plan and Associated Best Management Practices.</p> <p>TRLIA and its construction contractor(s) will implement the following measures to protect water quality:</p> <ol style="list-style-type: none"> 1. During the development of grading permits and improvement plans, TRLIA will consult with Yuba County and the Central Valley RWQCB. The purpose of the consultation will be to acquire the regulatory approvals necessary to obtain a statewide National Pollutant Discharge Elimination System stormwater permit for general construction activity from the State Water Resources Control Board. 2. TRLIA or its construction contractor shall prepare and implement the appropriate storm water pollution prevention plan (SWPPP) to prevent and control pollution and to minimize and control runoff and erosion. The SWPPP will identify the activities that may cause pollutant discharge (including sediment) during storms and best management practices (BMPs) that will be employed to control pollutant discharge. Construction techniques that will be identified and implemented to reduce the potential for runoff may include minimizing site disturbance, controlling water flow over the construction site, stabilizing bare soil, and ensuring proper site cleanup. In addition, the SWPPP will include an erosion and sediment control plan and BMPs that specify the erosion and sedimentation control measures to be implemented, which may include silt fences, trench plugs, terraces, water bars, and seeding and mulching. The SWPPP also will include a spill prevention, control, and countermeasure plan and applicable hazardous materials business plans, and will identify the types of materials used for equipment operation (including fuel and hydraulic fluids), and measures to prevent and materials available to clean up hazardous material and waste spills. The SWPPP will also identify emergency procedures for responding to spills. 3. BMPs presented in either document shall be clearly identified and maintained in good working condition, with sufficient backup stock on-site during all site work and construction activities. 	Before and during ground-disturbing activities	During activities identified under "Mitigation Measure"	TRLIA and its construction contractor(s)	Yuba County and Central Valley RWQCB waste discharge requirements are implemented, and BMPs are implemented and maintained such that contaminants are isolated from drainages to the extent practical.	

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	4. The construction contractor will retain a copy of the approved SWPPP on the construction site and modify it as necessary to suit specific site conditions through amendments approved by the Central Valley RWQCB.					
Noise						
NOI-1	<p>Employ Noise-Reducing Construction Measures for Construction-Related Traffic.</p> <p>TRLIA and its construction contractor(s) will implement the following measures to reduce potential impacts related to construction-related traffic noise:</p> <ol style="list-style-type: none"> 1. Establish and enforce construction site and haul road speed limits. 2. Route construction-related truck traffic along roadways that will cause the least disturbance to residents. 3. Use high-grade engine exhaust silencers and engine-casing sound insulation. <p>Alternatively, potential impacts would be adequately reduced by using only the borrow sites located in Yuba City, not the Marysville borrow site.</p>	During construction activities	Throughout all construction activities	TRLIA and its construction contractor(s)	Measures are implemented such that noise in residential areas from heavy-loaded trucks is reduced to the extent feasible and practical.	
NOI-2	<p>Employ Noise-Reducing Construction Measures for Stationary Construction Equipment.</p> <p>TRLIA and its construction contractor(s) will implement the following measures to reduce potential impacts related to construction-related increases in exterior ambient noise levels:</p> <ol style="list-style-type: none"> 1. Provide written notification to the potentially affected residents before construction, identifying the type, duration, and frequency of construction activities within 1,000 feet of residences. Notification materials shall also identify a mechanism for residents to register complaints with the appropriate jurisdiction if construction noise levels are overly intrusive or construction occurs outside the permitted hours. 2. Provide written notification of heavy construction activities to all noise-sensitive receptors located adjacent to the project site and heavy construction operations. Notification shall include anticipated dates and hours during which construction activities 	During construction activities	Throughout all construction activities	TRLIA and its construction contractor(s)	Measures are implemented such that exterior ambient noise levels at noise-sensitive receptors adjacent to the project site are reduced to the extent feasible and practical.	

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	<p>are anticipated to occur and contact information, including a daytime telephone number, for the project representative to be contacted in the event that noise levels are deemed excessive. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) shall be included in the notification.</p> <ol style="list-style-type: none"> 3. Prohibit the start-up of machines or equipment before 7 a.m. and after 7 p.m. Monday through Saturday and before 9 a.m. and past 6 p.m. on Sunday (except during cutoff wall construction). 4. Prohibit use of materials and equipment deliveries before 7 a.m. and after 7 p.m., Monday through Saturday and before 9 a.m. and past 6 p.m. on Sunday (except during cutoff wall construction). 5. To the extent practicable, construction activities shall be limited to the hours of 7 a.m. to 10 p.m. when operations occur within 500 feet of a residential or other noise-sensitive land use. 6. Construction equipment travel on the levee crown, the land side of the levee, landside staging areas, and public roadways shall be minimized and arranged to minimize disturbance to occupied residences (i.e., between 7 a.m. and 10 p.m.) to the extent possible. During cutoff wall construction, TRLIA shall work with the construction contractor and nearby residents to minimize disturbance to occupied residences. 7. Minimize idling times of equipment either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes. 8. Use electrically powered equipment instead of internal combustion equipment where practicable and feasible. 9. Restrict the use of bells, whistles, alarms, and horns to safety-warning purposes. 10. Equip all construction equipment with noise-reduction devices such as mufflers to minimize construction noise and operate all internal combustion engines with exhaust and intake silencers. 11. To the extent feasible, the simultaneous operation of multiple construction equipment within 50 feet of residences shall be limited. 					

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	<p>12. Locate fixed construction equipment (e.g., compressors and generators), construction staging and stockpiling areas, and construction vehicle routes as far as feasible from noise-sensitive receptors.</p> <p>13. Use noise-attenuating buffers such as structures, truck trailers, or soil piles between noise generation sources and sensitive receptors, where feasible and particularly in locations subject to prolonged construction.</p> <p>14. Designate a disturbance coordinator and conspicuously post this person's number around the project sites, in adjacent public spaces, and in construction notifications. The disturbance coordinator shall be responsible for responding to any complaints about construction activities. The disturbance coordinator shall receive all public complaints about construction disturbances and be responsible for determining the cause of the complaint and implementation of feasible measures to be taken to alleviate the problem.</p>					
Transportation and Circulation						
TR-1	<p>Prepare and Implement a Traffic Control and Road Maintenance Plan.</p> <p>Before the start of project-related construction activities, TRLIA shall prepare and implement a plan to manage expected construction-related traffic to the extent feasible, and to avoid and minimize potential traffic congestion on local roadways during construction. The traffic control plan shall outline the phasing of activities and the use of specific routes to and from the work site, staging area, and borrow site locations to minimize the daily amount of traffic on individual roadways. The items listed below shall be included as terms of the construction contracts and shall be implemented by the construction contractor(s).</p> <p>1. Provide a site-specific access plan specifying the roadways on which construction workers are allowed to travel to access the staging areas, work sites, and borrow areas. To the maximum extent feasible, levee roadways shall be used instead of surface streets for access to staging areas, work sites, and borrow areas.</p>	Before the start of construction activities and during construction	During activities identified under "Mitigation Measure"	TRLIA and its construction contractor(s)	Traffic Control and Road Maintenance Plan is prepared and implemented such that traffic impacts are minimized to the extent feasible and practical.	

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	<ol style="list-style-type: none"> 2. Prohibit construction workers from accessing work sites, staging areas, or borrow sites from any locations other than those specified in the plan. 3. Maintain two-way traffic flow on arterial roadways accessing active work areas to accommodate construction of project facilities, unless otherwise allowed by the appropriate jurisdiction. 4. Schedule haul truck trips outside of peak commute periods to minimize effects of project construction on traffic congestion, to the extent feasible. 5. Provide 72-hour advance notification if access to driveways or private roads shall be affected. Limit effects on driveway and private roadway access to working hours and provide uninterrupted access to driveways and private roads during non-work hours. If necessary, use steel plates, temporary backfill, or another accepted measure to provide access. 6. Provide clearly marked pedestrian detours to address any sidewalk or pedestrian walkway closures. 7. Provide clearly marked bicycle detours to address closures of bicycle routes or avoid otherwise compromising bicyclist safety. 8. Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety, particularly near schools. 9. Queue trucks only in areas and at times allowed by the appropriate jurisdiction. 10. Post warnings about the potential presence of slow-moving vehicles. 11. Use traffic control personnel when appropriate. 12. Place and maintain barriers and install traffic control devices necessary for safety, as specified in Caltrans’s Manual of Traffic Controls for Construction and Maintenance Works Zones and in accordance with County requirements. 13. Comply with Caltrans requirements by submitting the traffic control and road maintenance plan to Caltrans for review to cover points of access from the state highway system (State Route [SR] 70 and SR 20) for haul trucks and other construction equipment. 					

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	<p>The traffic control and road maintenance plan to Caltrans shall include the point of access from SR 70 to the levee, at the north end of the project site.</p> <p>14. Assess and repair any damage to roadways and paved bicycle/pedestrian paths that are used during construction, and repair all project-related potholes, fractures, or other damages. In some cases, bike paths may need to be restored to pre-project conditions.</p> <p>15. Limit all operations or expeditiously remove the accumulation of project-generated mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The construction contractor shall sweep the paved roadways (water sweeper with reclaimed water recommended) at the end of each day if substantial volumes of soil material have been carried onto adjacent paved, public roads from the project sites.</p>					
TR-2	<p>Provide Pre-notification of Road Closures and Detours to Emergency Service Providers and Maintain Emergency Access.</p> <p>TRLIA shall provide public notice by appropriate means, such as physical signage, Internet postings, letters, or telephone calls, to emergency service providers in the project study area at least 72 hours before road closures and detours.</p> <ol style="list-style-type: none"> 1. Provide clear emergency access to all existing buildings and facilities at all times. 2. Maintain routes for passage of emergency response vehicles through roadways affected by construction activities. 	During construction activities	During activities identified under "Mitigation Measure"	TRLIA and its primary construction contractor(s)	Notice of road closures and detours is provided and emergency access and routes are maintained to prevent disrupting emergency response.	
TR-3	<p>Provide Advance Notice of Bicycle and Pedestrian Facility Closures and Detour Routes.</p> <p>TRLIA and its construction contractor(s) will implement the following measures to improve access to and provide for the safety of pedestrian and bicycle facilities during construction.</p> <ol style="list-style-type: none"> 1. Coordinate with and provide notice to the appropriate county departments at least 10 days before the start of construction activities that would require closure and/or detours of pedestrian and bicycle routes. 	During construction activities	During activities identified under "Mitigation Measure"	TRLIA and its primary construction contractor(s)	Notice is provided, signage is installed and maintained, clearly marked detours are provided, and trails and paths are reconstructed to minimize impacts to pedestrians and cyclists.	

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	2. Provide clearly marked pedestrian detours to address any sidewalk or pedestrian walkway closures or if pedestrian safety would be otherwise compromised. 3. Provide clearly marked bicycle detours to address bicycle route closure or avoid otherwise compromising bicyclist safety. 4. Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety. 5. Locate all stationary equipment as far away as possible from areas used by vehicles, bicyclists, and pedestrians where feasible. 6. Post alternative bicycle or pedestrian routes and facilities that can be used during construction activities showing when detours or route closures are required at least 10 days before the start of construction activities. 7. Reconstruct pedestrian/bicycle trails and paths to pre-project conditions at the completion of project-related construction activities.					