

CHAPTER 7

MITIGATION MONITORING AND REPORTING PLAN

7.1 STATUTORY REQUIREMENT

When a Lead Agency makes findings on significant environmental effects identified in an EIR, the agency must also adopt a “reporting or monitoring program for the changes to the project which it has adopted or made a condition of approval in order to mitigate or avoid significant effects on the environment” (Public Resources Code §21081.6(a) and CEQA *Guidelines* §15091(d) and §15097). The Mitigation Monitoring and Reporting Plan (MMRP) is implemented to ensure that the mitigation measures and project revisions identified in the EIR are implemented. Therefore, the MMRP must include all changes in the proposed project either adopted by the project proponent or made conditions of approval by the Lead or Responsible Agency.

7.2 ADMINISTRATION OF THE MITIGATION MONITORING AND REPORTING PLAN

The County of San Luis Obispo is the Lead Agency responsible for the adoption of the MMRP. According to CEQA *Guidelines* §15097(a), a public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity that accepts the delegation. However, until mitigation measures have been completed, the Lead Agency remains responsible for ensuring that the implementation of the measure occurs in accordance with the program.

7.3 MITIGATION MEASURES AND MONITORING PLAN

Table 7-1 on the following pages is structured to enable quick reference to mitigation measures and the associated monitoring plan based on the environmental resource. The numbering of mitigation measures correlates with numbering of measures founding the analysis chapter of this EIR (refer to Chapter 4).

Table7-1. Mitigation Monitoring and Reporting Plan

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
AGRICULTURAL RESOURCES					
AGR/mm-1	Prior to completion of the construction plan for Alternative 3a, 3c and the UPRR bridge raise, the Flood Control and Water Conservation District (District) shall coordinate with local agriculturalists to refine the construction easement areas to existing agricultural roads and other areas not likely to be in production, to the maximum extent feasible. Construction fencing shall be installed along the easement to reduce the potential for disturbance outside of the construction easement area, as appropriate.	Coordinate with local agriculturalists to refine the construction easement areas to existing agricultural roads and other areas not likely to be in production, to the maximum extent feasible	San Luis Obispo County Flood Control and Water Conservation District (District)	Install fencing.	Prior to completion of the construction plan for Alternative 3a, 3c and the UPRR bridge raise
AGR/mm-2	<p>Prior to completion of the final construction plans, the permanent easement area of the Los Berros Creek channel shall be limited to the existing access road areas, to the extent feasible. <u>Further, Construction access and stockpiling locations shall be located within public right of ways to the maximum extent feasible.</u></p> <p><u>Permanent conversion of land available for crop production shall be minimized by allowing the use of identified portions of the easement for agricultural roads to the degree possible and appropriate while still ensuring the functionality of the levee. The allowance for and any limitations to locating agricultural roads on the top or outside portion of the levee should be noted in the easement agreement. The allowance to cross through the easement and levee channel should also be noted in those areas where such a crossing is to be retained.</u></p>	Limit permanent easement area to existing access roads	District	Review construction plans.	Prior to completion of the final construction plans

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AGR/mm-3	<p><u>Any imported soils or levee fill/aggregate should be stockpiled in a manner to avoid impacts to adjoining crops. This includes maintaining adequate moisture to avoid dust impacts to nearby crops, the placement of a geotextile membrane in order to prevent rock, construction materials, or imported soil from becoming mixed with the native soils, and the removal of all fill material and the geotextile membrane upon completion of the project, coupled with the restoration of the native soils' previous soil texture, available water holding capacity, and soil permeability in all areas of private agricultural land that are not part of the permanent floodway easement.</u></p> <p>Upon conclusion of the construction of Alternative 3a and 3c the District shall coordinate with local agriculturalists to determine if restoration (disking, fine grading) of the temporarily disturbed area is necessary. Costs of this restoration shall be considered during easement negotiations with landowners.</p>	Coordinate with local agriculturalists to determine if restoration (disking, fine grading) of the temporarily disturbed area is necessary	District	Provide verification at final inspection.	Upon conclusion of the construction of Alternative 3a and 3c
AGR/mm-4	Construction of the UPRR bridge improvement shall be focused within the UPRR right of way to the maximum extent feasible.	Focus UPRR improvements in the ROW	District	Upon submittal of plans	Prior to issuance of permits.

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AGR/mm-5	<p>Prior to completion of the final plans for the Alternative 3a, 3c and the UPRR bridge raise, the District shall coordinate with local agriculturalists, to address potential conflicts between the construction activities and agricultural operations. Issues such as the location of stockpiles and haul routes, hours of operation, and farm and construction crew safety and the location of critical agricultural improvements to be avoided shall be considered. The final plans shall identify haul routes, and include a diagram of critical agricultural improvements that shall be avoided during construction, including wells, and accessory structures. <u>Where the project results in the need to relocate existing water or associated electrical infrastructure, such measures should be completed prior to construction commencing in order to ensure the continuity of access to adequate irrigation supplies.</u></p>	<p>Coordinate with local agriculturalists, to address potential conflicts between the construction activities and agricultural operations.</p>	<p>District</p>	<p>Review final plans.</p>	<p>Prior to completion of the final plans for the Alternative 3a, 3c and the UPRR bridge raise.</p>
AGR/mm-6	<p><u>Prior to the issuance of grading permits for Alternative 3c, the District shall provide evidence that funds sufficient to, (1) purchase a farmland conservation easement, deed restriction, or other farmland conservation mechanism, and (2) to compensate for administrative costs incurred in the implementation of this measure have been provided to the California Farmland Conservancy Program or similar program, which will provide for the conservation of farmland impacted by Alternative 3c at a 1:1 ratio in San Luis Obispo County.</u></p>	<p><u>Provide evidence that funds have been provided to farmland conservation program.</u></p>	<p><u>District</u></p>	<p><u>Receive confirmation of funding from conservation program.</u></p>	<p><u>Prior to issuance of grading permits for Alternative 3c.</u></p>

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AIR QUALITY					
AQ/mm-1	<p>Prior to <u>issuance of construction permits for any project component, initiation of the initial sediment removal, construction of Alternative 3a, construction of Alternative 3c, and the UPRR bridge raise</u>, a Construction Activities Management Plan (CAMP) shall be submitted for review and approval by the SLOAPCD. <u>The CAMP shall evaluate the actual equipment that will be used and scheduling and overlapping of the various phases and compare the resulting impacts to the APCD air quality impact thresholds to determine if exceedances are expected and, if so, to define specific mitigation that will be implemented to reduce impacts below the thresholds.</u> The plan shall describe the construction schedule, equipment to be used, and identify the distances to disposal sites or from fill sites, as applicable. Based on those factors, if necessary, the SLOAPCD shall prescribe which Best Available Control Technology shall be incorporated into the CAMP. Applicable technologies <u>shall address GHG as well, and</u> may include:</p> <ol style="list-style-type: none"> a. Minimizing the number of large pieces of construction equipment operating during any given period. b. Regularly maintaining and properly tuning all construction equipment according to manufacturer’s specifications. c. Fueling all off-road and portable diesel powered equipment including, but not limited to: bulldozers, graders, cranes, loaders, scrapers, backhoes, generators, compressors, and auxiliary power units with 	Submit CAMP to SLOAPCD	District	Submit CAMP	Prior to initiation of the initial sediment removal, construction of Alternative 3a, construction of Alternative 3c, and the UPRR bridge raise.

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	<p>CARB motor vehicle diesel fuel.</p> <p>d. Using 1996 or newer heavy duty off road vehicles.</p> <p>e. Electrifying equipment where possible.</p> <p>f. Using Compressed Natural Gas (CNG), liquefied natural gas (LNG), bio-diesel, or propane for on site mobile equipment instead of diesel-powered equipment.</p> <p>g. Ensuring that on and off-road diesel equipment shall not be allowed to idle for more than five minutes.</p> <p>h. To the greatest extent practicable, using Purinox or similar NOX reducing agents diesel fuel.</p> <p>i. To the greatest extent feasible, installing catalytic reduction units on all heavy equipment performing this work.</p>				
AQ/mm-2	<p>To minimize the impacts of diesel emissions on sensitive receptors construction activities shall be limited as follows:</p> <p>a. Excavation shall occur from the southern levee (opposite existing residences) to the extent feasible;</p> <p>b. Stockpile locations and staging areas shall be located at least 1,000 feet from sensitive receptors to the extent feasible; and</p> <p><u>c. Haul routes that avoid sensitive receptors shall be considered to the extent feasible;</u></p> <p><u>d. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;</u></p> <p><u>e. Diesel idling within 1,000 feet of sensitive receptors is not permitted;</u></p>	Limit exposure by sensitive receptors.	District	Review of construction plans.	During construction activities.

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	<p>f. Use of alternative fueled equipment is recommended whenever possible;</p> <p>g. Signs that specify the no idling requirements must be posted and enforced at the active project locations; and,</p> <p>e.h. These toxic impact reductions for sensitive receptors shall be added to the CAMP as well.</p>				
AQ/mm-3	<p>Prior to construction of any of the project components requiring earthwork, the most current BMPs to reduce fugitive dust emissions shall be shown on all project plans and implemented during daily earth moving activities. Particulate matter shall be addressed in the CAMP as well. BMPs shall specifically address potential fugitive dust emissions which may affect adjacent agricultural operations.</p>	<p>Incorporate dust control BMPs during construction.</p>	<p>District</p>	<p>Review project plans.</p>	<p>Prior to construction of any of the project components requiring earthwork</p>
AQ/mm-4	<p>Prior to commencement of demolition activities the applicant shall:</p> <ol style="list-style-type: none"> Notify the APCD at least ten working days prior to commencement of any demolition activities; Conduct an asbestos survey by a Certified Asbestos Inspector; Use applicable disposal and removal requirements for any identified asbestos containing material; and Contact the SLOAPCD Enforcement Division prior to final approval of any demolition activity. 	<p>Coordinate demolition activities with APCD.</p>	<p>District</p>	<p>Submit asbestos survey to APCD</p>	<p>Prior to commencement of demolition activities</p>

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BIOLOGICAL RESOURCES					
BR/mm-1	Prior to implementation of any component of the WMP, the District shall obtain a Section 404 Permit from USACE, a Section 401 Water Quality Certification from RWQCB, a Coastal Development Permit from the CCC, and a Section 1602 Streambed Alteration Agreement from CDFG for project-related impacts that will occur in areas under the jurisdiction of these regulatory agencies.	Obtain a Section 404 Permit from USACE, a Section 401 Water Quality Certification from RWQCB, a Coastal Development Permit from the CCC, and a Section 1602 Streambed Alteration Agreement from CDFG.	District	Obtain permits.	Prior to implementation of any component of the WMP.
BR/mm-2	<p>Prior to construction, to mitigate for the permanent impacts the District shall develop a Mitigation Monitoring Plan (MMRP) in consultation with the appropriate regulatory agencies due to the known presence of sensitive habitats and jurisdictional wetlands/other waters within the project site. The MMRP shall include success criteria goals and a five-year monitoring schedule. A qualified biologist/botanist shall supervise site preparation, timing, species utilized, planting installation, maintenance, monitoring, and reporting of the revegetation/restoration efforts. The following measures shall be incorporated into the MMRP:</p> <p>a. Prior to construction, locations of wetlands to be avoided shall be flagged by a qualified biologist. The areas to be protected should be shown on all applicable construction plans. Prior to any vegetation or sediment removal, exclusionary fencing should be erected by the contractor at the boundaries of all construction areas to avoid equipment</p>	Develop a Mitigation Monitoring Plan (MMRP) in consultation with the appropriate regulatory agencies.	District	Submit MMRP.	Prior to construction.

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	<p>and human intrusion into adjacent habitats. The fencing should be maintained and remain in place throughout construction activities.</p> <p>b. Prior to construction, the District shall specify an on-site mitigation strategy (or combination of on-site and off-site) in the MMRP to mitigate for impacts to sensitive habitats which would be impacted. This plan should identify the following:</p> <ul style="list-style-type: none"> i. Suitable on-site mitigation locations (or off-site locations, if there is not enough suitable space along Arroyo Grande Creek) based on soil type, hydrologic conditions, and proximity to existing sensitive species populations; ii. Seed collection and cuttings/plantings requirements and protocol; iii. Soil seed bank conservation strategies; iv. Mitigation site preparation techniques; v. Seeding regimen; vi. Mitigation site maintenance schedule, including weed abatement strategies, erosion control monitoring, etc.; and, vii. Monitoring requirements. <p>c. The MMRP will be implemented after initial vegetation and sediment removal activities.</p>				
BR/mm-3	<p>Prior to initiation of WMP activities, the District shall retain qualified biological monitor(s) approved by all involved regulatory agencies to ensure compliance with mitigation measures pertaining to biological resources. Monitoring will occur throughout the length of initial</p>	<p>Retain qualified biological monitor(s) approved by all involved regulatory agencies.</p>	<p>District</p>	<p>Retain monitor.</p>	<p>Prior to initiation of WMP activities.</p>

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	vegetation and sediment removal and during supplemental vegetation and sediment removal, or as directed by the regulatory agencies.				
BR/mm-4	Prior to initial, and during subsequent management activities, the project site shall be clearly flagged or fenced so that the contractor is aware of the limits of allowable site access and disturbance.	Flag or fence limits of disturbance.	District	Observe flagging in field.	Prior to initial, and during subsequent management activities
BR/mm-5	Prior to initiation of WMP activities, the District shall prepare a Hazardous Materials (HAZMAT) Response Plan to allow for a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.	Prepare a Hazardous Materials (HAZMAT) Response Plan.	District	Prepare HAZMAT.	Prior to initiation of WMP activities.
BR/mm-6	Prior to initiation of WMP activities, if stream diversion/dewatering shall be necessary for any component of the project, the District shall prepare a Diversion and Dewatering plan. The form and function of all pumps used during the dewatering activities shall be checked by biological monitor(s) to ensure a dry work environment and minimize adverse effects to aquatic species and habitats.	Prepare a Diversion and Dewatering plan	District	Prepare plan.	Prior to initiation of WMP activities.
BR/mm-7	During implementation of the WMP, all equipment staging areas, construction-crew parking, and construction access routes shall be established in previously disturbed areas.	Establish construction staging, etc. in previously disturbed areas.	District	Review construction plans.	During implementation of the WMP.
BR/mm-8	During implementation of the WMP, the cleaning and refueling of equipment and vehicles shall occur only within a designated staging area and at least 65 ft (20 m) from	Cleaning and refueling of equipment and vehicles shall occur	District	Check vehicles regularly.	During implementation of the WMP.

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	wetlands, other waters, or other aquatic areas. This staging area shall conform to BMPs applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles shall be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills.	only within a designated staging area and at least 65 ft (20 m) from wetlands, other waters, or other aquatic areas			
BR/mm-9	During implementation of the WMP, all project-related hazardous materials spills within the project site shall be cleaned up immediately. Spill prevention and cleanup materials shall be on-site at all times during construction.	Hazardous materials spills within the project site shall be cleaned up immediately	District	In field documentation of spills by biological monitor.	During implementation of the WMP.
BR/mm-10	During implementation of the WMP, trash shall be contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.	Trash shall be contained, removed from the work site	District	Field observation.	During implementation of the WMP.
BR/mm-11	During implementation of the WMP, no pets shall be allowed on the construction site.	Prohibit pets onsite.	District	Field observation	During implementation of the WMP.
BR/mm-12	After diversion/dewatering (if necessary) has been completed, all material used for diversion/dewatering shall be removed from creek corridor under the supervision of the biological monitor(s) or qualified fisheries biologist.	Material used for diversion/dewatering shall be removed from creek corridor	District	Field observation by biological monitor.	During implementation of the WMP.
BR/mm-13	Following initial vegetation and sediment removal, areas of temporary disturbance shall be restored using topsoil salvage and hydroseeding with appropriate non-invasive herbaceous species for erosion control. Because native plant species are likely to be out-competed by non-native species, a ground-cover mix is recommended for impacted areas.	Temporary disturbance shall be restored using topsoil salvage and hydroseeding with appropriate non-invasive herbaceous species for erosion	District	Field observation by biological monitor.	Following initial vegetation and sediment removal.

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	Topsoil salvage methods and seed mixes shall be specified in the MMRP. Hydroseeded areas shall be monitored by a qualified restoration biologist and/or horticulturalist for viability and overall success, with additional recommendations as necessary.	control			
BR/mm-14	To reduce impacts of beaver dams on flood control in the Arroyo Grande Creek channel, coordinate with CDFG to implement beaver management as outlined in the WMP.	Coordinate with CDFG to implement beaver management as outlined in the WMP	District	Field observation.	Ongoing.
BR/mm-15	During construction or subsequent survey efforts, if marsh sandwort, Gambel's watercress, or other sensitive species are observed within the project corridor by biological monitor(s), areas with sensitive plant species will be fenced or marked for avoidance until coordination with regulatory agencies can be facilitated to obtain incidental take (if necessary) or mitigation can be developed to avoid, minimize, or offset impacts to sensitive plant species.	Areas with sensitive plant species will be fenced or marked for avoidance	District	Reporting by biological monitors.	During construction or subsequent survey efforts.
BR/mm-16	Prior to finalization of the Alternative 3a and/or 3c levee raise components of the project, a qualified biologist shall perform an updated full floristic survey of the proposed area of disturbance to identify sensitive species which could be impacted during construction.	Perform an updated full floristic survey of the proposed area of disturbance	District	Submittal of report.	Prior to finalization of the Alternative 3a and/or 3c levee raise components of the project.
BR/mm-17	If marsh sandwort, Gambel's watercress, or other sensitive species are observed within the area of disturbance the District the plans shall be redesigned to avoid these species to the extent feasible, and coordinate with regulatory agencies to facilitate to obtain incidental take (if	Redesigned to avoid sensitive plant species to the extent feasible.	District	Correspondence with agencies.	Ongoing.

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	necessary) or mitigation can be developed to avoid, minimize, or offset impacts to sensitive plant species.				
BR/mm-18	Prior to construction, the District shall coordinate with USACE via the Section 404 permitting process to acquire incidental take authorization from 1) USFWS through a FESA Section 7 Biological Opinion and Incidental Take Statement for tidewater goby; and, 2) NMFS through a FESA Section 7 Biological Opinion and Incidental Take Statement for steelhead.	Coordinate with USACE via the Section 404 permitting process to acquire incidental take authorization from 1) USFWS through a FESA Section 7 Biological Opinion and Incidental Take Statement for tidewater goby; and, 2) NMFS through a FESA Section 7 Biological Opinion and Incidental Take Statement for steelhead.	District	Correspondence with USACE. Receipt of permit.	Prior to construction.
BR/mm-19	Prior to construction, a component including a description of tidewater goby and south-central California coast steelhead, their ecology, legal status, and the need for conservation of these species shall be integrated into a worker environmental training program. All construction personnel conducting in-stream work shall participate in the training program conducted by a qualified biologist.	A description of tidewater goby and south-central California coast steelhead, their ecology, legal status, and the need for conservation of these species shall be integrated into a worker environmental training program.	District	Report from biological monitor.	Prior to construction

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BR/mm-20	If in-stream work is necessary, a qualified biologist shall be retained with experience in tidewater goby and steelhead biology and ecology, aquatic habitats, biological monitoring (including diversion/dewatering), and capturing, handling, and relocating fish species. During in-stream work, the biological monitor(s) shall continuously monitor placement and removal of any required stream diversions to capture stranded steelhead and other native fish species and relocate them to suitable habitat as appropriate. The biologist(s) shall capture native fish stranded as a result of diversion/dewatering and relocate them to suitable instream habitat immediately downstream of the work area. The biologist shall note the number of native observed in the affected area, the number of fish relocated, and the date and time of the collection and relocation.	Retain qualified biologist during dewatering activities.	District	Retention of biologist.	Ongoing.
BR/mm-21	During construction, non-native fish and other aquatic species shall be permanently removed from Arroyo Grande Creek when captured.	Remove non-native aquatic species when captured.	District	Reporting of biological monitors.	<i>During construction.</i>
BR/mm-22	During in-stream work, if pumps are incorporated to assist in temporarily dewatering the site, intakes shall be completely screened with no larger than 0.2 inch (five mm) wire mesh to prevent tidewater goby, steelhead, and other sensitive aquatic species from entering the pump system. Pumps shall release the additional water to a settling basin allowing the suspended sediment to settle out prior to re-entering the stream(s) outside of the isolated area. The form and function of all pumps used during the dewatering activities	Prevent sensitive wildlife from being affected by pumps.	District	Reporting of biological monitors.	<i>During in-stream work.</i>

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	shall be checked daily, at a minimum, by a qualified biological monitor to ensure a dry work environment and minimize adverse effects to aquatic species and habitats.				
BR/mm-23	During construction, the biological monitor shall monitor erosion and sediment controls to identify and correct any conditions that could adversely affect sensitive aquatic species or habitats. The biological monitor shall be granted the authority to halt work activity as necessary and to recommend measures to avoid/minimize adverse effects to steelhead and steelhead habitat.	Monitor erosion and sediment controls.	District	Reporting of biological monitors.	During construction
BR/mm-24	At least 15 days prior to the onset of activities, the District or project proponent shall submit the name(s) and credentials of biologists who would conduct activities specified in the following measures. No project activities shall begin until proponents have received written approval from the Service that the biologist(s) is qualified to conduct the work.	Submit the name(s) and credentials of biologists who would conduct activities specified in the following measures	District	Submit credentials	At least 15 days prior to the onset of activities.
BR/mm-25	A Service-approved biologist shall survey the work site two weeks before the onset of activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist shall contact the Service to determine if moving any of these life-stages is appropriate. In making this determination the Service shall consider if an appropriate relocation site exists. If the Service approves moving animals, the approved biologist shall be allowed sufficient time to move California red-legged frogs from the work site before work activities begin. Only Service-approved biologists shall participate in activities	Survey the work site for California red-legged frogs, tadpoles, or eggs.	District	Reporting of biological monitors and correspondence with agencies.	Two weeks before the onset of activities.

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Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	associated with the capture, handling, and monitoring of California red-legged frogs.				
BR/mm-26	Prior to initiation of the WMP, a Service-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat, the importance of the California red-legged frog and its habitat, the general measures that are being implemented to conserve the California red-legged frog as they relate to the project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.	Conduct a training session for all construction personnel.	District	Reporting of biological monitors.	Prior to initiation of the WMP.
BR/mm-27	A Service-approved biologist shall be present at the work site until such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance have been completed. After this time, the contractor or permittee shall designate a person to monitor on-site compliance with all minimization measures. The Service-approved biologist shall ensure that this individual receives training outlined in the above measure and in the identification of California red-legged frogs. The monitor and the Service-approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by the Corps and Service during review of the proposed action. If work is stopped, the Corps and Service shall be notified immediately by the Service-approved biologist or on-site biological monitor.	Have a biologist present at the work site until such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance have been completed.	District	Reporting of biological monitors.	Such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance have been completed.

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BR/mm-28	The number of access routes, number, and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the project goal. Routes and boundaries shall be clearly demarcated, and these areas shall be outside of riparian and wetland areas. Where impacts occur in these staging areas and access routes, restoration shall occur as identified in measures above.	Limit staging and activity areas.	District	Review construction plans.	Ongoing.
BR/mm-29	A Service-approved biologist shall permanently remove, from within the project area, any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes, to the maximum extent possible. The permittee shall have the responsibility to ensure that their activities are in compliance with the California Fish and Game Code.	Permanently remove, from within the project area, any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes, to the maximum extent possible.	District	Reporting of biological monitors.	Ongoing.
BR/mm-30	Prior to initiation of the WMP, the District shall obtain a letter of permission (or similar authorization) from CDFG to capture and relocate Coast Range newt, southwestern pond turtle, coast horned lizard, two-striped garter snake and other CSC species from work areas encountered during construction as necessary. Qualified biologists shall conduct a pre-construction survey for these species in areas where construction will occur. The qualified biologists shall capture and relocate these sensitive species or other sensitive aquatic species to suitable habitat outside of the area of impact. Observations of Species of Special Concern or other special-status species shall be documented on CNDDDB forms	Obtain a letter of permission (or similar authorization) from CDFG to capture and relocate Coast Range newt, southwestern pond turtle, coast horned lizard, two-striped garter snake and other CSC species from work areas encountered during construction	District	Receive letter.	Prior to initiation of the WMP.

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	and submitted to CDFG.				
BR/mm-31	Prior to construction, vegetation removal shall be scheduled to occur outside of the typical nesting season (vegetation removal after August 15) if possible, to prevent birds from nesting within areas of disturbance during or just prior to construction.	Schedule vegetation removal outside of nesting bird season to the extent feasible.	District	Reporting of biological monitors.	Prior to construction.
BR/mm-32	Prior to construction, if construction activities are proposed to occur during the typical nesting season (between February 15 and August 15 as outlined in WMP Protection Measure PM-2) within 300 ft (90 m) of potential nesting habitat, a nesting bird survey shall be conducted by qualified biologists in potential nesting habitat at least two weeks prior to construction to determine presence/absence of nesting birds within the area of disturbance. Pre-construction surveys for least Bell's vireo by qualified biologists shall be included with any such pre-construction survey effort. Work activities shall be avoided within 100 ft (30 m) of active bird nests and 300 ft (90 m) of active raptor nests until young birds have fledged and left the nest. Readily visible exclusion zones shall be established in areas where nests must be avoided. USFWS and CDFG shall be contacted for additional guidance if nesting birds are observed within or near the boundaries of the project site. Nests, eggs, or young of birds covered by the MBTA and California Fish and Game Code shall not be moved or disturbed until the end of the nesting season or until young fledge, whichever is later, nor would adult birds be killed, injured, or harassed at any time.	A nesting bird survey shall be conducted by qualified biologists.	District	Reporting of biological monitors.	Prior to construction.

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BR/mm-33	Prior to construction, the District shall coordinate with CDFG to determine if a Section 2081 Incidental Take Permit (or a Section 2080.1 Consistency Determination) will be required for least Bell's vireo. The District shall ensure avoidance of take of the Fully Protected white-tailed kite at all times.	Ensure avoidance of take of the Fully Protected white-tailed kite	District	Reporting of biological monitors.	Ongoing.
BR/mm-34	Vegetation removal in potential nesting habitats shall be monitored and documented by the biological monitor(s) regardless of time of year.	Monitor vegetation removal in nesting habitat.	District	Reporting of biological monitors.	Ongoing.
BR/mm-35	Prior to bridge demolition, a qualified biologist shall conduct a nest survey and any unoccupied nests (such as cliff swallow nests) under the existing bridge shall be knocked down prior to the typical nesting season (nests removed from August 16 to February 14) to discourage nesting activity just prior to demolition. After February 14, pre-construction surveys by qualified biologists shall continue on a weekly basis to determine if any new nesting activity has occurred under the existing bridges. Partially constructed but unoccupied nests shall be destroyed before they are 1/3 complete. The District shall coordinate with the appropriate regulatory agencies to allow for the legal removal of any bird nests prior to or during the nesting bird season.	Conduct a nest survey and any unoccupied nests (such as cliff swallow nests) under the existing bridge.	District	Receipt of survey results.	Prior to bridge demolition.
BR/mm-36	Prior to construction, if construction activities are proposed to occur during the typical nesting season (February 15 to August 15) within 100 ft (30 m) of potential nesting habitat under bridges, a nesting bird survey shall be conducted by qualified biologists at least two weeks prior to construction to determine presence/absence of nesting birds. Work	Nesting bird survey shall be conducted by qualified biologists.	District	Receipt of survey results.	Prior to construction.

Table7-1. Mitigation Monitoring and Reporting Plan

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	<p>activities shall be avoided within 100 ft (30 m) of active bird nests under the bridge, until young birds have fledged and left the nest. Readily visible exclusion zones shall be established in areas where nests must be avoided. USFWS and CDFG shall be contacted for additional guidance if nesting birds are observed within or near the boundaries of the project site. Nests, eggs, or young of birds covered by the MBTA and California Fish and Game Code would not be moved or disturbed until the end of the nesting season or until young fledge, whichever is later, nor would adult birds be killed, injured, or harassed at any time.</p>				
BR/mm-37	<p>Prior to construction, pre-construction surveys (at least two at dawn and two at dusk at appropriate times of the year, such as in the fall and spring prior to construction) shall be conducted by qualified biologists to determine if bats are roosting under bridges. The biologist(s) conducting the preconstruction surveys will also identify the nature of the bat utilization of the bridge (i.e., no roosting, night roost, day roost, maternity roost). The last survey shall be conducted no later than March 15 to allow for bat exclusion (if required) prior to the onset of the maternity roosting season (typically around April 15).</p>	<p>Pre-construction surveys shall be conducted by qualified biologists to determine if bats are roosting under bridges.</p>	District	Receipt of survey results.	Prior to construction.
BR/mm-38	<p>Prior to demolition or modification of existing bridges, if bats are found to be roosting under the bridges, bat exclusion shall be conducted by a qualified biologist or firm qualified to conduct bat exclusion activities. Exclusion methods may include, but are not limited to, wire mesh, spray foam, or fabric placement. If</p>	<p>Bat exclusion shall be conducted by a qualified biologist or firm qualified to conduct bat exclusion activities.</p>	District	Retention of qualified biologist.	Prior to demolition or modification of existing bridges

Table7-1. Mitigation Monitoring and Reporting Plan

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	exclusion is necessary, a Bat Exclusion Plan shall be submitted to CDFG for approval prior to construction.				
BR/mm-39	Prior to demolition or modification of existing bridges, the District may opt to employ bat exclusion, even if roosting bats aren't observed during pre-construction surveys, prior to the maternity roosting season to eliminate the potential for bat roosting during bridge replacement or modification.	Employ bat exclusion.	District	Review of final construction plans.	Prior to demolition or modification of existing bridges.
BR/mm-40	If bats are found to be roosting under the Union Pacific Railroad Bridge at any time prior to construction, the new bridge design shall be examined by a qualified biologist in coordination with design engineers to determine if the new bridge will be capable of supporting roosting bats. If bats are found to roost under the existing bridge and it is determined that the new bridge will not support roosting bats, features facilitating bat roosting such as rails under the bridge or bat boxes shall be attached to the new bridge to allow for bat roosting opportunities. The design, number, and placement of any bat boxes shall be determined by a qualified biologist and coordination with CDFG. Any bat structure proposed as mitigation shall be reviewed by a qualified biologist.	New bridge design shall be examined by a qualified biologist in coordination with design engineers to determine if the new bridge will be capable of supporting roosting bats.	District	Review of final construction plans and survey results.	Any time prior to construction.
FLOODING, HYDROLOGY, AND WATER QUALITY					
WQ/mm-1	Prior to commencement of annual vegetation and sediment management the County shall prepare an erosion control and water quality protection plan that details measures to be taken during annual monitoring and	Prepare an erosion control and water quality protection plan.	District	Review plans and SWPPP.	Prior to commencement of annual vegetation and sediment management.

Table7-1. Mitigation Monitoring and Reporting Plan

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	<p>maintenance efforts that would minimize water quality impacts. This plan would borrow heavily from the SWPPP and shall include measures such as:</p> <ol style="list-style-type: none"> 1. Maintaining vegetation outside of the buffer area if it is providing protection and shade of the low-flow channel; 2. Minimizing equipment operation in the channels; 3. Prohibiting refueling within or adjacent to the channels; 4. Identifying appropriate species to be planted on levee slopes to provide erosion control that are compatible with biological resources mitigation and the desired channel roughness coefficient. 				
GEOLOGY AND SOILS					
GS/mm-1	<p>Prior to construction of Alternative 3a and 3c a design-level geotechnical report for the levee improvements shall be prepared by the FCWCD. The report shall provide ground motion parameters, for use in geotechnical analyses, such as for evaluating slope stability, liquefaction, and seismic settlement.</p>	<p>Design-level geotechnical report for the levee improvements</p>	<p>District</p>	<p>Prepare report.</p>	<p>Prior to construction of Alternative 3a and 3c.</p>
GS/mm-2	<p>Prior to construction of Alternative 3a and 3c an Emergency Response Plan shall be prepared by the FCWCD to address seismic hazards. The plan shall recognize the potential for liquefaction and seismic impacts to the levee, and delineate specific high-hazard areas that should be inspected for damage immediately following an earthquake.</p>	<p>Prepare an emergency response plan.</p>	<p>District</p>	<p>Prepare Emergency Response Plan.</p>	<p>Prior to construction of Alternative 3a and 3c.</p>

Table7-1. Mitigation Monitoring and Reporting Plan

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
GS/mm-3	Prior to construction of Alternative 3a and 3c a design level geotechnical report shall be prepared by the FCWCD to address seepage conditions. It should include mitigation strategies such as cutoff walls, impervious blankets, or drainage systems, for example, that control or reduce gradients.	Prepare a design level geotechnical report.	District	Prepare report.	Prior to construction of Alternative 3a and 3c.
GS/mm-4	Prior to initiation of any project components an erosion control plan shall be implemented by the FCWCD. The plan shall address short and long-term erosion control and scour which may result from the project components. Vegetation used for erosion control shall be compatible with vegetation management efforts to reduce channel roughness coefficients, and any biological resources mitigation measures.	Implement erosion control plan.	District	Prepare plan.	Prior to initiation of any project components.
GS/mm-5	Prior to initiation of any project components the FCWCD shall prepare and submit to the SWRCB for approval a Notice of Intent and Storm Water Pollution Prevention Plan (SWPPP) in accordance with the requirements of the State General Order related to construction projects. The SWPPP shall identify the selected stormwater management procedures, pollution control technologies, spill response procedures, and other means that will be used to minimize erosion and sediment production and the release of pollutants to surface water during construction. The SWPPP shall also describe procedures and be consistent with biological resources mitigation.	Prepare and submit to the SWRCB for approval a Notice of Intent and Storm Water Pollution Prevention Plan (SWPPP).	District	Review NOI	Prior to initiation of any project components.
GS/mm-6	On-going maintenance of the levee embankments by the FCWCD should include removal of debris and dead vegetation which could concentrate flows, and repair of holes	Remove debris and dead vegetation which could concentrate flows.	District	Reports from maintenance crews.	Ongoing.

Table7-1. Mitigation Monitoring and Reporting Plan

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	and other disturbances resulting from the initial and annual vegetation management activities.				
GS/mm-7	Prior to implementation of Alternative 3a and 3c the FCWCD shall identify areas adjacent to the south levee where levee overtop and flooding may least affect public safety and property value and consider construction of a permanent spillway at these location(s). The spillway shall be designed to accommodate flood events in a manner that would reduce the potential for mass erosion and catastrophic failure of the levees.	Consider construction of a permanent spillway.	District	Review final construction plans.	Prior to implementation of Alternative 3a and 3c.
HAZARDS AND HAZARDOUS MATERIALS					
HAZ/mm-1	Prior to completion of the final design plans, the District shall obtain the natural gas purveyor's Hazardous Materials Plan, which shall include, but is not limited to, details of the existing and proposed storage tank locations and associated infrastructure, and relocation procedures. The procedures shall be referenced on the final plans and implemented during construction, as necessary.	Obtain the natural gas purveyor's Hazardous Materials Plan.	District	Obtain plan.	Prior to completion of the final design plans.
HAZ/mm-2	Prior to construction, pipeline locations shall be clearly indicated on construction plans and in the field. Project plans shall include specific measures to be taken by construction crews so that damage to the pipelines is avoided.	Pipeline locations shall be clearly indicated.	District	Review construction plan.	Prior to construction.
HAZ/mm-3	At least 30 days prior to commencement of all construction activities, the County shall provide local agriculturalists a construction schedule and request that use of agricultural chemicals (particularly sprays) be limited during construction hours (typically 8:00 a.m. to 4:00	Provide local agriculturalists a construction schedule.	District	Provide schedule.	At least 30 days prior to commencement of all construction activities,

Table7-1. Mitigation Monitoring and Reporting Plan

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	p.m.).				
HAZ/mm-4	Prior to initiation of construction activities that include heavy machinery, existing ASTs located within 50 feet of the exterior toe of the levee slopes shall be identified on construction plans and identified in the field.	Identify activities within 50 feet of AST's.	District	Review final construction plans.	Prior to initiation of construction activities.
HAZ/mm-5	Prior to construction of any project component that would result in significant disturbance within the UPRR railroad right-of-way, a qualified consultant shall perform soils tests to determine whether or not hazardous conditions exist. If so, a Contaminated Materials Management Plan (CMMRP) shall be developed in coordination with the County Environmental Health Division and implemented during construction.	Perform soils tests to determine whether or not hazardous conditions exist along the UPRR right of way.	District	Obtain test results. Prepare CMMP.	Prior to construction of any project component that would result in significant disturbance within the UPRR railroad right-of-way.
HAZ/mm-6	Planting tall tree species (sycamore or cottonwood) within the channel between the UPRR bridge and the southern end of the runway shall be prohibited.	Prohibit planting of tall species west of the UPRR bridge.	District	Review annual plans.	Ongoing
TRANSPORTATION AND TRAFFIC					
TR/mm-1	Prior to initiation of construction activities, the FCWCD shall prepare a Construction Traffic Management Plan. The plan shall identify haul routes, the ingress and egress points from the Arroyo Grande Creek and Los Berros Creek channels, the maximum number of daily trips allowed, and the hours of operation, at minimum. It shall also include a description of safety measures (cones, signage, flagmen, etc.) to be put in place during construction activities.	Prepare a Construction Traffic Management Plan.	District	Obtain CTMP	Prior to initiation of construction activities.

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