EXECUTIVE SUMMARY

PURPOSE OF THE EIR

The purpose of this Environmental Impact Report (EIR) is to identify the potential significant impacts of the Arroyo Grande Creek Channel Waterway Management Program (WMP; proposed project) on the environment, indicate the manner in which such significant impacts will be mitigated or avoided, and identify alternatives to the proposed project that avoid or reduce these impacts. The EIR is intended to serve as an informational document for use by the County of San Luis Obispo (County), the California Environmental Quality Act (CEQA) lead agency; the other responsible agencies; and the general public in their consideration and evaluation of the environmental consequences associated with the implementation of the proposed project. The EIR addresses potentially significant impacts to Agricultural Resources; Biological Resources; Cultural Resources; Geology and Soils; and Flooding, Hydrology and Water Quality; Hazards and Hazardous Materials; and Transportation and Circulation. Significant impacts identified, and the measures recommended to avoid them are shown in Table ES-1.

PROJECT LOCATION

The proposed project is located within San Luis Obispo County, California, near the City of Arroyo Grande and the community of Oceano (refer to Figure ES-1). The project area is located entirely within the unincorporated areas of San Luis Obispo County. The project area is a linear corridor with two segments: (1) Arroyo Grande Creek channel from near the confluence of Los Berros Creek downstream to the Arroyo Grande lagoon and (2) Los Berros Creek channel from the Century Lane Bridge to Arroyo Grande Creek (refer to Figure ES-2). This area is within the County's Flood Control District Zone 1/1A. The total length of the flood control channels addressed in the WMP is approximately 3.5 miles.

PROJECT BACKGROUND

The lower Arroyo Grande Valley has a long history of flooding and severe damage to agricultural and residential lands. Levees were built along lower Arroyo Grande Creek and the lower portion of Los Berros Creek was diverted in 1961 to provide flood control.

In February 2005, the Department of Water Resources (DWR) issued a Statement of Necessary Work with the goal of initiating maintenance work on the channel in July 2005. In response to impending assessments estimated by DWR, the Zone 1/1A Advisory Committee actively lobbied the County Board of Supervisors to instead restore funding for a study of flood control alternatives. The County approved funding to the Coastal San Luis Resource Conservation District (RCD) to conduct an Alternatives Study. It was completed in 2006.

Following completion of the Alternatives Study, the Zone 1/1A Advisory Committee selected a preliminary preferred project alternative that was considered feasible within anticipated funding limits. That alternative became the Waterway Management Program, which is evaluated in the EIR.

Figure ES-1. Project Vicinity Map

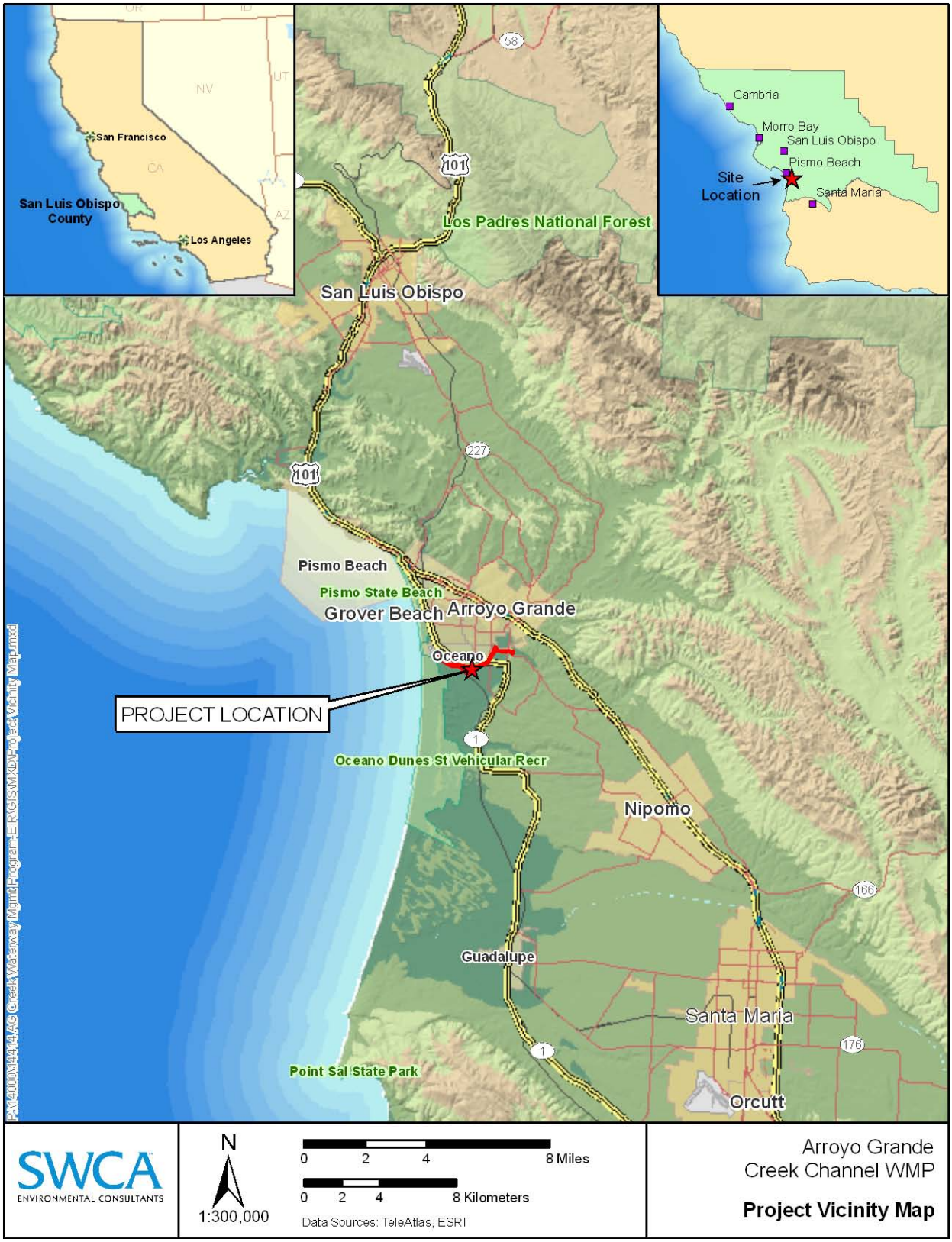
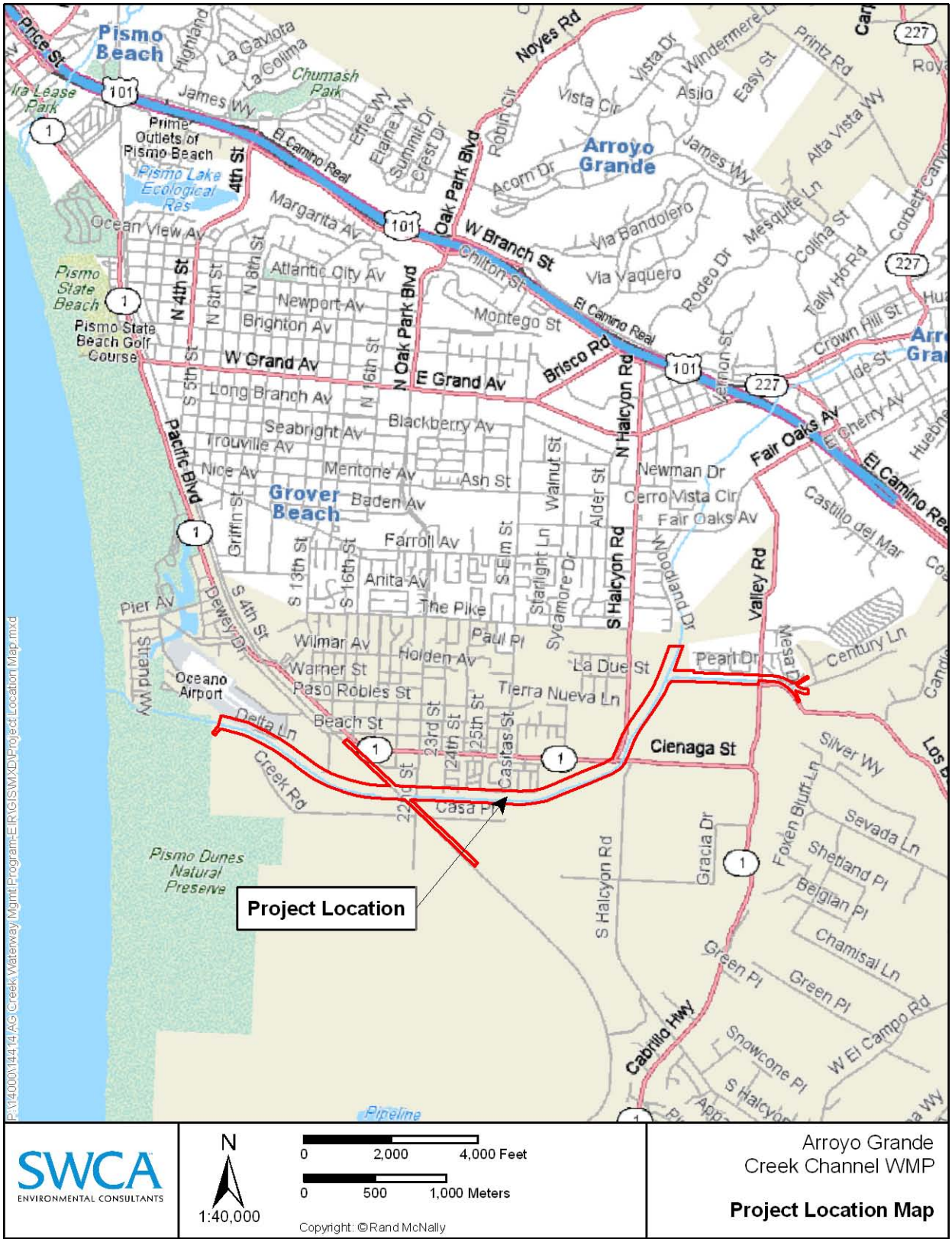


Figure ES-2. Project Location Map



PROPOSED PROJECT

Implementation of the WMP would include three distinctive components.

1. Vegetation Management

The vegetation management component would consist of maintaining a 10-foot riparian buffer on both sides of the low-flow channel to provide riparian habitat and streamside cover to protect aquatic habitat. Willows present within the buffer would be limbed up to reduce cross-sectional roughness but still provide adequate stream shading and riparian habitat. Gaps in the riparian buffer would be revegetated with native riparian species including cottonwood, sycamore, and willow. Cottonwood and sycamore would be planted at random along the length of the flood control channel within the buffer to encourage long-term diversity in the riparian canopy. Based on past experience, vegetation management would be repeated approximately every one to three years, depending on the amount of regrowth.

2. Sediment Management

The Arroyo Grande Creek flood control channel currently lacks the secondary channels that are found in more natural, low gradient stream environments. Therefore secondary, or overflow channels, would be excavated into areas in the channel that have accumulated excess sediment resulting in reduced flood capacity. The excavated secondary channels would be connected with the primary channels to allow for complex flow conditions that would encourage scour and sediment transport, and reduce the need for future sediment removal. No sediment in the primary channel would be excavated. Some maintenance (sediment removal) of the secondary channels would be required over the long-term because of the likelihood that significant quantities of fine material would be deposited in the channels.

Large wood structures would be placed at the confluence of each active and secondary channel connection to enhance aquatic habitat. Approximately 35 large wood structures are proposed for the project, to promote pool scour, encourage sediment sorting, and provide deep pools and cover habitat for steelhead and red-legged frog.

3. Levee Raising (Alternatives 3a and 3c)

The proposed project includes raising the levees in two stages along portions of the Los Berros Creek Diversion Channel and along Arroyo Grande Creek Channel from the Los Berros confluence to the lagoon. Levee raising would most likely be conducted in phases as funding is available. The levees would ultimately be raised up to 2.5 feet above the 20-year storm flows (i.e., “freeboard”). The first phase of the levee raising (Alternative 3a) would raise the levees to an elevation that would, along with the vegetation and sediment management discussed above, provide up to 10-year flood protection with freeboard. This raise would focus on “low spots” along the existing levee. The levees would need to be raised in various locations from approximately six inches to as much as two feet.

The longer term levee raise (Alternative 3c) would achieve 20-year flood protection with up to 2.5-feet of freeboard for those parcels included within the special maintenance assessment district. The average levee raise required to implement this component would be approximately 2.8 feet from existing grade, with a maximum raise necessary in some places of approximately 5 feet.

SCOPING AND NOTICE OF PREPARATION PROCESS

In compliance with CEQA Guidelines, the County of San Luis Obispo has taken steps to maximize opportunities to participate in the environmental process. During the environmental determination process, an effort was made to contact various federal, state, regional, and local governmental agencies and other interested parties to solicit comments and inform the public of the proposed project. This included holding a preliminary agency scoping meeting on August 14, 2008 and a public scoping meeting on June 25, 2009. The NOP for the EIR was distributed on June 5, 2009. The proposed project was described, the scope of the environmental review was identified, and agencies and the public were invited to review and comment on the NOP. The close of the NOP review period was July 10, 2009.

Agencies, organizations, and interested parties not contacted or who did not respond to the request for comments about the project during the preparation of the Draft EIR also had the opportunity to comment during the 45-day public review period on the Draft EIR. Comments received and the responses are included in Chapter 9 of the Final EIR.

SIGNIFICANT ENVIRONMENTAL IMPACTS IDENTIFIED

Table ES-1 shows each impact identified and all mitigation measures recommended to reduce or avoid impacts. The most significant impacts identified in the EIR include:

- Biological Resource impacts to Environmentally Sensitive Habitat Areas (ESHA), jurisdictional features including wetlands, riparian habitat, and sensitive wildlife and plant species.

- Agricultural Resource impacts due to conflicts with agricultural operations and potential loss of productive agricultural soils.

- Geology and Soils impacts related to the repair and construction of the levees in saturated soils where seismic activity is likely and the structures are subject to high stormwater flows.

All impacts identified in the EIR can be reduced to a level of insignificance with mitigation.

PROJECT ALTERNATIVES

Three alternatives to the proposed project were brought forward for substantial review and comparison in the EIR:

1. No Project Alternative

2. Levee Setback Alternative

3. Levee Raise and Vegetation Management Alternative

The No Project Alternative would result in the fewest significant impacts among the alternatives, including the proposed project. Impacts to all resources other than biological resources and agricultural resources would be avoided by the No Project Alternative. However it would not meet the project objectives.

Because it would result in increased area for habitat and reduce the need for sediment and vegetation management, the Levee Setback Alternative would result in significantly fewer biological resource impacts when compared to the proposed project. However this alternative would have significantly greater impacts to agricultural resources. This alternative would permanently convert approximately 50 acres of highly productive soils along the levees.

Alternative 3, the Levee Raise and Vegetation Management Alternative would not avoid or significantly reduce the biological resource impacts associated with the proposed project. It would have impacts similar to the proposed project in general.

Due to the biological resources which exist in the channel and the agricultural resources adjacent to the channel, neither the proposed project nor the Levee Setback Alternative could feasibly avoid impacts. The difference therefore between the two alternatives is the potential for feasible mitigation. Impacts to biological resources can be mitigated to a less than significant level through the application of intensive compensatory mitigation. For example, the Army Corps of Engineers policy is "no net loss" of wetlands. This policy allows for wetlands to be impacted (if avoidance is not feasible) as long as wetlands are created or enhanced in return. Prime agricultural soils on the other hand are considered a finite resource. Mitigation measures can be proposed to address impacts; however ultimately, especially when considering the scale of the conversion which would occur with the Levee Setback Alternative, impacts would be considered significant and unavoidable. Because of this, the proposed project is the environmentally superior alternative.

IMPACT SUMMARY TABLE

The table on the following pages provides a summary of the potential impacts of the proposed project. Also summarized in these tables are the mitigation measures associated with each impact that are to be implemented by the project applicant in order to reduce the environmental impacts to a level of insignificance. In accordance with CEQA, the Summary Tables identify the following types of potential impacts associated with the proposed development.

Class I Impacts—Significant environmental impacts that cannot be fully mitigated or avoided. The decision maker must adopt a "Statement of Overriding Considerations" as required under CEQA Guidelines Section 15093 if the project is approved.

Class II Impacts—Significant environmental impacts that can be feasibly mitigated or avoided. The decision maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved.

Class III Impacts—Environmental impacts that are adverse but not significant for which the decision maker does not have to adopt "Findings" under CEQA.

Class IV Effect—An effect that would be beneficial, and would reduce existing environmental impacts or hazards.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
AGRICULTURAL RESOURCES			
AGR Impact 1 Implementation of Alternative 3a and 3c would result in the temporary disturbance of up to approximately 3.5 acres of prime farmland and the permanent loss of up to one acre of prime farmland.	Short-term	**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. **AGR/mm-2** 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. Further, Construction access and stockpiling locations shall be located within public right of ways to the maximum extent feasible. 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. **AGR/mm-3** 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	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		agricultural land that are not part of the permanent floodway easement. 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.	
AGR Impact 2 Raising the UPRR bridge would result in the temporary disturbance of approximately 1.5 acres of prime soils.	Short-term	Implement **AGR/mm-1 and AGR/mm-3**. **AGR/mm-4** Construction of the UPRR bridge improvement shall be focused within the UPRR right of way to the maximum extent feasible.	Class III Less Than Significant.
AGR Impact 3 Construction of Alternative 3a, 3c and the UPRR bridge raise would potentially occur on and adjacent to agricultural infrastructure improvements, temporarily reducing productivity.	Short-term	Implement **AGR/mm-1**. **AGR/mm-5** 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. 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.	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
AGR Impact 4 The loss of up to one acre of prime farmland resulting from the implementation of Alternative 3c would contribute to a cumulatively significant impact to agricultural resources.	Long-term	**AGR/mm-6** 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.	Class III Less Than Significant
AIR QUALITY			
AQ Impact 1 Short-term construction emissions resulting from the implementation of the initial sediment management, Alternative 3a and Alternative 3c, and the UPRR bridge raise would potentially exceed ROG and NOx thresholds and produce significant CO2, a GHG.	Short-term	**AQ/mm-1** Prior to issuance of construction permits for any project component, a Construction Activities Management Plan (CAMP) shall be submitted for review and approval by the SLOAPCD. 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. 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 shall address GHG as well, and may include: 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,	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		loaders, scrapers, backhoes, generators, compressors, and auxiliary power units with CARB motor vehicle diesel fuel. d. Using 1996 or newer heavy duty off road vehicles. e. Electrifying equipment where possible. f. Using Compressed Natural Gas (CNG), liquefied natural gas (LNG), bio-diesel, or propane for on site mobile equipment instead of diesel-powered equipment. g. Ensuring that on and off-road diesel equipment shall not be allowed to idle for more than five minutes. h. To the greatest extent practicable, using Purinox or similar NOX reducing agents diesel fuel. i. To the greatest extent feasible, installing catalytic reduction units on all heavy equipment performing this work.	
AQ Impact 2 Short-term construction emissions would occur in close proximity to sensitive receptors.	Short-term	**AQ/mm-2** To minimize the impacts of diesel emissions on sensitive receptors construction activities shall be limited as follows: a. Excavation shall occur from the southern levee (opposite existing residences) to the extent feasible; b. Stockpile locations and staging areas shall be located at least 1,000 feet from sensitive receptors to the extent feasible; c. Haul routes that avoid sensitive receptors shall be considered to the extent feasible; d. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors; e. Diesel idling within 1,000 feet of sensitive receptors is not permitted; f. Use of alternative fueled equipment is recommended	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		whenever possible; g. Signs that specify the no idling requirements must be posted and enforced at the active project locations; and, h. These toxic impact reductions for sensitive receptors shall be added to the CAMP as well.	
AQ Impact 3 Short-term construction emissions would potentially include fugitive dust (PM10) emissions.	Short-term	**AQ/mm-3** 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.	Class III Less Than Significant.
AQ Impact 4 Demolition and relocation activities have the potential to result in adverse air quality impacts associated with hazardous building materials.	Short-term	**AQ/mm-4** Prior to commencement of demolition activities the applicant shall: a. Notify the APCD at least ten working days prior to commencement of any demolition activities; b. Conduct an asbestos survey by a Certified Asbestos Inspector; c. Use applicable disposal and removal requirements for any identified asbestos containing material; and d. Contact the SLOAPCD Enforcement Division prior to final approval of any demolition activity.	Class III Less Than Significant.
BIOLOGICAL RESOURCES			
BR Impact 1 Vegetation and sediment management would include the permanent loss of	Long-term	**BR/mm-1** Prior to implementation of any component of the WMP, the District shall obtain a Section 404 Permit from USACE, a	Class III Less Than

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(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
approximately 26.48 acres of CDFG jurisdiction, 0.36 acres of USACE/RWQCB wetlands, and 9.18 acres of coastal wetlands within Arroyo Grande Creek channel and Los Berros Creek, resulting in a significant impact.		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. **BR/mm-2** Prior to construction, to mitigate for the permanent impacts the District shall develop a Mitigation Monitoring Plan (MMP) 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 MMP 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 MMP: 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 and human intrusion into adjacent habitats. The fencing should be maintained and remain in place throughout construction activities. b. Prior to construction, the District shall specify an on-site mitigation strategy (or combination of on-site and off-site) in the MMP to mitigate for impacts to sensitive habitats which would be impacted. This plan should identify the following: 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	Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		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. c. The MMP will be implemented after initial vegetation and sediment removal activities. **BR/mm-3** 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 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. **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. **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	

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		activities shall be checked by biological monitor(s) to ensure a dry work environment and minimize adverse effects to aquatic species and habitats. **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. **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 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. **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. **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. **BR/mm-11** During implementation of the WMP, no pets shall be allowed on the construction site. **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. **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	

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

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Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		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. Topsoil salvage methods and seed mixes shall be specified in the MMP. Hydroseeded areas shall be monitored by a qualified restoration biologist and/or horticulturalist for viability and overall success, with additional recommendations as necessary. **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.	
BR Impact 2 Vegetation and sediment management would include temporary impacts of up to approximately 16.76 acres of CDFG jurisdiction, 10.17 acres of USACE/RWQCB wetlands, and 5.14 acres of coastal wetlands annually within Arroyo Grande Creek and Los Berros Creek, resulting in a significant impact.	Short-term	Implement **PM VEG-1 through 4**, **PM SED 4 and 5**, and **BR/mm- 1, and 3-14**.	Class III Less Than Significant.
BR Impact 3 Construction of the Alternative 3a and/or 3c levee raise would temporarily impact to jurisdictional areas, resulting in a significant impact.	Short-term	Implement **PM VEG-1 through 4**, **PM SED 4 and 5**, and **BR/mm-1 through 14**, as applicable.	Class III Less Than Significant.
BR Impact 4 Replacement of the Union Pacific Railroad Bridge would permanently impact 0.28 acres of USACE/RWQCB wetlands and temporarily impact 0.1 acres of CDFG jurisdictional areas, resulting in a significant impact.	Short-term	Implement **BR/mm-1 through 14** as applicable to the UPRR component of the project.	Class III Less Than Significant.
BR Impact 5 Implementation of the WMP could result in take of federally listed marsh sandwort, Gambel's watercress, or other sensitive plant species.	Long-term	**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	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		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.	
BR Impact 6 Implementation of the levee raise components of the project could result in take of federally listed marsh sandwort, Gambel's watercress, or other sensitive plant species.	Long-term	**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. **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 necessary) or mitigation can be developed to avoid, minimize, or offset impacts to sensitive plant species.	Class III Less Than Significant.
BR Impact 7 Vegetation and sediment removal activities have the potential to directly and/or indirectly impact the federally listed tidewater goby and south-central California coast steelhead.	Long-term	Implement **WMP Performance Measures PM SED-4 and 5**, and **Protection Measures PM-3, PM-4, and PM-5**, and **BR/mm-1 through 14**. **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. **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	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		training program. All construction personnel conducting in-stream work shall participate in the training program conducted by a qualified biologist. **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. **BR/mm-21** During construction, non-native fish and other aquatic species shall be permanently removed from Arroyo Grande Creek when captured. **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 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	

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

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Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		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.	
BR Impact 8 Vegetation and sediment management activities have the potential to directly and/or indirectly impact the federally listed California red-legged frog.	Long-term	Implement **BR/mm-3 through 14, 22, and 23**. **BR/mm-24** At least 15 days prior to the onset of activities, the District or project proponent shall submit to the USFWS 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. **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 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,	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		provided that a qualified person is on hand to answer any questions. **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. **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. **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.	
BR Impact 9 Vegetation and sediment management activities have the potential to directly and/or indirectly impact the following California Species of Special Concern: Coast Range newt,	Long-term	**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	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
southwestern pond turtle, coast horned lizard, and two-striped garter snake.		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 CNDDB forms and submitted to CDFG.	
BR Impact 10 Vegetation and sediment management have the potential to directly and/or indirectly impact nesting bird species.	Long-term	**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. **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. **BR/mm-33** Prior to construction, the District shall coordinate	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		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. **BR/mm-34** Vegetation removal in potential nesting habitats shall be monitored and documented by the biological monitor(s) regardless of time of year.	
BR Impact 11 Implementation of the levee raise components of the project could result in take of sensitive wildlife species including the California red-legged frog and two striped garter snake, among others.	Long-term	Implement **BR/mm-3, 14, and 22 through 29**.	Class III Less Than Significant.
BR Impact 12 Replacement of the Union Pacific Railroad bridge and modification of the 22nd Street Bridge have the potential to impact nesting birds, pallid bat, Townsend's big-eared bat, or other roosting bats.	Short-term	**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. **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 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	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		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. **BR/mm-37** 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). **BR/mm-38** 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 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. **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	

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

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Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		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.	
FLOODING, HYDROLOGY, AND WATER QUALITY			
WQ Impact 1 Construction activities would significantly impact water quality due to the exposure of large areas of soil to erosive forces, the need to dewater during construction, and due to the presence of fuel, oil, and other pollutants on site for construction purposes.	Short-term	Implement **GS/mm-4 through GS/mm-6**.	Class III Less Than Significant.
WQ Impact 2 Long-term sediment and vegetation management activities may impact surface water quality due to the reduction of vegetation, exposure of areas of soil to erosive forces, and due to the presence of fuel, oil, and other pollutants on site for sediment removal purposes.	Long-term	Implement **BR/mm 5, 7, 8, 9, and 13**. **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 maintenance efforts that would minimize water quality impacts. This plan would borrow heavily from the SWPPP and shall include measures such as: 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.	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA *Guidelines* §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
GEOLOGY AND SOILS			
GS Impact 1 The proposed Alternative 3a and 3c levee improvements may become unstable when a seismic event results in liquefaction of the underlying soils.	Long-term	**GS/mm-1** Prior to construction of Alternative 3a and 3c a design-level geotechnical report for the levee improvements shall be prepared by the District. The report shall provide ground motion parameters, for use in geotechnical analyses, such as for evaluating slope stability, liquefaction, and seismic settlement. **GS/mm-2** Prior to construction of Alternative 3a and 3c an Emergency Response Plan shall be prepared by the District 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.	Class III Less Than Significant.
GS Impact 2 Foundation and/or embankment seepage may result in localized destabilization of the levees.	Long-term	**GS/mm-3** Prior to construction of Alternative 3a and 3c a design level geotechnical report shall be prepared by the District 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.	Class III Less Than Significant.
GS Impact 3 Soils disturbed during the vegetation and sediment management, construction of Alternative 3a and 3c, and the UPRR bridge raise would be subject to erosion and scour from stormwater, high flow events in the channel, and flooding events.	Long-term	**GS/mm-4** Prior to initiation of any project components an erosion control plan shall be implemented by the District. 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. **GS/mm-5** Prior to initiation of any project components the District 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	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

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Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		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. **GS/mm-6** On-going maintenance of the levee embankments by the District should include removal of debris and dead vegetation which could concentrate flows, and repair of holes and other disturbances resulting from the initial and annual vegetation management activities. **GS/mm-7** Prior to implementation of Alternative 3a and 3c the District 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.	
HAZARDS AND HAZARDOUS MATERIALS			
HAZ Impact 1 The construction of Alternative 3c may require the relocation of potentially explosive liquid natural gas storage tanks.	Short-term	**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.	Class III Less Than Significant.
HAZ Impact 2 Implementation of the sediment management, and Alternative 3a and 3c components of the project, could potentially disturb existing gas and petroleum pipelines located within the Arroyo Grande Creek channel and levees.	Short-term	**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.	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

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Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
HAZ Impact 3 During implementation of the WMP, construction workers may be exposed to agricultural chemicals due to overlap between normally scheduled applications and construction activities.	Short-term	**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 p.m.).	Class III Less Than Significant.
HAZ Impact 4 Heavy machinery would be operated in proximity to ASTs and other storage equipment which may contain hazardous materials.	Short-term	Implement **AGR/mm-5**. **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.	Class III Less Than Significant.
HAZ Impact 5 Construction activities associated with the Alternative 3a and 3c levee raise and the UPRR bridge raise may expose construction crews to hazardous soil conditions associated with the railroad right of way.	Short-term	**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 (CMMP) shall be developed in coordination with the County Environmental Health Division and implemented during construction.	Class III Less Than Significant.
HAZ Impact 6 Proposed vegetation management would potentially introduce taller tree species near the southern end of the runway, resulting in a strike hazard to aircraft.	Long-term	**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.	Class III Less Than Significant.
TRANSPORTATION AND TRAFFIC			
TR Impact 1 Construction of the proposed project components would result in short-term increased truck traffic on Halcyon Road and Highway 1, contributing to existing congestion.	Short-term	**TR/mm-1** Prior to initiation of construction activities, the District 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	Class III Less Than Significant.

Table ES-1. Significant Environmental Impacts That Can be Feasibly Mitigated or Avoided

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Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		(cones, signage, flagmen, etc.) to be put in place during construction activities.	
TR Impact 2 Construction of the proposed project components would result in short-term increased truck traffic, potentially creating unsafe driving conditions on due to the slower truck speeds and the need to access public roads from undesignated locations.	Short-term	Implement **TR/mm-1**.	Class III Less Than Significant.

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