

Mitigation Measures and Project Consistency with the Delta Plan MMRP – Yolo Bypass East Levee Project

This table presents a “crosswalk” between Delta Plan Mitigation Measures and the Project-specific Environmental Commitments and/or Mitigation Measures which demonstrate compliance with, or effective substitution for, the Delta Plan Mitigation Measures. The “Yolo Bypass East Levee Project Consistency” column includes a brief explanation for how the Project will meet or exceed the requirements set forth in each of the Delta Plan Mitigation Measures. The Delta Plan Mitigation Measures can be satisfied through inherent Project design and operation or through incorporation of project-specific mitigation measures developed under the California Environmental Quality Act (CEQA) and various permitting processes. Many of the individual Mitigation Measures of the Delta Plan include multiple nested elements (e.g., Mitigation Measure 3-1 includes three elements, 1-3). When applicable, the Project has included numbering before each of its responses which correspond to which specific element of the Delta Plan Mitigation Measure is being referenced. Many of the Delta Plan Mitigation Measures includes language which are not applicable to the Project (e.g., housing policy requirements). In those circumstances, the Project provides an explanation for why a particular Mitigation Measure or elements nested within the Mitigation Measure are not applicable. To facilitate ease of review, the “Summary of Consistency Between Project and Delta Plan Mitigation Measure” column provides a simple conclusion statement as to whether or not the Project considers the Project to be consistent with the particular Delta Plan Mitigation Measure, or if the Mitigation Measures is not applicable.

Delta Plan Mitigation Measure #	Delta Plan Mitigation Measure	Yolo Bypass East Levee Project Consistency	Summary of Consistency Between Project and Delta Plan Mitigation Measure
Water Resources			
3-1	<p>1. For construction of new facilities, all typical construction mitigation measures shall be required. Typical mitigation measures include the following construction-related Best Management Practices (BMPs):</p> <ul style="list-style-type: none"> • Gravel bags, silt fences, etc., shall be placed along the edge of all work areas in order to contain particulates prior to contact with receiving waters. • All concrete washing and spoils dumping shall occur in a designated location. • Construction stockpiles shall be covered in order to prevent blowoff or runoff during weather events. • Severe weather event erosion control materials and devices shall be stored onsite for use as needed. 	<p>1,2. Construction activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including stormwater and downstream receiving water bodies.</p> <p>The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific best management practices (BMPs) designed to prevent sediment and pollutants from contacting stormwater from moving off site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to</p>	Project is consistent with elements 1-6 of Mitigation Measure 3-1

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	<ul style="list-style-type: none"> • Soil stabilization, sediment control, wind erosion control, tracking control, non-storm water management, and waste management/materials pollution control <ol style="list-style-type: none"> 2. Apply other BMPs as determined necessary by the regulating entity (city, county). 3. Any new facility with introduced impervious surfaces shall include stormwater control measures that are consistent with the Regional Water Quality Control Board (RWQCB) National Pollutant Discharge Elimination System (NPDES) municipal stormwater runoff requirements. The stormwater control measures shall be designed and implemented to reduce the discharge of stormwater pollutants to the maximum extent practical. Stormwater controls such as bioretention facilities, flow-through planters, detention basins, vegetative swales, covering pollutant sources, oil/water separators, and retention ponds shall be designed to control stormwater quality to the maximum extent practical. 4. Mitigate sediment contaminant bioavailability impacts through (a) the exclusion of bird use or nesting areas from areas that may have excessive selenium or mercury; (b) minimization of methylmercury production; and/or (c) maximization of contaminant degradation before discharge of water, as appropriate. <p>For any construction activities with the potential to cause in-river sediment disturbance associated with construction:</p> <ol style="list-style-type: none"> 5. Apply BMPs to avoid or reduce temporary increases in suspended sediment. These BMPs for in-channel construction and levee disturbance may include, but are not limited to, silt curtains, cofferdams, the use of environmental dredges, erosion control on all inward levee slopes, and various levee-stabilization techniques, including revegetation. All construction sites will include preparation of a Storm Water Pollution Prevention Plan and BMPs designed to capture spills and prevent erosion to the waterbody. Turbidity shall be monitored up- and downstream of construction sites as a measure of impact. 6. Apply bank stabilization BMPs, as needed, for any in-channel disturbance, such as: <ul style="list-style-type: none"> • A 100-foot vegetative or engineered buffer 	<p>protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area. Routine inspection of all BMPs is required under the provisions of the Construction General Permit. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.</p> <p>The SWPPP must be prepared before the construction begins. The SWPPP must contain a site map(s) that delineates the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project area. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, vehicle and equipment washing and fueling. The Construction General Permit also sets post-construction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the site following construction).</p> <ol style="list-style-type: none"> 3. N.A. The scope of the project would not necessitate the need for an MS4 permit. 4. The project is not expected to result in sediment contaminant bioavailability impacts. 5. As described above a SWPPP will be developed which will include a suite of BMPs to prevent and minimize the extent of siltation and sedimentation entering water bodies. 6. Bank stabilization BMP elements are not identified as a necessary component in the currently available design, but may be added if warranted as drawings progress towards 100% 	
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	<p>shall be maintained between the construction zone and surface water body.</p> <ul style="list-style-type: none"> Native and annual grasses or other vegetative cover shall be established on construction sites immediately upon completion of work causing disturbance, to reduce the potential for erosion close to a waterway or water body. 	design.	
3-2	<p>Prior to construction, a survey should be made of all wells located adjacent to the construction site to determine location and depths of the wells and the groundwater surface. During construction of any project that requires dewatering of groundwater, monitoring wells should be installed adjacent to the groundwater dewatering wells or pumps. If the adjacent groundwater declines in a manner that would adversely affect adjacent wells following implementation of dewatering, the dewatering operations should be halted until the following measures are implemented:</p> <ul style="list-style-type: none"> Install sheet piles to reduce the area influenced by shallow groundwater level declines. In case sheet piles are not an option and domestic well yields are affected, water supplies shall be trucked in to satisfy the well user's water supply needs. If sheet piles are not effective and the impact on the well yield is important, such that the trucking in of water is not economically feasible, the affected well shall be deepened. Another option for a well that is deep enough would be to lower the pump bowl such that deepened water can be pumped out of the well. If these two options are not feasible, a new, deeper, replacement well shall be installed for groundwater production. 	<p>The Groundwater Sustainability Agency for the Yolo Subbasin is the Yolo Subbasin Groundwater Agency (YGSA). Although there is currently no effective Groundwater Sustainability Plan (GSP) pursuant to the Sustainable Groundwater Management Act (SGMA), YGSA will be required to complete a GSP by January 1, 2022. Nevertheless, it is anticipated that the project would not generate conflicts with future groundwater sustainability planning efforts because the project would utilize minimal water resources during construction and would not require ongoing groundwater resources for operation and maintenance.</p>	<p>Delta Plan Mitigation Measure 3-2 is not applicable to the project.</p>
Biological Resources			
4-1	<p>1. Avoid, minimize, and compensate for reduction in area and/or habitat quality of sensitive natural communities, including wetlands, by doing the following:</p> <ul style="list-style-type: none"> Selecting project site(s) that would avoid 	<p>1. The Project would consist of structural modifications to the levee to address seepage, levee stability, erosion, and overtopping concerns. Levee bank construction would involve the use of heavy equipment resulting in approximately 15 acres of ground disturbance, which could result in potentially adverse effects on biological resources</p>	<p>Project is consistent with elements 1-6 of Mitigation Measure 4-1</p>

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	<p>sensitive natural communities, including jurisdictional wetlands and other waters, vernal pools, alkali seasonal wetlands, riparian habitats, and inland dune scrub.</p> <ul style="list-style-type: none"> • Design, to the extent practicable, project elements to avoid effects on sensitive natural communities. • Replacing, restoring, or enhancing on a “no net loss” basis (in accordance with U.S. Army Corps of Engineers (USACE) and State Water Resources Control Board (SWRCB) requirements), wetlands and other waters of the United States and waters of the State that would be removed, lost, and/or degraded. • Where impacts to sensitive natural communities other than waters of the United States or State are unavoidable, compensating for impacts by restoring and/or preserving in-kind sensitive natural communities on-site, or off-site at a nearby site, or by purchasing in-kind restoration or preservation credits from a mitigation bank that services the project site and that is approved by the appropriate agencies, in consultation with applicable regulatory agencies (at ratios that offset temporal loss of habitat value). <p>2. Implement advanced mitigation planning for ecosystem restoration prior to construction.</p> <p>3. Implement construction best management practices, including:</p> <ul style="list-style-type: none"> • Developing and implementing a Stormwater Pollution Prevention Plan (SWPPP). • Minimizing soil disturbance, erosion, and sediment runoff from project site. • Avoiding and minimizing contaminant spills. • Minimizing visual and noise disturbance from construction activities. • Conducting biological construction monitoring to ensure that implemented BMPs are effective. <p>4. Restore areas temporarily affected by construction activities, including:</p>	<p>including special-status species. The Project would temporarily result in impacts on approximately 15 acres of developed areas and ruderal grassland. While neither habitat is considered native, implementation of Mitigation Measure BIO-1: Native Habitat; Mitigation Measure BIO-3: Sensitive Natural Communities; and Mitigation Measure BIO-4: Federally Protected Waterways would reduce adverse effects on impacted habitat to less than significant.</p> <p>2. N/A. The Project does not involve ecosystem restoration.</p> <p>3. As described previously, a SWPPP for the project will be prepared before construction begins and will include applicable BMPs to protect stormwater runoff. The MMRP for the project describes that qualified biologists will be present on-site during construction activities to minimize impacts to biological resources, including</p> <p>4. The project’s Mitigation Measure BIO-1: Native Habitat would help to address disturbances to any ruderal grassland temporarily impacted by construction would be restored by reseeded the affected area with native grasses and forbs following construction, as appropriate.</p> <p>5. N/A. The Project does not involve conversion of oak woodlands</p> <p>6. With any construction that results in ground disturbance there is the potential to introduce weeds. The project site is already dominated by ruderal or non-native weed species. As such, it is unlikely that the applicant will be able to discern the incremental effect that the project would have on invasive species relative to existing baseline conditions if monitoring were implemented. The applicant will ensure that invasive plant species are not intentionally introduced to the project site as a result of the project.</p>	
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	<ul style="list-style-type: none"> • Preparing restoration plan for temporary impacts sites for review by resource agencies. • Minimizing soil disturbance and stockpiling topsoil for later use in any areas to be graded. • Decompacting or amending soil if necessary before planting and use native species for revegetation. • Restoring natural communities with similar or improved function from communities that were affected. <p>5. If a project may result in conversion of oak woodlands, as identified in section 21083.4 of the Public Resources Code, one or more of the following mitigation measures shall be implemented:</p> <ul style="list-style-type: none"> • Conserve oak woodlands, through the use of conservation easements. • Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees. • Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of section 1363 of the Fish and Game Code. <p>6. An invasive species management plan shall be developed and implemented for any project whose construction or operation could lead to introduction or facilitation of invasive species establishment. The plan shall ensure that invasive plant species and populations are kept below preconstruction abundance and distribution levels. The plan shall be based on the best available science and developed in consultation with Department of Fish and Wildlife (DFW) and local experts, such as the University of California Extension, county agricultural commissioners, representatives of County Weed Management Areas (WMA), California Invasive Plant Council, and California Department of Food and Agriculture. The invasive species management plan will include the following elements:</p> <ul style="list-style-type: none"> • Nonnative species eradication methods (if eradication is feasible) • Nonnative species management methods • Early detection methods • Notification requirements 		
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	<ul style="list-style-type: none"> • Best management practices for preconstruction, construction, and post construction periods • Monitoring, remedial actions and reporting requirements • Provisions for updating the target species list over the lifetime of the project as new invasive species become potential threats to the integrity of the local ecosystems 		
<p>4-2</p>	<ol style="list-style-type: none"> 1. Select project site(s) that would avoid habitats of special-status species (which may include foraging, sheltering, migration and rearing habitat in addition to breeding or spawning habitat), and to the maximum extent practicable, (re)design project elements to avoid effects on such species. 2. Schedule construction to avoid special-status species' breeding, spawning, or migration locations during the seasons or active periods that these activities occur. 3. Conduct preconstruction surveys (by a qualified biologist) for special-status species in accordance with U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS) and DFW survey methodologies and appropriate timing to determine presence and locations of any special-status species and their habitat, and avoid, minimize, or compensate for impacts to special-status species in coordination with DFW and USFWS or NMFS. 4. Establish buffers around special-status species habitats to exclude effects of construction activities. The size of the buffer shall be in accordance with USFWS and DFW protocols for the applicable special-status species. If nest tree removal is necessary, remove the tree only after the nest is no longer active, as determined by a qualified biologist. 5. Conduct construction monitoring (by qualified biologist) to ensure effectiveness of avoidance and minimization measures and implement remedial measures if necessary. 6. When appropriate, relocate special-status plant and animal species or their habitats from project sites following USFWS, NMFS, and DFW protocols (e.g., for special-status plant species or elderberry 	<ol style="list-style-type: none"> 1. While the Yolo Bypass Toe Drain Canal and the surrounding riparian habitat provides suitable habitat for giant gartersnake, western pond turtle, special-status fish including California Central Valley DPS steelhead, Central Valley ESU spring-run chinook salmon, longfin smelt, Sacramento perch, Sacramento River ESU winter-run Chinook salmon, and Sacramento splittail, the Project would avoid direct impacts to the Toe Drain Canal. Construction activities could result in indirect impacts to fish habitat including increased erosion potential. Implementation of the Mitigation Measure BIO-2a: Special-Status Species - Special-Status Fish, Mitigation Measure BIO-2b: Special-Status Species - Giant Gartersnake, Mitigation Measure BIO-2c: Special-Status Species - Western Pond Turtle, Mitigation Measure BIO-3: Sensitive Natural Communities and Mitigation Measure BIO-4: Federally Protected Waterways would reduce potential indirect effects to special-status species to less than significant. 2. The project will include implementation Mitigation Measure BIO-2b: Special-Status Species - Giant Gartersnake, unless approved otherwise by USFWS, construction will be initiated only during the giant gartersnakes' active period (May 1– October 1), when they are able to move away from disturbance. 3. Nesting bird and special-status reptile surveys will be performed before project construction is initiated. The following Mitigation Measures will be implemented which include requirements for preconstruction monitoring including Mitigation Measure BIO-2a: Special-Status Species - Special-Status Fish, Mitigation Measure BIO-2b: Special-Status Species - Giant Gartersnake, Mitigation Measure BIO-2c: Special-Status Species - Western Pond Turtle, Mitigation Measure BIO-2d: Special-Status Species - Burrowing Owl, Mitigation Measure BIO-2e: Special-Status Species - Swainson's Hawk, and Mitigation Measure BIO-2f: Special-Status Species - Nesting Birds and Raptors (Excluding Swainson's Hawk). 	<p>Project is consistent with elements 1-7 of Mitigation Measure 4-2</p>

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	<p>shrubs).</p> <p>7. Where impacts to special-status species are unavoidable, compensate for impacts by restoring or preserving in-kind suitable habitat on-site, or off-site, or by purchasing restoration or preservation credits (in compliance with the California Endangered Species Act (CESA) and federal Endangered Species Act (ESA) for affected State- or federally-listed species from a mitigation bank that serves the project site and that is approved by the appropriate agencies, in consultation with the appropriate regulatory agencies (at ratios that offset the temporary loss of habitat value).</p>	<p>4. Project will establish buffers if appropriate. See Mitigation Measure BIO-2d: Special-Status Species - Burrowing Owl, Mitigation Measure BIO-2e: Special-Status Species - Swainson's Hawk, and Mitigation Measure BIO-2f: Special-Status Species - Nesting Birds and Raptors (Excluding Swainson's Hawk)</p> <p>5. If nesting birds are determined to be present qualified biologists will be present on-site during construction activities to minimize impacts to bird resources. See Mitigation Measure BIO-2e: Special-Status Species - Swainson's Hawk, and Mitigation Measure BIO-2f: Special-Status Species - Nesting Birds and Raptors (Excluding Swainson's Hawk)</p> <p>6. As per Mitigation Measure BIO-2c: Special-Status Species - Western Pond Turtle, if any western pond turtles are observed during construction, the biologist will relocate the individual(s) at least 200 feet up- or downstream of the project area to similar habitat within or adjacent to the Toe Drain Canal, if feasible.</p> <p>7. Impacts/Mitigation: The project is not expected to warrant the need to have compensatory mitigation for special-status species.</p>	
<p>4-3</p>	<p>1. Select project site(s) that would avoid a substantial reduction in fish and wildlife species habitat.</p> <p>2. To the maximum extent practicable, design project elements to avoid effects that would lead to a substantial loss of fish and wildlife habitat.</p> <p>3. Replace, restore, or enhance habitats for fish and wildlife species that would be lost.</p> <p>4. Where substantial loss of habitat for fish and wildlife species is unavoidable, compensate for impacts by preserving in-kind habitat.</p>	<p>1. The Project would temporarily result in impacts on approximately 15 acres of developed areas and ruderal grassland.</p> <p>2. The Project is designed to minimize impacts to fish and wildlife habitat.</p> <p>3,4. The Project plans to avoid the Toe Drain Canal, which would have the most impact on Special-Status species habitats. All other impacts would be none or less than significant after implementing Mitigation Measures BIO-1, 2a, 2b, 2c, 2d, 2e, 2f, 3, and 4.</p>	<p>Project is consistent with elements 1-4 of Mitigation Measure 4-3</p>
<p>4-4</p>	<p>1. Protect habitat for migratory waterfowl and shorebirds by expanding existing wildlife refuges and management areas, and establishing new ones in or near wetland areas used by migratory waterfowl and shorebirds.</p> <p>2. Protect, restore and enhance connectivity of habitats, including but not limited to wetland and riparian habitats that function as migration corridors for wildlife species. Habitat restoration might be accomplished by establishing suitable hydrology or other physical conditions for desirable vegetation, planting desirable vegetation, fencing and managing</p>	<p>1. The Project is not expected to permanently affect migratory waterfowl and shorebird habitat</p> <p>2. The Project would reduce overall flood risk to West Sacramento and reduce risk of uncontrolled flooding in the study area that could result in significant damages. Restoration would include reseeding disturbed areas with a native grass seed mix to promote revegetation and minimize soil erosion.</p> <p>3. The Toe Drain Canal within the project area provides a seasonal wildlife corridor for fish species travelling northward to the Tule Canal and westward to the Yolo Bypass. The Project plans to avoid the Toe Drain Canal,</p>	<p>Project is consistent with elements 1-4 of Mitigation Measure 4-4</p>

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	<p>grazing, and other means.</p> <p>3. Protect migratory pathways for migratory aquatic species such as salmon, steelhead, and sturgeon including those that use Delta tributaries and floodplain habitats by screening new diversions, and screening existing diversions and removing existing migration barriers if the specific proposed project/activity (e.g., increased intake volume through an existing unscreened diversion, new diversion, new barrier, new barrier near an existing unscreened diversion, etc.) exacerbates the negative effect on migratory aquatic species caused by the existing barrier or unscreened diversion.</p> <p>4. Avoid or minimize alteration of flow patterns and water quality effects that could disrupt migratory cues for migratory aquatic species by implementing water management measures and establishing programs to reduce water pollution.</p>	<p>Additionally, implementation of the Mitigation Measure BIO-2a: <i>Special-Status Species - Special-Status Fish</i> would reduce potential indirect effects to special-status fish to less than significant.</p> <p>4. The Project is not expected to alter water flow patterns. Mitigation Measure HYD-1: <i>Prepare SWPPP</i> and Mitigation Measure BIO-2a: <i>Special-Status Species - Special-Status Fish</i> would monitor and minimize impacts on water quality.</p>	
<p>4-5</p>	<p>Prior to construction, evaluate impacts to trees or other biological resources protected by local policies and ordinances, and abide by any permit requirements associated with these policies and ordinances.</p>	<p>Site preparation for the Project would not involve removing any trees or shrubs but would involve clearing non-native groundcover. The Project would not conflict with any local policies or ordinances protecting biological resources including a tree preservation policy or ordinance. Nor is the Project located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.</p>	<p>Project is consistent with Mitigation Measure 4-5</p>
<p>Delta Flood Risk</p>			
<p>5-1</p>	<p>1. Prepare a drainage or hydrology and hydraulic study that would assess the need and provide a basis for the design of drainage-related mitigations, such as new onsite drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of Federal Emergency Management Agency (FEMA), USACE, state Department of Water Resources (DWR), Central Valley Flood Protection Board (CVFPB), as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, and CVFPB. The study would identify potential increases in flood risks, including those that may result from new facilities.</p>	<p>1. Implementation of the proposed pump station and drainage infrastructure would alleviate existing flood risk. As such, operation, and maintenance of the project would result in no adverse impacts with respect to flooding; effects would be permanent and beneficial.</p> <p>2. The project proposes to construct a 30-inch perforated pipe subdrain system within Segment AD. The subdrain system would be connected to the existing subdrain system constructed in 2021, and would transport seepage to the newly constructed pump station. The pump station would discharge seepage runoff from the levee toe into the Yolo Bypass. The construction of the new subdrain system and pump station would allow for increased seepage resulting from the project, reducing impacts to the existing subdrain system in the project area. The addition of the new drainage infrastructure to discharge infrequent seepage water described above, would not result in an adverse impact with</p>	<p>Project is consistent with all relevant elements of Mitigation Measure 5-1 (note that elements 6, 8, 9, and 10 are not applicable to the project).</p>

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	<ol style="list-style-type: none"> 2. Provide temporary drainage bypass facilities that would reroute drainage around, along, or over the Proposed Project facilities and construction sites. The temporary bypass facilities would be designed in accordance with the results and recommendations of a drainage or hydrologic and hydraulic study and would be in place and fully functional until long-term replacement facilities are completed. 3. Provide onsite stormwater detention storage at construction and project facility sites that would reduce project-caused short- or long-term increases in drainage runoff. The storage space placement and capacity would be designed based on the drainage or hydrologic and hydraulic study. 4. Based on the results of the drainage or hydrologic and hydraulic study, arrange the length of any stockpiles or other construction features in the direction of the floodplain flow to maximize surface flows under flood flow conditions. 5. At in-stream construction sites that might reduce channel capacity, install setback levees or bypass channels to maintain channel capacity and to mitigate hydraulic impacts. 6. Where low channel velocities might result from construction, implement a sediment management program in order to maintain channel capacity. 7. Provide cross drainage, replacement drainage paths and facilities, and enlarged flow paths to reroute drainage around, under, or over the Proposed Project facilities and to restore the function of any affected existing drainage or flow paths and facilities. 8. Channel modifications for restoration actions would be required to be implemented to maintain or improve flood management functions and would be coordinated with the USACE, DWR, CVFPB, and other flood control agencies to assess the desirability and feasibility for channel modifications. To the extent consistent with floodplain land uses and flood control requirements, if applicable, woody riparian vegetation would be allowed to naturally establish. 9. For areas that would be flooded as a result of the project, or where existing flooding would be increased in magnitude, frequency, or duration, purchase a flowage easement and/or property at the 	<p>respect to existing service systems.</p> <ol style="list-style-type: none"> 3, 4. Proposed project would be required to comply with the Construction General Permit and local stormwater ordinances, which would require obtaining coverage under the Construction General Permit and the preparation and implementation of a SWPPP to control runoff and runoff from construction work sites. 5. The construction of the Project will not applicably change conveyance capacity within the Yolo Bypass; therefore setback levees or bypass channels are not necessary. 6. N/A. The project will not affect low channel velocities in Yolo Bypass. 7. As described previously, the project is not expected to alter existing drainages or flow paths 8. N.A. The project does not involve restoration actions 9. N.A. The project would not cause new flooding of areas 10. N.A. Sediment removal is not expected to be necessary at the discharge outfall location. The applicant seeks to avoid future sediment removal at the outfall structure to the extent possible to avoid causing additional impacts to waters of the U.S. and listed fish species that would result from such work. 11. The project does not affect upstream reservoir operations. 	
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	<p>fair-market value.</p> <p>10. Provide a long-term sediment removal program at in-river structures.</p> <p>11. To mitigate potential impacts of changes in the timing of reservoir releases or the possible combination of river peak flows, use forecasts to implement coordination of operations with existing reservoirs.</p>		
5-2	<p>1. Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design of drainage-related mitigations, such as new onsite drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, CVFPB, as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, and CVFPB.</p> <p>2. Provide onsite stormwater detention storage at construction and project facility sites that would reduce project-caused short- and long-term increases in drainage runoff. The storage space would be designed based on the drainage or hydrologic and hydraulic study.</p>	<p>1. No specific mitigation measures for drainage issues is considered necessary based on design and location of the project. The project proposes to construct a 30-inch perforated pipe subdrain system within Segment AD. The subdrain system would be connected to the existing subdrain system constructed in 2021, and would transport seepage to the newly constructed pump station. The pump station would discharge seepage runoff from the toe into the Yolo Bypass. The construction of the new subdrain system and pump station would allow for increased seepage resulting from the project, reducing impacts to the existing subdrain system in the project area. The addition of the new drainage infrastructure to discharge infrequent seepage water described above, would not result in an adverse impact with respect to existing service systems.</p> <p>2. Proposed project would be required to comply with the Construction General Permit and local stormwater ordinances, which would require obtaining coverage under the Construction General Permit and the preparation and implementation of a SWPPP to control runoff and runoff from construction work sites.</p>	Project is consistent with elements 1-2 of Mitigation Measure 5-2
5-4	<p>1. Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design of drainage-related mitigations, such as new onsite drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, CVFPB, as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, and CVFPB.</p> <p>2. Where high channel velocities might result from construction, provide bank protection, such as rip</p>	<p>1. No specific mitigation measures for drainage issues is considered necessary based on design and location of the project. The project proposes to construct a 30-inch perforated pipe subdrain system within Segment AD. The subdrain system would be connected to the existing subdrain system constructed in 2021, and would transport seepage to the newly constructed pump station. The pump station would discharge seepage runoff from the toe into the Yolo Bypass. The construction of the new subdrain system and pump station would allow for increased seepage resulting from the project, reducing impacts to the existing subdrain system in the project area. The addition of the new drainage infrastructure to discharge infrequent seepage water described above, would not result in an adverse</p>	Project is consistent with all relevant elements of Mitigation Measure 5-4 (note that elements 4, 6, 7, 11, 13, and 15 are not applicable).

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<p>rap, to protect levees from erosion.</p> <ol style="list-style-type: none"> 3. Where construction results in longer channel wind fetch lengths, install vegetative buffer zones or wave erosion protection on the water side slope of levees, such as rock or grouted rip rap, and increase levee freeboard to address higher wind and wave runup. 4. Based on the drainage or hydrology and hydraulics study, determine any resulting changes to available evacuation plans or emergency response times. 5. To reduce emergency response times and public safety risks, raise structures and major roads out of the floodplain. 6. Provide automated flood warning systems. 7. Develop and implement area-specific evacuation and emergency response plans. 8. Considering the results of the hydraulics study noted above, perform a seepage and stability analyses that would assess the need and act as a basis for design of other seepage- and stability-related mitigations, such as cutoff walls, adjacent levees, setback levees, berms, and subdrainage features. Perform the analyses in accordance with applicable standards of FEMA, USACE, and DWR. 9. Perform research and collect subsurface information in accordance with applicable standards of FEMA, USACE, and DWR and perform settlement analyses that would assess the need for monitoring and potential settlement- related mitigations, such as ground improvement or pre-construction surcharging. Perform the analyses in accordance with applicable standards of USACE. 10. Perform research and collect subsurface information in accordance with applicable standards of FEMA, USACE, and DWR and perform seismic and liquefaction analyses that would assess the need and provide the basis for design of other seismic-related mitigations, such as ground improvement. Perform the analyses in accordance with applicable standards of USACE and American Society of Civil Engineers and Southern California Earthquake Center. 11. Prepare and implement a plan for periodic maintenance, inspections, repair, and rehabilitation of new water storage and conveyance facilities that 	<p>impact with respect to existing service systems.</p> <ol style="list-style-type: none"> 2. The project's construction is not expected to cause high channel velocities that will increase the potential for erosion of levees. 3. The project will not result in longer channel wind fetch lengths. 4. N.A. As described in the MND, the project is not expected to alter existing drainages or drainage patterns. 5. The project will not increase emergency response times or increase public safety risks by placing more structures or major roads within a floodplain. 6. N.A. This measure is not warranted because construction of the project is not creating an increased flood risk to the community. 7. N.A. This measure is not warranted because the project is in no way increasing emergency flood risk to the community. 8. The project involves levee bank construction would consist of structural improvements to the YBEL to address seepage, erosion and overtopping concerns. 9. The project will comply with all California Building Code requirements to ensure that the buildings will not be constructed on unsuitable, unstable soils 10. The California Building Code and local ordinances would require that the structural elements of the proposed project would undergo appropriate design-level geotechnical evaluations prior to final design and construction. The geotechnical investigation would include any necessary recommendations for soils remediation and/or foundation systems necessary to reduce seismic-related hazards to less than significant. 11. N.A. The project would not create an impoundment of water, for example a reservoir, which would cause flooding upon failure. The facilities would undergo regular maintenance, inspections, and repair. 12. Implementation of the proposed pump station and drainage infrastructure would alleviate existing flood risk. As such, operation, and maintenance of the project would result in no adverse impacts with respect to flooding; effects would be permanent and beneficial. 13. N/A. The project does not result in a large impoundment of water (e.g., a reservoir) which would warrant the need for safety measures such as gated checks 14. The project does not warrant the need to construct new evacuation and access roads. 15. N/A. The purpose of Golden Guardian emergency drills is to coordinate and familiarize local, state and federal governments and private sector patterns to respond to 	
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	<p>could cause flooding upon failure.</p> <p>12. Provide redundancy and safety controls and devices on water storage and conveyance facilities (pump stations, canals, and tunnels) to protect against facility failure and subsequent flooding.</p> <p>13. To limit flooding from the unlikely event of a conveyance facility failure, limit extensive flow escape with installation of safety devices such as gated checks.</p> <p>14. Construct new evacuation roads and access roads, as necessary.</p> <p>15. Conduct Golden Guardian emergency drills.</p>	<p>natural and man-made disasters (e.g., a large earthquake). These drills take months to coordinate and execute. Implementation of the Project would not warrant the need for such a drill.</p>	
<p>5-5</p>	<p>1. Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design of drainage-related mitigations, such as new onsite drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, CVFPB, as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, and CVFPB. Provide temporary drainage bypass facilities that would reroute drainage around, along, or over the Proposed Project facilities and construction sites. The temporary bypass facilities would be designed in accordance with drainage or hydrology and hydraulic study and would be in place and fully functional until long-term replacement facilities are completed.</p> <p>2. Based on the results of the drainage or hydrologic and hydraulic study, arrange the length of any stockpiles or other construction features in the direction of the floodplain flow to maximize surface flows under flood conditions.</p> <p>3. At in-stream construction sites that might reduce channel capacity, install setback levees or bypass channels to maintain channel capacity and to mitigate hydraulic impacts.</p> <p>4. Provide cross drainage, replacement drainage paths and facilities, and enlarged flow paths to reroute drainage around, under, or over the Proposed Project facilities and to restore the function of any</p>	<p>1. No specific mitigation measures for drainage issues is considered necessary based on design and location of the project. The project proposes to construct a 30-inch perforated pipe subdrain system within Segment AD. The subdrain system would be connected to the existing subdrain system constructed in 2021, and would transport seepage to the newly constructed pump station. The pump station would discharge seepage runoff from the toe into the Yolo Bypass. The construction of the new subdrain system and pump station would allow for increased seepage resulting from the project, reducing impacts to the existing subdrain system in the project area. The addition of the new drainage infrastructure to discharge infrequent seepage water described above, would not result in an adverse impact with respect to existing service systems.</p> <p>2. Proposed project would be required to comply with the Construction General Permit and local stormwater ordinances, which would require obtaining coverage under the Construction General Permit and the preparation and implementation of a SWPPP to control runoff and runoff from construction work sites.</p> <p>3. The project is not expected to change flow conveyance within the Yolo Bypass.</p> <p>4. The project is not expected to alter existing drainage or flow paths.</p> <p>5. N.A. The project does not involve restoration actions.</p>	<p>Project is consistent with all relevant elements of Mitigation Measure 5-5 (note that element 5 is not applicable to the project).</p>

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	<p>affected existing drainage or flow paths and facilities.</p> <p>5. Channel modifications for restoration actions would be required to be implemented to maintain or improve flood management functions and would be coordinated with the USACE, DWR, CVFPB, and other flood control agencies to assess the desirability and feasibility for channel modifications. To the extent consistent with floodplain land uses and flood control requirements, if applicable, woody riparian vegetation would be allowed to naturally establish.</p>		
Land Use and Planning			
<p>6-1</p>	<p>Minimize physical division of existing established communities or residential areas by designing new facilities and infrastructure to be located underground or with sufficient points of visual and physical access. Examples of methods of minimizing physical division include (but are not limited to):</p> <ul style="list-style-type: none"> • Burying or visually masking new infrastructure or facilities; • Restoring disturbed landscapes back to preconstruction conditions; • Reestablishing access (e.g., reconnecting roads, rebuilding bridges); • Relocating landmark buildings; or • Implementing other feasible mitigation to reduce the disturbance to a community's physical composition, visual character, or other features integral to the community's identity. 	<p>The construction of the project is designed to minimize disturbance to the community. The project does not propose changes to land use designations and would have no adverse effects to existing or proposed land uses within the project area. As a result, there are no anticipated effects on land use in the project area.</p>	<p>Project is consistent with Mitigation Measure 6-1</p>
<p>6-2</p>	<p>Compensate for the loss or reduction in environmental values protected by the subject plan or policy. For example, if the project would result in conversion of agricultural land to a non-agricultural use, potential mitigation actions could include:</p> <ul style="list-style-type: none"> • Recording a deed restriction that ensures permanent conservation and mitigation on other property of equal or greater environmental mitigation value; • Creating a buffer or barrier between uses; • Redesigning the project or selecting an alternate location that avoids or mitigates the impact; and/or • Restoring disturbed land to conditions to 	<p>The project will not involve conversion of agricultural land to non-agricultural land. Constructed facilities will be compatible with existing land use designations set forth by zoning ordinances and general plan documents.</p>	<p>Project is consistent with Mitigation Measure 6-2</p>

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	provide equal or greater environmental value to the land affected by the covered action.		
Agriculture and Forestry Resources			
7-1	<ol style="list-style-type: none"> 1. Design proposed projects to minimize, to the greatest extent feasible, the loss of the highest valued agricultural land. 2. For projects that will result in permanent conversion of Farmland, preserve in perpetuity other Farmland through acquisition of an agricultural conservation easement, or contributing funds to a land trust or other entity qualified to preserve Farmland in perpetuity (at a target ratio of 1:1, depending on the nature of the conversion and the characteristics of the Farmland to be converted, to compensate for permanent loss). 3. Redesign project features to minimize fragmenting or isolating Farmland. Where a project involves acquiring land or easements, ensure that the remaining nonproject area is of a size sufficient to allow viable farming operations. The project proponents shall be responsible for acquiring easements, making lot line adjustments, and merging affected land parcels into units suitable for continued commercial agricultural management. 4. Reconnect utilities or infrastructure that serve agricultural uses if these are disturbed by project construction. If a project temporarily or permanently cuts off roadway access or removes utility lines, irrigation features, or other infrastructure, the project proponents shall be responsible for restoring access as necessary to ensure that economically viable farming operations are not interrupted. 5. Manage project operations to minimize the introduction of invasive species or weeds that may affect agricultural production on adjacent agricultural land. 6. Establish buffer areas between projects and adjacent agricultural land that are sufficient to protect and maintain land capability and agricultural operation flexibility. Design buffers to protect the feasibility of ongoing agricultural operations and reduce the effects of construction- or operation-related activities (including the potential to introduce 	1-6 N.A. The project will not involve conversion of agricultural land and no existing agricultural or timber-harvest uses are located on in the vicinity of the project components. As such no Mitigation Measures regarding agricultural and forestry resources are necessary.	Mitigation Measure 7-1 is not applicable to the project

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	<p>special-status species in the agricultural areas) on adjacent or nearby properties. The buffer shall also serve to protect ecological restoration areas from noise, dust, and the application of agricultural chemicals. The width of the buffer shall be determined on a project-by-project basis to account for variations in prevailing winds, crop types, agricultural practices, ecological restoration, or infrastructure. Buffers can function as drainage swales, trails, roads, linear parkways, or other uses compatible with ongoing agricultural operations.</p>		
7-2	<p>Design proposed projects to minimize, to the greatest extent feasible, conflicts and inconsistencies with land protected by agricultural zoning or a Williamson Act contract and the terms of the applicable zoning/contract.</p>	<p>N/A. The project does not affect land protected by agricultural zoning or a Williamson Act contract.</p>	<p>Mitigation Measure 7-2 is not applicable to the project</p>
7-3	<p>Avoid land protected as forestland and timberland through site selection and/or project design. Where feasible, project proponents should take into account the value of the forest, not only in terms of direct products such as wood but also as part of the watershed ecosystem, when selecting a project site. Wherever possible, nonprotected sites should be preferred and selected instead of protected sites.</p>	<p>N/A. The project does not affect forestland and timberland.</p>	<p>Mitigation Measure 7-3 is not applicable to the project</p>
7-4	<ol style="list-style-type: none"> 1. For projects that will result in permanent conversion of Forestland, preserve in perpetuity other forestland through a conservation easement or by acquiring lands or contributing funds to a land trust or other agency (at a target ratio of 1:1, depending on the nature of the conversion and the characteristics of the Forestland to be converted, to compensate for permanent loss). 2. Avoid land protected as forestland and timberland through site selection and/or project design. Where feasible, project proponents should take into account the value of the forest, not only in terms of direct products such as wood, but also as part of the watershed ecosystem, when selecting a project site. When possible, unprotected sites should be preferred and selected instead of protected sites. 3. When removal of existing forestland or timberlands is required as part of an action, proponents must acquire the property at fair market value. 	<p>1-3. N/A. The project does not affect forestland and timberland.</p>	<p>Mitigation Measure 7-4 is not applicable to the project</p>

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Visual Resources			
8-1	<ol style="list-style-type: none"> 1. Use compatible colors for proposed structural features, such as intakes, pumping plants, and surge towers. Use earth tone paints and stains with low levels of reflectivity. 2. Minimize the vertical profile of proposed structures as much as possible. Where possible, use subgrades for floors of structures. Use landscaped berms instead of walls to mask views of structures from high-visibility sites. Use green roof design where roof structures would be highly visible. 3. Use vegetation plantings on proposed facility walls, such as climbing plants, espaliers, and other forms that soften the appearance of structures. 4. Develop a landscaping plan for all proposed structures. Provide vegetative screening to soften views of structures. Landscaping should complement the surrounding landscape. 5. Round the tops and bottoms of spoil disposal areas, and contour the faces of slopes to create more natural-looking landforms. Create visual diversity by planting vegetation with diverse growth forms on the spoil disposal areas; plant with more than just grasses. 6. Landscape parking areas at proposed facilities, and include low-impact design features, such as permeable pavers, tree basins, and bioswales, that reduce stormwater runoff and enhance visual quality. 7. Conduct only partial vegetative clearing of the limits of construction rather than clear the entire area; partial clearing would leave islands of vegetation and result in a more natural look. Use irregular clearing shapes with feathered edges instead of hard edges to promote a more natural effect. 8. Develop design form and materials with a goal to achieve aesthetic visual character instead of a strictly utilitarian objective. Use cast natural form elements or natural materials for facing to achieve texture and color compatible with the adjacent landscape; natural materials would be preferable for areas of high visibility and public use. Landscape areas adjacent to facilities. Use natural materials, such as wood and stone, for signage at proposed 	<ol style="list-style-type: none"> 1-4. The Project includes a new pump station along Segment AD, that would be similar in appearance to the existing pump station and surrounding levee infrastructure. Because of the pump station's relatively small size, and the presence of riparian vegetation along the bank of the river, the pump station would not affect scenic vistas. 5. Site preparation for the Project would not involve removing any trees or shrubs but would involve clearing non-native groundcover. All construction activities would be contained to the project boundaries, which is currently degraded and lacking in visual appeal. Once construction is completed, all disturbed areas would be restored and all equipment and trucks would be removed. Disturbed areas would be reseeded with native grasses and forbs to promote revegetation. The staging areas would also be reseeded and planted with native grasses and forbs and would be returned to pre-project conditions. 6. The SWPPP and landscaping plan to be developed will consider these design approaches. 7. The amount of vegetation clearing will be minimized to the extent feasible 8. These building materials for the pump station will be considered, but the specific building construction materials to be used will largely be dictated by available budget since use of natural materials is often more expensive. 9. The minimal landscaping associated with the pump station, if any, is expected to be aesthetically pleasing to the majority of citizens 10. PG&E owns and operates a 12kvpower distribution line that is located east of and running parallel to Segment AA. The existing 12 kv power line is supported by two power poles, located within the project area at stations 6+90 and 38+00. The project construction activities would require relocation of the power pole located at station 38+0 and the other would be replaced with a longer pole that would raise the power line to meet CVFPB Title 23 requirements Title 23 requirements. As the owner and operator, PG&E will be responsible for complying with Title 23 requirements, as such, they are preparing the design and engineering documents and will be working on the power line and power pole relocation in parallel to the Project. 11. N.A. The project does not involve development of a visitor center. 	<p>Project is consistent with all relevant elements of Mitigation Measure 8-1 (note that element 11 is not applicable to the project).</p>

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	<p>facilities.</p> <p>9. Develop aesthetically pleasing landscaping for relocated roads at the shoulders, intersections, and on- and off- ramps from highways. Design turnouts and scenic vista points where appropriate for relocated roads with high visibility and high public use.</p> <p>10. To the extent consistent with the safety and reliability of the electric grid, as well as site-specific considerations, use single-pole electrical transmission towers instead of lattice-form towers for proposed large electrical transmission lines, and put transmission lines underground along areas with high visibility and high public use.</p> <p>11. Consider developing aesthetically well-designed visitor centers, vantage areas, or observation decks at appropriate facilities with interpretation features, walking paths, and other features. Although developing visitor centers would not reduce a visual impact, it would have the effect of making the facilities features of interest to the touring public.</p>		
8-2	<p>1. Implement elements of Mitigation Measure 8-1 for temporary construction activities and new facilities that are visible from scenic vistas and designated roads and highways as appropriate.</p> <p>2. Replace all scenic resources (e.g., large trees) that would be removed for the Proposed Project, when feasible. Identify compensatory mitigation for visual or aesthetic resources by providing improvements to areas with existing diminished scenic quality.</p>	<p>1. N.A. The project area is not located within a local, State or Federally-designated scenic vista.</p> <p>2. N.A. Based on the MND analysis, the project is not expected to remove any scenic resources.</p>	Mitigation Measure 8-2 is not applicable to the project
8-3	Use shields for proposed lighting facilities, and direct lighting downward and inward toward the facilities.	The Project would not install or add substantial new sources of light or glare to the project vicinity. Furthermore, construction would typically occur during 8 hour daytime shifts and is not anticipated to extend into the nighttime.	Project is consistent with Mitigation Measure 8-3
Air Quality			
9-1	<p>1. Use equipment and vehicles that are compliant with Air Resource Board (ARB) requirements and emission standards for on-road and off-road fleets and engines. New engines and retrofit control systems should reduce NOx and PM from diesel-fueled on-road and off-road vehicles and equipment.</p> <p>2. Minimize idling times either by shutting equipment</p>	1-8. The YSAQMD requires that all projects should implement best management practices to reduce dust emissions and avoid localized health impacts. The Project would implement the YSAQMD recommended best management practices as Mitigation Measure AQ-1 including but not limited to:	Project is consistent with Mitigation Measure 9-1. The Project has air quality measures which are equivalent to elements 1-8 of Mitigation Measure 9-1.

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<p>off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CA Code of Regulations [CCR]). Clear signage should be posted for construction workers at all entrances to the site.</p> <ol style="list-style-type: none"> 3. Maintain all equipment in proper working condition according to manufacturer's specifications. 4. Use electric equipment when possible. Use lower-emitting alternative fuels to power vehicles and equipment where feasible. 5. Use low Volatile Organic Compounds (VOC) coatings and chemicals; minimize chemical use. 6. Prepare a dust control plan and apply dust control measures at the construction sites. 7. To minimize track-out of dirt and mud from dirt and gravel roads, all trucks and equipment, including their tires, shall be washed prior to leaving the site. Only exteriors of trucks and equipment are to be washed (no engine degreasing), no detergents or chemicals shall be used in the wash water, and off-site runoff of rinse water shall be prevented. 8. For projects involving land fallowing, land conversion, or other agricultural operations, implement applicable BMPs from agencies such as the U.S. Department of Agriculture Natural Resources Conservation Service to reduce potential dust emissions. <p>BMPs for fallowed lands could include, but are not limited to, the following:</p> <ol style="list-style-type: none"> 9. Implement conservation cropping sequences and wind erosion protection measures, such as: <ul style="list-style-type: none"> • Plan ahead to start with plenty of vegetation residue, and maintain as much residue on fallowed fields as possible. Residue is more effective for wind erosion protection if left standing. • If residues are not adequate, small grain can be seeded about the first of the year to take advantage of the winter rains and irrigated with a light irrigation if needed to get adequate growth. • Avoid any tillage if possible. • Avoid any traffic or tillage when fields are 	<ul style="list-style-type: none"> • Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure; • Haul trucks shall maintain at least 2 feet of freeboard; • Cover all trucks hauling dirt, sand, or loose materials; • Apply non-toxic binders to exposed areas after cut and fill operations and hydroseed area; • Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days); • Plant tree windbreaks on the windward perimeter of the construction projects if adjacent to open land; • Plant vegetative ground cover in disturbed areas as soon as possible; • Cover inactive storage piles; • Sweep streets if visible soil material is carried out from the construction site; • Treat accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips or mulch; • Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel. <p>Furthermore, the Project would through implementation of Mitigation Measure AQ-2 minimize idling time either by shutting equipment off when not in use or reducing the time of idling to five minutes, as required by the California Code of Regulations, Title 13, sections 2449(d)(3) and 2885. The project proponent would provide clear signage that posts this requirement for workers at the entrances to the site.</p> <p>9-12. The Project will not involve fallowing of agricultural lands or otherwise affect agricultural lands.</p> <p>Basic Construction Mitigation Measures Recommended for ALL Proposed Projects</p> <p>1-8. The YSAQMD requires that all projects should implement best management practices to reduce dust emissions and avoid localized health impacts. The Project would implement the YSAQMD recommended best management practices as Mitigation Measure AQ-1 including but not limited to:</p>	<p>Elements 9-12 of Mitigation Measure 9-12 are not applicable because the project would not involve fallowing of land.</p> <p>Elements 1-8 regarding basic mitigation measures required of all projects is being achieved through adoption of BAAQMD basic construction measures</p> <p>Elements 1-10 regarding additional construction mitigation measures are not applicable because with the aforementioned measures in place, the project would not result in significant impacts to air quality.</p>
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	<p>extremely dry to avoid pulverization.</p> <p>10. Apply soil stabilization chemicals to fallowed lands.</p> <p>11. Re-apply drain water to allow protective vegetation to be established.</p> <p>12. Reuse irrigation return flows to irrigate windbreaks across blocks of land including many fields to reduce wind fetch and reduce emissions from fallowed, farmed, and other lands within the block. Windbreak species, management, and layout would be optimized to achieve the largest feasible dust emissions reduction per unit water available for their irrigation. Windbreak corridors would provide ancillary aesthetic and habitat benefits.</p> <p>A. Project-specific lists of mitigation measures should also include the recommendations or requirements of the local air district(s). For example, the Bay Area Air Quality Management District (BAAQMD) lists the following basic and additional mitigation measures to reduce emissions from project construction (BAAQMD, 2010. California Environmental Quality Act Air Quality Guidelines. December 2010. San Francisco, California. Site accessed February 8, 2011. http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx).</p> <p>Basic Construction Mitigation Measures Recommended for ALL Proposed Projects</p> <ol style="list-style-type: none"> 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 mph. 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by 	<ul style="list-style-type: none"> • Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure; • Haul trucks shall maintain at least 2 feet of freeboard; • Cover all trucks hauling dirt, sand, or loose materials; • Apply non-toxic binders to exposed areas after cut and fill operations and hydroseed area; • Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days); • Plant tree windbreaks on the windward perimeter of the construction projects if adjacent to open land; • Plant vegetative ground cover in disturbed areas as soon as possible; • Cover inactive storage piles; • Sweep streets if visible soil material is carried out from the construction site; • Treat accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips or mulch; • Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel. <p>Furthermore, the Project would through implementation of Mitigation Measure AQ-2 minimize idling time either by shutting equipment off when not in use or reducing the time of idling to five minutes, as required by the California Code of Regulations, Title 13, sections 2449(d)(3) and 2885. The project proponent would provide clear signage that posts this requirement for workers at the entrances to the site.</p> <p>Additional Construction Mitigation Measures Recommended for Projects with Construction Emissions Above the Threshold</p> <p>Implementation of the aforementioned air quality mitigation measures would be sufficient to minimize air quality impacts to a less than significant level.</p>	
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	<p>the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.</p> <ol style="list-style-type: none"> 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator. 8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. <p>Additional Construction Mitigation Measures Recommended for Projects with Construction Emissions Above the Threshold</p> <ol style="list-style-type: none"> 1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. 2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. 3. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity. 4. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. 5. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time. 6. All trucks and equipment, including their tires, shall be washed off prior to leaving the site. 7. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel. 8. Sandbags or other erosion control measures shall 		
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	<p>be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.</p> <ol style="list-style-type: none"> 9. Minimizing the idling time of diesel powered construction equipment to two minutes. 10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. 11. Use low VOC (i.e., reactive organic gases or ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings). 12. Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM. 13. Require all contractors to use equipment that meets ARB's most recent certification standard for off-road heavy duty diesel engines. 		
<p>9-2</p>	<p>Applicants should develop and implement a project-specific Odor Management Plan. Odor control measures that can be incorporated into this plan include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • A list of potential odor sources • Identification and description of the most likely sources of odor • Identification of potential, intensity, and frequency of odor from likely sources • A list of odor control technologies and management practices that could be implemented to minimize odor releases • A protocol for monitoring, recording, reporting and responding to odor events, including notification of the local and downwind jurisdictions of projects that may result in odor complaints, including contact 	<p>The Project determined that a project-specific Odor Management Plan was not warranted. The rationale for that assessment is as follows:</p> <p>The Project does not include any of the land use types identified by the YSAQMD to be associated with odor impacts. Because no new odor sources and no impact would occur, odors are not addressed further in the MND.</p>	<p>Mitigation Measure 9-2 is not applicable.</p>

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	<p>numbers for responsible individuals during construction. If odor an event occurs, construction activity should be suspended until conditions change, removing the cause and resultant odors, or until alternate management practices are implemented that significantly reduce the odors.</p>		
<p>9-3</p>	<p>The Air Quality Technical Report prepared for the Proposed Project should evaluate human health risks from potential exposures of sensitive receptors to substantial pollutant concentrations on a project-specific basis. The need for a human health risk analysis should be evaluated using approved screening tools, and discussed with the local Air Quality Management District (AQMD) or Air Pollution Control District (APCD) at the time of preparation of the Air Quality Technical Report.</p> <p>If the health risk is determined to be significant on a project-specific basis, control measures should be implemented to reduce health risks to levels below the applicable air district threshold.</p> <p>Implementation of one or more of the following requirements, where feasible and appropriate would reduce the effects of Impact 9-3a, Construction or Operation of Projects Would Expose Sensitive Receptors to Substantial Pollutant Concentrations:</p> <ol style="list-style-type: none"> 1. Implement Mitigation Measure 9-1 to reduce air emissions and air quality impacts from construction and operations of the Proposed Project. 2. Use equipment with diesel engines designed or retrofitted to minimize DPM emissions, usually through the use of catalytic particulate filters in the exhaust. 3. Use electric equipment to eliminate local combustion emissions. 4. Use alternative fuels, such as compressed natural gas or liquefied natural gas. <p>If the project would result in significant emissions of airborne, naturally occurring asbestos or metals from excavation, hauling, blasting, tunneling, placement, or other handling of rocks or soil, a dust mitigation and air monitoring plan would be required to specify site-specific measures to minimize emissions and that airborne concentrations of the toxic air contaminants (TACs) of</p>	<p>Estimated emissions that would result from construction of the Project were compared to YSAQMD's CEQA thresholds of significance and the U.S. EPA's de minimis conformity thresholds to determine significance. According to 40 CFR 93.153, conformity determinations are required only of Federal actions that occur in nonattainment areas and result in generation of emissions that exceed established de minimis thresholds.</p> <p>Construction of the Project would begin in spring 2022 and is expected to continue until August 2022. Emissions of NOX, ROG, and PM2.5 would not exceed the Federal de minimis thresholds or the YSAQMD CEQA thresholds of significance before mitigation. Therefore, emissions generated during construction of the Project would be considered temporary, and less than significant.</p> <p>The YSAQMD has not established a threshold of significance for mobile source TAC emissions. The nearest receptor to the project site is located at the Valhalla Mobile Home Club. This receptor is not in the vicinity of the project site and TAC emissions from construction equipment use would have a negligible impact to receptors at this location. Therefore, construction of the preferred action would not result in significant impacts with respect to health risk.</p> <p>The Project is consistent with applicable mitigation measures identified in this section.</p>	<p>Project is consistent with Mitigation Measure 9-3.</p>

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	concern do not exceed regulatory or risk-based trigger levels.		
Cultural Resources			
10-1	<ol style="list-style-type: none"> 1. Before any ground-disturbing activities begin, conduct intensive archaeological surveys, including subsurface investigations to identify the locations, extent, and integrity of presently undocumented archaeological resources that may be located in areas of potential disturbance. In addition, if ground-disturbing activities are planned for an area where a previously documented prehistoric archaeological site has been recorded but no longer may be visible on the ground surface, conduct test excavations to determine whether intact archaeological subsurface deposits are present. Also conduct surveys at the project site for the possible presence of cultural landscapes and traditional cultural properties. 2. If potentially CRHR-eligible prehistoric or historic-era archeological resources are discovered during the survey phase, additional investigations may be necessary. These investigations could include, but not necessarily be limited to, measures providing resource avoidance, archival research, archaeological testing and California Register of Historical Resources (CRHR) eligibility evaluations, and contiguous excavation unit data recovery. In addition, upon discovery of potentially CRHR-eligible prehistoric resources, coordinate with the NAHC and the Native American community to provide for an opportunity for suitable individuals and tribal organizations, including federally recognized tribes, to comment on the proposed research. 3. If CRHR-eligible archaeological resources or cultural landscapes/properties are present and would be physically impacted, specific strategies to avoid or protect these resources should be implemented if feasible. These measures may include: <ul style="list-style-type: none"> • Planning construction to avoid the sensitive sites • Deeding the sensitive sites into permanent conservation easements • Capping or covering archaeological sites • Planning parks, green space, or other open space to incorporate the sensitive sites 	<p>1-3: Surveys: Review of archival documents at the California Historical Resources Information System (CHRIS) identified one resource, P-34-005225 (Sacramento River Tribal Cultural Landscape), within 0.5 mile of the APE. No pre-contact Native American archaeological resources or historic-era archaeological resources have been previously recorded in the APE or within 0.5 mile. GEI archaeologists conducted an archaeological pedestrian survey of all portions of the APE on September 29 to October 1, 2020. Tribal monitors from the Yocha Dehe Wintun Nation were also present. The surveys were conducted to intensive standards (pedestrian transects spaced no more than 15 meters apart).</p> <p>No pre-contact Native American or historic-era archaeological resources were identified during the survey effort.</p> <p>Two historic-era built environment resources were recorded: segments the West Sacramento Unit 2 North Levee and the Deep Water Ship Channel (DWSC) Navigation Levee. The Project will include implementation of Mitigation Measure CR-2: <i>Inadvertent Discovery of Cultural Materials</i>: If an inadvertent discovery of cultural materials; tribal cultural resources; sacred sites; or landscapes is made at any time during project-related construction activities, USACE in consultation with WSAFCA and other interested parties, in coordination with an archaeologist meeting the Secretary of the Interior’s Professional Qualifications Standards for Archaeology and culturally affiliated Native American tribes, shall develop appropriate protection and avoidance measures where feasible. These procedures shall be developed in accordance with the GRR PA and Historic Properties Management Plan (HPMP), which specifies procedures for post-review discoveries. Additional measures, such as development of a Historic Properties Treatment Plan prepared in accordance with the GRR PA and Historic Properties Management Plan (HPMP) may be necessary, if avoidance or protection is not possible</p> <p>4,5: The Project will have consultation with the State Historic Preservation Officer (SHPO) and the NAHC as part of the permitting process. GEI sent a letter to interested Native American tribes identified by USACE via email on August 21, 2020. The letter stated that the tribe had been identified</p>	Project is consistent with all elements of Mitigation Measure 10-1

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	<ul style="list-style-type: none"> • Granting of cultural easements to Native American tribes for the purpose of protecting cultural resource properties <p>4. If federal agencies are participants in the activity and Section 106 of the National Historic Preservation Act applies, conduct formal consultation with the State Historic Preservation Officer, Tribal Historic Preservation Officer (THPO) or Tribal Administrator for tribes that do not have a THPO, and the Native American community. Potential adverse effects on cultural resources recommended as eligible for listing in the National Register of Historic Places (NRHP) will be resolved through the development of a memorandum of agreement and/or a program-level agreement.</p> <p>5. As part of efforts to identify, evaluate, and consider cultural resources, including prehistoric sites, Native American human remains, and traditional cultural properties, Native Americans would be consulted. The California Native American Heritage Commission (NAHC) would be asked to provide a list of Native Americans who should be contacted concerning an identified future project. The NAHC would also be asked to search its Sacred Lands Files. Native Americans identified by the NAHC would be contacted by letter to request information on cultural resources of importance. They also would be asked to identify concerns they have about the project. THPOs and Tribal Administrators of federally recognized tribes would be contacted and asked to search their files and provide information necessary for the identification and consideration of cultural resources.</p> <p>6. Before any project-specific ground-disturbing activities begin, conduct investigations to identify submerged cultural resources. These investigations would include review of State Lands Commission (SLC) Shipwrecks Database and other SLC files, and remote sensing surveys conducted under the direction of a qualified maritime archaeologist. If avoidance of significant submerged cultural resources is not feasible, a permit from SLC may be necessary to conduct resource documentation and possible salvage of artifacts, ship components, and other data and objects.</p> <p>7. If CRHR-eligible archaeological resources, including</p>	<p>by USACE as an interested party and that GEI would coordinate with the tribe concerning pedestrian surveys, resource recording, and any other resources of tribal significance. The letter also gave a brief project description and a summary of cultural resources investigations to date. Finally, the letter indicated the dates that GEI would be conducting a pedestrian survey of the APE. Letters were sent to the following tribes and individuals:</p> <ul style="list-style-type: none"> • United Auburn Indian Community (UAIC); Melodi McAdams, Repatriation and Research Specialist; Matthew Moore, Tribal Historic Preservation Officer; Travis Young, Lead Tribal Monitor, • Wilton Rancheria (Wilton): Mariah Mayberry; Herbert Griffin, Director Cultural Resources Department, • Yocha Dehe Wintun Nation (YDWN): Anthony Roberts, Chairperson; Laverne Bill, Cultural Resources Manager. <p>Responses to the initial letters were:</p> <ul style="list-style-type: none"> • UAIC responded on August 24, 2020 in an email stating that since YDWN was actively involved in the Project UAIC were not anticipating active involvement at present, but wished to be kept informed. • Wilton did not respond to the initial letter that was sent. • YDWN responded on September 3, 2020 via letter. The letter stated that YDWN had concerns the project may impact know cultural resources; the resources were not identified in the letter and there has been no further mention of potentially impacted resources in subsequent communications. The letter further stated that the tribe would like a meeting to learn the timeline of environmental documents. <p>Subsequent emails were sent to the above tribes and individuals on September 18, 2020 inviting the tribes to send a representative during the cultural resources pedestrian survey if they wished. The initial emails contained the start date of the survey, as well as the invitation to participate. Responses were as follows:</p> <ul style="list-style-type: none"> • UAIC did not respond to the email inviting them to send a representative for the pedestrian survey. • Wilton responded on September 22, 2020 stating that they were interested in sending a tribal 	
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	<p>submerged or buried shipwrecks or other maritime-related cultural resources, are discovered during construction activities, work would halt within 100 feet of the discovery until the find can be evaluated by a qualified archaeologist or maritime archaeologist as appropriate. In addition, SLC would be consulted.</p>	<p>monitor to participate in the survey. A follow up email with additional information was sent on September 23, 2020. No follow up to the last email was received, however, and Wilton did not send a tribal monitor during the pedestrian survey.</p> <ul style="list-style-type: none"> • YDWN responded on September 24, 2020. The response was sent by Alex Cedano, a tribal monitor, requesting additional meeting location information. Mr. Cedano was present for the cultural resources pedestrian survey. <p>GEI also sent a request to the Native American Heritage Commission (NAHC) for a search of their Sacred Lands File. The NAHC responded on August 20, 2020. Their response letter indicated that their search was positive, however no specific resources were noted.</p> <p>The Project will also include implementation of Mitigation Measure CR-3: <i>Inadvertent Discovery of Human Remains</i>. If the remains are determined to be of Native American descent, the coroner has 48 hours to notify the NAHC.</p> <p>6. No known submerged cultural resource is present in the area where Project activities will occur.</p> <p>7. This measure is considered equivalent to the project's Mitigation Measure CR-2: <i>Inadvertent Discovery of Cultural Resources</i>.</p>	
<p>10-2</p>	<p>The identification, evaluation, and determination of disposition of Native American human remains shall be conducted in accordance with Native American consultation procedures described below and in Mitigation Measure 10-1. The location, content, and character of Native American human remains are confidential and shall not be released to the public. Native American human remains and associated funerary objects shall be treated with the utmost respect and in accordance with the direction of the identified Most Likely Descendant (MLD).</p> <p>1. If human remains are encountered during ground-disturbing construction activities, stop work that would potentially affect the find and contact the county coroner.</p> <ul style="list-style-type: none"> • In accordance with the California Health and Safety Code and the California Native American Grave Protection and Repatriation Act (CNAGPRA), if human remains are uncovered during ground-disturbing activities, the contractor shall 	<p>Refer to of Mitigation Measure CR-3: <i>Inadvertent Discovery of Human Remains</i></p>	<p>Project is consistent with both elements of Mitigation Measure 10-2</p>

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	<p>immediately halt potentially damaging excavation in the area of the burial and notify the county coroner, a professional archaeologist to determine the nature of the remains, and a representative of California Indian tribes. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by telephone within 24 hours of making that determination (Health and Safety Code section 7050[c]).</p> <ul style="list-style-type: none"> • Following the coroner’s findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California Public Resources Code section 5097.9. • Upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further activity until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. • A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. California Public Resources 		
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	<p>Code section 5097.9 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that the landowner shall employ: <i>(1) Record the site with the NAHC or the appropriate information center. (2) Use an open space or conservation zoning designation or easement. (3) Record a document with the county in which the property is located.</i></p> <ul style="list-style-type: none"> • The landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or his or her authorized representative may also reinter the remains in a location not subject to further disturbance if he or she rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the landowner. <p>2. If the discovery of human remains occurs on lands owned and administered by a federal agency, the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) will apply. NAGPRA requires federal agencies and certain recipients of federal funds to document Native American human remains and cultural items in their collections, notify native groups of their holdings, and provide an opportunity for repatriation of these materials. The act also requires planning for dealing with potential future collections of Native American human remains and associated funerary objects, sacred objects, and objects of cultural patrimony.</p>		
<p>10-3</p>	<p>1. Inventory and evaluate historic-era buildings, structures, and linear features. Conduct cultural resource studies to determine whether historic-era buildings, structures, and linear features in the project area are eligible for listing in the CRHR.</p>	<p>Based on site studies, there are no historic-era buildings, structures, or other features eligible for listing at the Project site.</p>	<p>Project is consistent with all elements of Mitigation Measure 10-3</p>

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	<ol style="list-style-type: none"> 2. Before construction activities begin, an inventory and evaluation of historic-era resources in the project area should be conducted under the direct supervision of an architectural historian meeting the Secretary of the Interior’s Professional Qualification Standards for history or architectural history. The documentation should include conducting an intensive field survey, background research on the history of the project area, and property-specific research. Based on this research, the eligibility of historic-era resources located in the project area should be evaluated by the architectural historian using criteria for listing in the CRHR. The resources would be recorded on DPR 523 forms and the findings documented in a technical report. If federal funding or approval is required, then the project implementation agencies would comply with Section 106 of the National Historic Preservation Act. 3. Identify measures to avoid significant historic resources. Avoidance through project redesign is the preferred mitigation measure for mitigating potential effects on historic-era buildings, structures, linear features, and archaeological sites that appear to be eligible for listing in the NRHP or CRHR. 4. Record photographic and written documentation to Historic American Building Survey (HABS)/Historic American Engineering Record (HAER) standards. If avoidance of a significant historic resource is not feasible, the lead agency should ensure that HABS/HAER documentation is completed. Through HABS/HAER documentation, a qualified architectural historian and qualified photographer should formally document the historic resource through large-format photography, measured drawings, written architectural descriptions, and historical narratives. The completed documentation should be submitted to the Library of Congress. 5. Conform to the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings in the event of relocation. If any historic buildings, structures, or levees are relocated or altered, the lead agency should ensure that any changes to significant buildings or structures conform to the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. Implementation of this measure 		
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	<p>can mitigate potential changes to significant architectural resources.</p> <p>6. Conform to the Secretary of the Interior’s Guidance for the Treatment of Cultural Landscapes to preserve landscapes’ historic form, features, and details that have evolved over time.</p>		
10-4	<p>Mitigation Measures 10-1 and 10-3 will also mitigate Impact 10-4, Disturbance or Destruction of Cultural Landscapes and Traditional Cultural Properties. However, to mitigate Impact 10-4, Mitigation Measure 10-1 surveys and Mitigation Measure 10-3 inventories would focus on cultural landscapes and traditional cultural properties.</p>	<p>See Consistency with Delta Plan Mitigation Measure 10-1 above. Based on the findings from the cultural survey conducted for the Project, the Project site is not known to be a cultural landscape or traditional cultural property.</p>	<p>Project is consistent with all elements of Mitigation Measure 10-4</p>
Geology and Soils			
11-1	<p>1. For construction that occurs in an Alquist-Priolo Special Studies Zone, a determination must be made by a licensed practitioner (California Certified Engineering Geologist) that no fault traces are present within the building footprint of any structure intended for human occupancy. The standard of care for such determinations includes direct examination of potentially affected subsurface materials (soil and/or bedrock) by logging of subsurface trenches. Uncertainties regarding the exact locations of future ground ruptures associated with such determinations generally are resolved by providing a minimum setback of 50 feet from any known surface trace of an active fault. For critical structures, such as hospitals, dams, and emergency facilities, more stringent mitigation measures are required, including but not limited to greater structural setbacks and heavier reinforcement against strong ground motion, in compliance not only with California regulations but in many cases in compliance with additional Federal regulations.</p> <p>2. Lead agencies shall ensure that geotechnical design recommendations are included in the design of facilities and construction specifications to minimize the potential impacts from seismic events and the presence of adverse soil conditions. Recommended measures to address adverse conditions shall conform to applicable design codes, guidelines, and standards.</p>	<p>1. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting in structures for human occupancy. The act does not apply to the Project because no active faults cross the project area.</p> <p>2. The California Building Code contains California amendments based on the American Society of Civil Engineers (ASCE) Minimum Design Standard ASCE/SEI 7-16, Minimum Design Loads for Buildings and Other Structures, provides requirements for general structural design and includes means for determining earthquake loads, as well as other loads (such as wind loads) for inclusion into building codes. Seismic design provisions of the building code generally prescribe minimum lateral forces applied statically to the structure, combined with the gravity forces of the dead and live loads of the structure, which the structure then must be designed to withstand. The design of the proposed project is required to comply with California Building Code requirements, which would make the proposed project consistent with the California Building Code.</p>	<p>Project is consistent with all elements of Mitigation Measure 11-1</p>

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<p>11-2</p>	<p>Require adherence, at minimum, to the precepts of the current approved version of the International Building Code (IBC). Included in the IBC are measures for mitigation of the impacts of strong ground motion on constructed works. In addition to the California –required conformance with the IBC, for critical structures, such as dams (including levees), hospitals, and emergency facilities, additional construction requirements are codified in federal statutes and the regulations of various federal agencies. Lead agencies will, by force of law, require conformance with these codified mitigation measures.</p>	<p>The California Building Code is based on the IBC requirements. The Project is designed to comply with requirements set forth in the California Building Code.</p>	<p>Project is consistent with all elements of Mitigation Measure 11-2</p>
<p>11-3</p>	<ol style="list-style-type: none"> 1. For projects that would result in significant or potentially significant grading operations, a geotechnical investigation shall be performed and a geotechnical report prepared. The geotechnical report shall include a quantitative analysis to determine whether excavation or fill placement would result in a potential for damage due to soil subsidence during and/or after construction. Project designs shall incorporate measures to reduce the potential damage to an insignificant level, including but not limited to removal and recompaction of existing soils susceptible to subsidence, ground improvement (such as densification by compaction or grouting, soil cementation), and reinforcement of structural components to resist deformation due to subsidence. The site-specific potential for and severity of cyclic seismic loading shall be analyzed in the assessment of subsidence for specific projects. 2. A geotechnical investigation shall be performed by an appropriately licensed professional engineer and/or geologist to determine the presence and thickness of potentially liquefiable sands that could result in loss of bearing value during seismic shaking events. Project designs shall incorporate measures to mitigate the potential damage to an insignificant level, including but not limited to ground improvement (such as grouting or soil cementation), surcharge loading by placement of fill, excavation, soil mixing with non-liquefiable finer-grained materials and replacement of liquefiable materials at shallow depths, and reinforcement of structural 	<ol style="list-style-type: none"> 1. According to NRCS Web Soil Survey data, the soils underlying the project site have a moderate expansion potential. The geotechnical investigation performed by Blackburn Consulting does not specifically identify any expansive soils within the project site. Soil that is required to construct the seepage/stability berm and to modify the landside drainage ditch to a buried pipe within Segment AA, and soil required for levee fill for slope mitigation in Segment AD, would be required to undergo analysis before use. Because the Project would not involve exposing any infrastructure to the moderately expansive soils, there would be no adverse effect associated with expansive soils and there would be no impact. Additionally, any potential risk associated with expansive soils would be identified and remedied in the forthcoming 90 percent design geotechnical documents 2. Blackburn Consulting performed the geotechnical analysis to address the geotechnical engineering aspects of the Project and to provide requirements and recommendations to inform the structural modifications and provide seismic design criteria. Adherence to the seismic design requirements and other recommendations included in the Geotechnical Data Report, as well as any future recommendations included in the geotechnical report to be completed at the 90 percent design phase, would prevent any adverse effects caused by seismic ground shaking and any secondary seismic-ground failures (i.e., liquefaction, landslide, lateral spreading, etc.). Therefore, this impact would be reduced to permanent and less than significant. 3. N/A. The project does not involve construction of wells intended for groundwater extraction. 	<p>Project is consistent with elements 1-2 of Mitigation Measure 11-3. Elements 3 and 4 are not applicable.</p>

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	<p>components to resist deformation due to liquefaction. An analysis of site-specific probable and credible seismic acceleration values, in accordance with current applicable standards of care, shall be performed to provide for suitable project design.</p> <p>3. For projects that would result in construction of wells intended for groundwater extraction, a hydrogeological/geotechnical investigation shall be performed in accordance with the current standards of care for such work by an appropriate licensed professional engineer or geologist to identify and quantify the potential for groundwater extraction-induced subsidence. The study shall include an analysis of existing conditions and modeling of future conditions to assess the potential for aquifer compaction/consolidation.</p> <p>4. For projects that would result in construction of surface reservoirs and canals a hydrogeological/geotechnical investigation shall be performed by a licensed professional engineer or geologist to identify and quantify the potential for seeps and springs to develop in areas adjacent to the proposed improvements and to propose mitigation measures. Mitigation of such seepage could include, without limitation, additives to concrete that reduce its permeability, construction of impervious liner systems, and design and construction of subdrainage (passive control) or dewatering systems (active control).</p> <p>Geotechnical investigations and preparation of geotechnical reports shall be performed in the responsible care of California licensed geotechnical professionals including professional civil engineers, certified geotechnical engineers, professional geologists, certified engineering geologists, and certified hydrogeologists, all of whom should be practicing within the current standards of care for such work.</p>	<p>4. N/A. The project does not involve construction of surface reservoirs and canals.</p>	
<p>11-4</p>	<p>Any covered action that would have significant soil erosion and topsoil loss impacts (Impact 11-4) shall incorporate specific measures for future projects that would expand the use of BMPs or optional erosion control measures listed in the SWPPPs. The SWPPP shall identify an effective combination of BMPs to reduce erosion during construction and to prevent erosion during operation. Examples of</p>	<p>The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific best management practices (BMPs) for erosion control. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration</p>	<p>Project is consistent with Mitigation Measure 11-4.</p>

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	<p>typical BMPs include:</p> <ul style="list-style-type: none"> • Erosion control measures such as silt fencing, sand bags, straw bales and mats, and rice straw wattles shall be placed to reduce erosion and capture sediment. Straw used for erosion control shall be new cereal grain straw derived from rice, wheat, or barley; free of mold and noxious weed seed; and neither derived from dry-farmed crops nor previously used for stable bedding. Clearance shall be obtained from the County Agricultural Commissioner before straw obtained from outside the county is delivered to the work site. Monitoring requirements of the newly revised General Construction Permit shall be implemented, and more effective BMPs shall be identified and installed if runoff samples indicate excessive turbidity. • During construction activities, topsoil shall be removed, stockpiled, and saved for reapplication following completion of construction. The top 6 inches shall be salvaged and reapplied to a comparable thickness. Soil material shall be placed in a manner that minimizes compaction and promotes plant reestablishment. • If catch basins are used for sediment capture, the site shall be graded to ensure stormwater runoff flows into the basins, and basins shall be designed for the appropriate storm interval as provided in the General Construction Permit. • Temporary work areas shall be surfaced with a compacted layer of well-graded gravel. They may be covered with a thin asphalt binder. Where expansive or compressible soils are present in temporary work areas, construction trailers shall be supported with concrete pads or footings. • Dust control shall conform to all federal, State, and local requirements and may include use of water trucks, street sweepers, or other methods described in the SWPPP. 	<p>of eroded soil and construction-related pollutants from the construction area. Routine inspection of all BMPs is required under the provisions of the Construction General Permit. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.</p> <p>The SWPPP must be prepared before the construction begins. The SWPPP must contain a site map(s) that delineates the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project area. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, vehicle and equipment washing and fueling. The Construction General Permit also sets post-construction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the site following construction).</p>	
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	<ul style="list-style-type: none"> Spoils shall be placed in 12-inch-thick loose lifts and compacted to reduce erosion and minimize future subsidence. Placement of peat spoils shall be on agricultural land where possible. Following construction, spoils sites shall be restored to avoid erosion. 		
11-5	<p>In areas where expansive clays exist, a hydrogeological/geotechnical investigation shall be performed by a licensed professional engineer or geologist to identify and quantify the potential for expansion, particularly differential expansion of clayey soils due to leakage and saturation beneath new improvements. Measures could include, but are not limited to removal and recompaction of problematic expansive soils, soil stabilization, and/or reinforcement of constructed improvements to resist deformation due to expansion of subsurface soils.</p>	<p>As a requirement of the California Building Code and local codes, the Project would be required to prepare a final geotechnical investigation that would include site-specific recommendations to address potentially expansive and corrosive soils as a condition of permit approval. The site-specific analysis of site foundation soils guides the recommended building foundation design, such that damage from expansive and corrosive soils is minimized and reduced to levels that can be accommodated by the final design. The potential measures could include replacement of native soils with engineered fill, treatment of native soils, or addition of soil amendments which are effective means of reducing the risk from expansive soils.</p>	<p>Project is consistent with Mitigation Measure 11-5</p>
11-6	<ol style="list-style-type: none"> For projects that would result in construction of canals, storage reservoirs and other surface impoundments, project design shall provide for protection from leakage to the subsurface. Measures could include, but are not limited to rendering concrete less permeable by specifying concrete additives such as bentonite, design of impermeable liner systems, design of leakage collection and recovery systems, and construction of impermeable subsurface cutoff walls. For ecosystem restoration projects that might cause subsurface seepage of nuisance water onto adjacent lands: <ul style="list-style-type: none"> Perform seepage monitoring studies by measuring the level of shallow groundwater in the adjacent soils, to evaluate the baseline conditions. Continue monitoring for seepage during and after the project implementation. Develop a seepage monitoring plan if subsurface seepage constitutes nuisance water to the adjacent land. Implement seepage control measures if adjacent land is not useable, such as installing subsurface agricultural drainage systems to avoid raising water levels into 	<p>1-2. N.A. The project would not result in construction of canals, storage reservoirs, or other surface impoundments. Additionally, the project will not involve ecosystem restoration and the purpose of the project is to address existing seepage issues.</p>	<p>Neither elements of Mitigation Measure 11-6 are applicable to the project.</p>

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	crop root zones. Cutoff walls and pumping wells can also be used to mitigate for the occurrence of subsurface nuisance water.		
11-7	For projects that would result in construction of levees, surface impoundments and other fill embankments, project design shall incorporate fill placement in accordance with local and State regulations and in accordance with the prevailing standards of care for such work. Measures could include, but are not limited to blending of soils most susceptible to landsliding with soils having higher cohesion characteristics, installation of slope stabilization measures, designing top-of-slope berms or v-ditches, terrace drains and other surface runoff control measures, and designing slopes at lower inclinations.	According to NRCS Web Soil Survey data, the soils underlying the project site have a moderate expansion potential. The geotechnical investigation performed by Blackburn Consulting does not specifically identify any expansive soils within the project site. Soil that is required to construct the seepage/stability berm and to modify the landside drainage ditch to a buried pipe within Segment AA, and soil required for levee fill for slope mitigation in Segment AD, would be required to undergo analysis before use. Because the Project would not involve exposing any infrastructure to the moderately expansive soils, there would be no adverse effect associated with expansive soils and there would be no impact. Additionally, any potential risk associated with expansive soils would be identified and remedied in the forthcoming 90 percent design geotechnical documents.	Mitigation Measure 11-7 is not applicable to the project
11-8	<p>A geotechnical investigation shall be performed and a geotechnical report prepared. The geotechnical report shall include a quantitative analysis to determine whether on-site soils would be suitable for an on-site wastewater treatment system. If it is determined that the soil could not support a conventional on-site treatment system, non-conventional systems shall be analyzed. Potential alternative systems include (SWRCB, 2011, Onsite Wastewater Treatment System Scoping Document. http://www.swrcb.ca.gov/water_issues/programs/owts/index.shtml):</p> <ul style="list-style-type: none"> • Containment systems that do not generate waste • Anoxic and anaerobic systems • Attached and suspended growth aerobic treatment systems • Natural treatment systems • Disinfection systems • Engineered-fill leach fields • Monitoring control systems 	N/A. No new wastewater treatment systems are proposed as a part of the Project.	Mitigation Measure 11-8 is not applicable to the project
11-9	<p>For projects that would result in significant or potentially significant risk to structures due to the presence of highly organic soils, lead agencies shall require geotechnical evaluation prior to construction to identify measures to mitigate organic soils. The following measures may be considered:</p> <ul style="list-style-type: none"> • Over-excavation and import of suitable fill 	N/A. The Project would not place structures on soils containing high organic content.	Mitigation Measure 11-9 is not applicable to the project

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	<ul style="list-style-type: none"> • material • Structural reinforcement of constructed works to resist deformation • Construction of structural supports below the depth of highly organic soils into materials with suitable bearing strength 		
Paleontological Resources			
12-1	<p>1. During the project-level analysis, a Paleontological Resources Monitoring and Recovery Plan (PRMRP) shall be developed and implemented for all actions. The PRMRP shall include protocols for paleontological resources monitoring in those areas where sediment with moderate to high paleontological sensitivity would be affected by construction-related excavations. The PRMRP also shall set forth the following procedures:</p> <ul style="list-style-type: none"> • Confirming the paleontological sensitivity (high, moderate, or low) of the areas to be impacted through review of project-level geological and geotechnical data • Determining the qualifications of the paleontologist as established by the Society of Vertebrate Paleontology (SVP) (SVP, 1991. Standard Measures for assessment and mitigation of adverse impacts to nonrenewable paleontological resources. Society of Vertebrate Paleontology News Bulletin 152:2 – 5; SVP, 1995. Assessment and mitigation of adverse impacts to nonrenewable paleontological resources: Standard guidelines. Society of Vertebrate Paleontology News Bulletin 163: 22 – 27; SVP, 1996. Conditions of Receivership for Paleontologic Salvage Collections. Society of Vertebrate Paleontology News Bulletin. Vol. 166, pp. 31 - 32 • The assessment and recovery of discovered fossil resources • The preparation and curation of fossil finds <p>2. The PRMRP would provide guidelines for the establishment of a yearly or biannual monitoring program led by a qualified paleontologist to determine the extent of fossiliferous sediment being exposed and affected by erosion, and</p>	<p>1-2. The online collections database of the University of California Museum of Paleontology (UCMP) was searched for fossil localities from the geologic units mapped within the project site, as well as throughout Yolo County. Data provided through the UCMP’s online database include taxonomic identification, locality number and name, age, and county, and sometimes geologic formation. Precise locality data are not provided; in some cases, however, the locality name can be used to further refine the general vicinity of the locality within Yolo County.</p> <p>The project will implement Mitigation Measure GEO-1 which describes the actions that will take place in the event of an unanticipated fossil discovery during construction. These actions include:</p> <ul style="list-style-type: none"> • Halting all earthwork or other types of ground disturbance within 100 feet of the find until a qualified paleontologist (meeting the standards of the Society of Vertebrate Paleontology [SVP]) can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The paleontologist may also propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. • If treatment and salvage is required, recommendations will be consistent with SVP guidelines (SVP, 2010) and currently accepted scientific practice. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the finds. 	Neither of the two elements of Mitigation Measure 12-1 is applicable to the project

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	determine whether paleontological resources are being lost. If loss of scientifically significant paleontological resources can be documented, then a recovery program should be implemented.		
Mineral Resources			
13-1	<ol style="list-style-type: none"> 1. Ensure land use compatibility between existing mineral resource extraction activities and projects, activities or actions that may be implemented as the result of the Proposed Project. 2. Maintain adequate buffer between future projects and designated MRZ-2 sectors. 3. Explore opportunities to classify and designate new MRZ-2 sectors (e.g., in existing MRZ-3 sectors) to ensure that important mineral resources are conserved and continue to be available for future construction needs. 4. Ensure future land use changes within designated mineral resource extraction areas recognize mineral resource extraction as a compatible use. 5. Limit use of construction aggregate to local sources with sufficient capacity to meet both project and future local development needs, to the extent possible. 6. Use recycled aggregate where possible, to decrease the demand for new aggregate. 	N.A. There are no known mineral resources of mineral extraction operations occurring in the project area, nor have those operations been known to occur historically. Development of the proposed project therefore would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; and would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	Elements 1-6 of Mitigation Measure 13-1 are not applicable to the project
13-2	<ol style="list-style-type: none"> 1. Ensure access is maintained to existing, active mineral resource extraction sites both during and after project construction. 2. Implement recommendations identified in Division of Oil, Gas, and Geothermal Resources of the U.S. Geological Survey (DOGGR) construction site well review program (DOC 2007, California Department of Conservation, Division of Oil, Gas and Geothermal Resources, Well Review Program: Introduction and Application.), such as: <ul style="list-style-type: none"> • For all future projects, identify all existing natural gas well sites and oil production facilities within or in close proximity to the project area. • Identify any oil and natural gas well within 100 feet of any navigable body of water or watercourse perennially covered by water 	N.A. There are no known mineral resources of mineral extraction operations occurring in the project area, nor have those operations been known to occur historically.	Both elements of Mitigation Measure 13-2 are not applicable to the project

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	<p>or any officially recognized wildlife preserve as a “critical well” (California Code of Regulations, Title 14, Chapter 4, Article 2, Section 1720(a)(2)(B) and (C)). The DOC requires that a “critical well” include more stringent blowout prevention equipment than non-critical wells based on pressure testing and rating.</p> <ul style="list-style-type: none"> • Identify safety measures to prevent unauthorized access to equipment. • Include safety shut-down devices on oil and natural gas wells and other equipment, as appropriate. • Notify DOC of new oil and natural gas wells or changes in oil and natural gas well operations or physical conditions, receive written approval from DOC of the changes, and receive written notification of DOC’s inspection of new or changed equipment. The approvals will be primarily related to the ability to: (1) protect all subsurface hydrocarbons and fresh water, (2) protect the environment, (3) use adequate blowout prevention equipment, and (4) use approved drilling and cementing techniques. • If any plugged/abandoned or unrecorded oil and natural gas wells are uncovered during construction, the DOC should be notified, the wells should undergo remedial well plugging actions, and no structures should be constructed over the abandoned oil and natural gas wells. • If oil and natural gas wells are under the jurisdiction or a lease from the California State Lands Commission, project proponents should provide additional plans and environmental documentation as required prior to modification of the oil or natural gas wells. 		
Hazards and Hazardous Materials			
14-1	<ol style="list-style-type: none"> 1. Refueling and maintenance of vehicles and equipment to occur only in designated areas that are either bermed or covered with concrete, asphalt, or other impervious surfaces to control potential spills. 	<p>The Project will use BMPs and will prepare a SWPPP, as required by the State Water Board, to minimize risk of hazardous waste contamination to aquatic resources.</p>	<p>Project is consistent with all elements of Mitigation Measure 14-1.</p>

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	<ol style="list-style-type: none"> 2. Refueling of vehicles and equipment to occur only when employees are present. 3. Vehicle and equipment service and maintenance conducted only by authorized personnel. 4. Refueling conducted only with approved pumps, hoses, and nozzles. 5. Catch-pans placed under equipment to catch potential spills during servicing. 6. All disconnected hoses placed in containers to collect residual fuel from the hoses. 7. Vehicle engines shut down during refueling. 8. No smoking, open flames, or welding allowed in refueling or service areas. 9. Refueling performed away from bodies of water to prevent contamination of water in the event of a leak or spill. 10. When refueling is completed, the service truck to leave the project site. 11. Service trucks provided with fire extinguishers and spill containment equipment, such as absorbents. 12. Should a spill contaminate soil, the soil shall be placed in containers and disposed of as appropriate. All containers used to store hazardous materials to be inspected at least once per week for signs of leaking or failure. All maintenance and refueling areas to be inspected monthly. Results of inspections to be recorded in a logbook maintained onsite. 13. Provision of an automatic sprinkler system for indoor hazardous material storage areas. 14. Provision of an exhaust system for indoor hazardous material storage areas. 15. Separation of incompatible materials by isolating them from each other with a noncombustible partition. 16. Spill control in all storage, handling, and dispensing areas. 17. Separate secondary containment for each chemical storage system. The secondary containment is required to hold the entire contents of the tank plus the volume of water for the fire suppression system that could be used for fire protection for a period of 	<p>In compliance with state and federal regulations, a hazardous materials business plan and a spill prevention and countermeasures plan would be prepared.</p>	
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	<p>20 minutes in the event of a catastrophic spill.</p> <p>In addition to the above, federal, state and local requirements for hazardous materials must be followed.</p> <p>In the unlikely event of a spill, the spill shall be reported to the appropriate regulatory agencies and contaminated soil shall be cleaned, treated, and/or removed in accordance with regulatory requirements. Small spills shall be contained and cleaned up immediately by trained, onsite personnel. Larger spills shall be reported via emergency phone numbers to obtain help from offsite containment and cleanup crews. All personnel working on the project during the construction phase shall be trained in handling hazardous materials and the dangers associated with hazardous materials. An onsite health and safety person shall be designated to implement health and safety guidelines and to contact emergency response personnel and the local hospital, if necessary.</p> <p>If there is a large spill from a service or refueling truck, contaminated soil shall be placed into barrels or trucks by service personnel for offsite disposal at an appropriate facility in accordance with law. If a spill involves hazardous materials quantities equal to or greater than the specific Reportable Quantities as required by regulatory agencies (42 gallons for petroleum products), all federal, State, and local reporting requirements shall be followed. In the event of a fire or injury, the local fire department shall be called.</p>		
<p>14-2</p>	<ol style="list-style-type: none"> 1. To reduce the risk due to increased exposure to materials that could be released during soil disturbance, worker training programs and breathing apparatus shall be provided. Monitoring programs shall be implemented as areas are excavated to determine the potential for exposure to soil organisms or other constituents. 2. To reduce risk to the community due to increased exposure to materials that could be released during soil disturbance, public outreach programs shall be conducted to educate the public of the types of construction activities and risks that could occur. In areas near extreme hazards, such as construction in areas with identified petroleum-product pipelines or soils with high concentrations of petroleum products, warning sirens shall be used at construction sites to 	<p>1, 2. The MND prepared for the project are considered to be adequate disclosure of the analyzed effects of public exposure to hazardous materials. Compliance with required law and regulations would reduce any risks to workers resulting from soil disturbance. The project would not create conditions of extreme hazards.</p>	<p>Project is consistent with elements 1 and 2 of Mitigation Measure 14-2.</p>

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	<p>immediately notify workers and residents. Emergency procedures shall be included in the education and outreach programs for the workers and the community.</p>		
14-3	<ol style="list-style-type: none"> 1. Freshwater habitat management to include water-control-structure management, vegetation management, mosquito predator management, drainage improvements, and other best management practices, and coordination with the DFG and local mosquito and vector control agencies regarding these strategies and specific techniques to help minimize mosquito production. 2. Maintenance of permanent ponds that increase the diversity of waterfowl yet decrease the introduction of vectors through constant circulation of water, vegetation control, and periodic draining of ponds. 3. Tidal management focused on mosquito problems arising from the residual tidal and floodwaters remaining in depressions and cracked ground (SCMAD 2011. San Joaquin County Mosquito and Vector Control District. http://www.sjmosquito.org/). 4. Avoidance of ponding in tidal marsh habitat or in areas within the waterside of setback levees. Design of ecosystem restoration areas, waterfowl hunting areas, setback levees, parks, canals, and surface water storage facilities to minimize standing water, or use of other methods such as mosquito fish to reduce mosquito breeding. 	<p>1-4. N.A. The project does not involve creation of freshwater habitat, tidal wetlands, or setback levees.</p>	<p>Elements 1-4 of Mitigation Measure 14-3 are not applicable to the project</p>
14-4	<ol style="list-style-type: none"> 1. Avoid creating hazardous wildlife attractants within a distance of 10,000 feet of an Airport Operations Area. 2. Maintain a distance of 5 statute miles between the farthest edge of the Airport Operations Area and hazardous wildlife attractants. 	<p>N.A. The YBEL project site is not located within the vicinity of a private airstrip, an airport land use plan, or within two miles of a public airport. The nearest public airports to the project site are the Sacramento Executive Airport (approximately 5.8 miles to the southeast of the project site), and the Yolo County Airport (approximately 14.5 miles to the west of the project site).</p>	<p>Elements 1-2 of Mitigation Measure 14-4 are not applicable to the project</p>
14-5	<ol style="list-style-type: none"> 1. Prepare and implement a fire management plan to minimize potential for wildland fires. 	<p>Based on mapping by the California Department of Forestry and Fire Protection (CAL FIRE) Forest Resource Assessment Program (FRAP) the project site is not within a Very High Fire Hazard Severity Zone (CAL FIRE, 2008)¹. The use of construction equipment and the possible temporary on-site storage of fuels and/or other flammable construction chemicals</p>	<p>Mitigation Measure 14-5 is not applicable to the project</p>

¹ California Department of Forestry and Fire Protection (CAL FIRE), 2008. Very High Fire Hazard Severity Zone in LRA. As Recommended by CAL FIRE. September 2008.

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		<p>could pose an increased fire risk resulting in injury to workers or the public during construction. However, contractors would be required to comply with hazardous materials storage and fire protection regulations, which would minimize potential for fire creation, and ensure that the risk of wildland fires during construction and would result in a temporary and less than significant impact.</p>	
Noise			
<p>15-1</p>	<ol style="list-style-type: none"> 1. Limit the hours of operation at noise-generation sources located near or adjacent to noise-sensitive areas, wherever practicable, to reduce the level of exposure to meet applicable local standards. 2. Locate construction equipment away from sensitive receptors, to the extent feasible, to reduce noise levels below applicable local standards. 3. Maintain construction equipment to manufacturers' recommended specifications, and equip all construction vehicles and equipment with appropriate mufflers and other approved noise-control devices. 4. Limit idling of construction equipment to the extent feasible to reduce the time that noise is emitted. 5. Conduct individual traffic noise analysis of identified haul routes and provide mitigation, such as reduced speed limits, at locations where noise standards cannot be maintained for sensitive receptors. 6. Incorporate use of temporary noise barriers, such as acoustical panel systems, between construction activities and sensitive receptors if it is concluded that they would be effective in reducing noise exposure to sensitive receptors. 7. Near sensitive receptors, avoid or minimize use of construction equipment known to generate high levels of ground borne vibration (for example, pile drivers). 	<p>Noise in the project area would be regulated by the City of West Sacramento 2035 General Plan and the City of West Sacramento Municipal Code.</p> <p>The West Sacramento Municipal Code requires an acoustical study to be required for any projects anticipated to create or be subject to a noise that exceeds the levels described in Tables 3.10-1 through 3.10-4. Project construction, operation, and maintenance would not exceed any noise compatibility standards for any sensitive receptors or outdoor activity areas near residential developments as shown in Tables 3.10-1 through 3.10-4. Although it appears that the City of West Sacramento noise level standards identified in the Local Regulations discussed above are applicable to long-term operational noise sources, for the purposes of this analysis noise level standards are estimated at project construction levels at the closest sensitive receptor location to the City's daytime hourly Leq standard of 55 dBA for a conservative evaluation. Construction levels for the closest sensitive receptor would be below (approximately 36 dBA Leq) the City's daytime hourly Leq standard. In addition, noise levels would be significantly below the FTA's Transit Noise and Vibration Impact Manual standard which identifies a daytime 1-hour Leq level of 90 dBA as a noise level where adverse community reaction could occur at residential land uses. Therefore, any noise generated during short-term project construction would be in compliance and below all thresholds set by the City of West Sacramento and the FTA. Noise levels from construction would not be adverse and the impact associated with increases in ambient noise levels in the vicinity of the Project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies would be temporary and less than significant. Noise levels from operation would not change from existing conditions, and there would be no impact.</p>	<p>The project is consistent with all elements of Mitigation Measure 15-1</p>

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<p>15-2</p>	<ol style="list-style-type: none"> 1. Conduct a preliminary ground borne vibration analysis report to determine future construction-related ground borne vibration levels based on, but not limited to, a detailed equipment list, hours of operation and distances to sensitive receptors located within 500 feet of project sites. 2. Provided that future ground borne vibration results in significant impacts at sensitive receptors, the following measures shall be implemented: <ul style="list-style-type: none"> • Designate a complaint coordinator and post this person’s contact information in a location near construction areas where it is clearly visible to the nearby receptors most likely to be affected. The coordinator will manage complaints and concerns resulting from activities that cause vibrations. The severity of the vibration concern should be assessed by the coordinator and, if necessary, evaluated by a qualified noise and vibration control expert. • Vibration monitoring will be conducted before and during vibration generating operations occurring within 100 feet of historic structures. Every attempt will be made to limit construction-generated vibration levels during pile driving and other ground borne noise and vibration-generating activities in the vicinity of the historic structures in accordance with recommendations of the appropriate agency with authority. • Adjacent historic features will be covered or temporarily shored, as necessary, for protection from vibrations, in consultation with the appropriate cultural resources authority. • Pile driving required within a 50-foot radius of residences will use alternative installation methods where possible (e.g., pile cushioning, jetting, predrilling, cast-in-place systems, resonance-free vibratory pile drivers). This would reduce the number and amplitude of blows required to seat the pile. • Pile-driving activities conducted within 285 feet of sensitive receptors will occur during 	<ol style="list-style-type: none"> 1. The MND analyzed the potential for construction to result in vibration levels that would exceed the City of West Sacramento General Plan and FTA guidelines, including from use of a vibratory roller used for compaction. Since the nearest residence is located approximately 0.8 miles away, the vibration levels from construction caused by a vibratory roller would attenuate to a level much lower than the threshold criteria. 2. N.A. The analysis conducted for the noise and vibration section of the MND determined that the impact of the Project with respect to vibration exposure would be temporary and less than significant. 	<p>Project is consistent with element 1 of Mitigation Measure 15-2. Element 2 of Mitigation Measure 15-2 is not applicable to the project since the MND analysis indicated there would not be vibration impacts at sensitive receptors.</p>
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	daytime hours to avoid sleep disturbance during evening and nighttime hours.		
<p>15-3</p>	<ol style="list-style-type: none"> 1. Identify noise-sensitive receptors in the vicinity of project activities and design projects to minimize exposure of sensitive receptors to long-term, operational noise sources (for example, water pumps) to reduce noise levels below applicable local standards. 2. Conduct a preliminary noise analysis report to determine future operation-related noise and distances to sensitive receptors. Provided that future operation-related noise results in significant at sensitive receptors, incorporate into construction design measures such as a structure encasing the new noise generating infrastructure. Materials (masonry brick, metal shed, wood) used to house the infrastructure will be of solid construction and void of gaps at the ground, roof line, and joints. All vents will include acoustically rated louvers. 3. Locate dog parks no closer than 200 feet from the nearest residential property line and at least 75 feet from habitat for noise-sensitive wildlife species. 4. Locate parking lots no closer than 65 feet from the nearest residential property line and at least 25 feet from habitat for noise-sensitive wildlife species unless a detailed noise study is conducted that determines that placement of parking lots closer than the distances specified above will not result in noise levels that exceed 67 dBA at the nearest residential property line or 60 dBA from noise-sensitive habitat, or appropriate mitigation measures, including permanent noise barriers, can be incorporated to reduce noise levels to equal the ambient noise level or referenced thresholds for residential property and noise sensitive habitat. 5. Locate playing fields no closer than located at least 125 feet from the nearest residential property line and at least 50 feet from habitat for noise-sensitive wildlife species unless a detailed noise study is conducted that determines that placement of playing fields closer than the distances specified above will not result in noise levels that exceed 67 dBA at the nearest residential property line or 60 dBA from noise-sensitive habitat, or appropriate mitigation measures, including permanent noise barriers, can 	<ol style="list-style-type: none"> 1, 2. N.A. Noise levels from operation would not change from existing conditions, and there would be no impact. The analysis conducted for the noise and vibration section of the MND determined that the impact of the Project with respect to vibration exposure would be temporary and less than significant. 3. The project would not involve creation of a dog park. 4. The project will not create a parking lot that is inconsistent with these buffer distance requirements. 5. The project would not involve creation of a playing field. 	<p>The project is consistent with all elements of Mitigation Measure 15-3.</p>

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	be incorporated to reduce noise levels to equal the ambient noise level or referenced thresholds for residential property and noise sensitive habitat.		
Population and Housing			
16-1	<ol style="list-style-type: none"> 1. Require compliance with applicable local policies and regulations regarding the provision of affordable housing. 2. Construct replacement housing if existing housing will be displaced. 	1-2. N/A. The project is not a housing project and will not result in displacement of existing housing.	Neither elements of Mitigation Measure 16-1 are applicable
Public Services			
17-1	<ol style="list-style-type: none"> 1. Establish construction fee schedules by local agencies for the new or modified facilities to fund additional emergency services potentially required during construction. If emergency services are not needed, a portion of the fees could be refunded. 2. Develop worker training programs to reduce construction and operations risks. 3. Develop appropriate emergency access routes and equipment for both land and water access, if applicable (such as in the Delta), that provides for adequate response time. If use of an existing emergency access route becomes limited due to new or modified facilities, additional routes or placement of duplicate equipment on each side of the route limitation could be considered. 4. Develop traffic plans and emergency response plans for construction and operations phases of new facilities. 5. Develop all facilities, including parks and ecosystem restoration areas, in accordance with applicable fire codes and regulations, and with adequate fire equipment access routes, occupancy limitations, and fire-protection equipment. 	<p>The Project is consistent with applicable mitigation measures identified in this section.</p> <ol style="list-style-type: none"> 1. The applicant will consider if such fees are necessary 2. The contractor will handle safety training for its workers involved with the project 3. As per Mitigation Measure Trans-1: Develop Traffic Control Plan, the contractor would be required to develop a Traffic Control Plan prior to construction, and coordinate all use of public roads with the City of West Sacramento, or other responsible agencies 4. This issue is addressed by Mitigation Measure Trans-1: Develop Traffic Control Plan. 5. The project will comply with all California Building Code requirements include those regarding fire codes and fire access. 	The Project is consistent with elements 1-5 of Mitigation Measure 17-1
Recreation			
18-1	<ol style="list-style-type: none"> 1. If the substantial impairment, degradation, or elimination of recreational facilities occurs, replacement facilities of equal capacity and quality with ongoing funding provided for maintenance of these facilities. 2. If degradation or impairment of recreational facilities, 	<ol style="list-style-type: none"> 1. N/A. The Project will not involve impairment, degradation or elimination of recreational facilities or activities. 2. N/A. The Project will not involve degradation or impairment of recreational facilities or activities due to water conservation measures. 3. N/A. The City of West Sacramento does not operate water 	Elements 1, 2 and 3 are not applicable.

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	<p>settings, and activities occur from implementation of water use efficient practices and water conservation measures at recreational areas, the park and recreation areas shall be redeveloped with drought-tolerant plant materials, water efficient irrigation systems, and synthetic turf substitutes where appropriate, in such a way as to retain recreational facilities and use areas.</p> <p>3. If the volume of water exported from the Delta declines over multiple years, the lead agencies that implement local water supplies may be unable to develop a long-term replacement water supply for the south-of-Delta surface water reservoirs with recreation uses. At these sites, facilities must be modified (including access facilities, as necessary) to accommodate lower water elevations or more frequent fluctuations in water elevations that could occur more frequently in the Proposed Project than under existing conditions.</p>	reservoirs south of the Delta.	
18-2	<p>1. If substantial temporary or permanent impairment, degradation, or elimination of recreational facilities causes users to be directed towards other existing facilities, lead agencies shall coordinate with impacted public and private recreation providers to direct displaced users to under-utilized recreational facilities.</p> <p>2. Lead agencies shall provide additional operations and maintenance of existing facilities in order to prevent deterioration of these facilities.</p> <p>3. If possible, lead agencies shall provide temporary replacement facilities.</p> <p>4. If the increase in use is temporary, once use is decreased back to existing conditions, degraded facilities shall be rehabilitated or restored.</p> <p>5. Where impacts to existing facilities are unavoidable, compensate for impacts through mitigation, restoration, or preservation off-site or creation of additional permanent new replacement facilities.</p>	1-5. N/A. The Project will not involve impairment, degradation or elimination of recreational facilities or activities.	None of the elements of Mitigation Measure 18-2 are applicable
18-3	<p>1. Projects shall be sited in areas that would have minimal adverse physical effect on the environment.</p> <p>2. Where impacts to the environment are unavoidable, compensate for impacts through mitigation, restoration, or preservation off-site or creation of</p>	1. The project is situated to minimize impacts. Primary improvements include installation of a stability berm adjacent to the existing levee, replenishment of existing waterside revetment extending north from the Navigation Levee to the Interstate 80 (I-80) Causeway, reconstruction of the existing maintenance road adjacent to the levee, and	Project is consistent with Mitigation Measure 18-3

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	additional permanent new replacement facilities.	installation of piping in the drainage ditch. 2. The MND identifies all mitigation measures developed for the project to address impacts on the environment.	
19-1	<ol style="list-style-type: none"> 1. Avoid modifications to federal, State, and county highways, local roadways, and bridges that may reduce vehicle capacity, to the extent feasible. 2. Develop and implement a traffic control plan to reduce effects of roadway construction activities, including full and partial lane closures, bike and pedestrian facility closures, and reduced access to adjacent properties. Minimize lane closures during morning and evening peak hours. Limit lane closures near the affected segment. Reroute bicycle and pedestrian access around the project area. Prevent bicyclists and pedestrians from entering the work area. 3. As part of the traffic control plan, identify specific project-vehicle access routes that would avoid additional traffic in residential areas or would adversely affect other sensitive land uses, where feasible. 4. Install roadway status signs at strategic locations in the Delta to inform the public of roadway closures and limits to ingress to/egress from Delta Islands. The signs shall include maps showing the relative locations of road closures and access restrictions to other Delta features. 5. For project operations that increase traffic, prepare a traffic study. Determine haul routes that would be used. Evaluate the levels of service at affected intersections and road segments during the peak a.m. and peak p.m. periods. Model changes in traffic with project traffic. If the level of service is maintained at levels acceptable to the appropriate agency, then no additional mitigation is required. If project traffic causes an intersection or road segment to perform below the minimum level of service standard, then select an alternate route for project traffic or schedule project trips for non-peak-hour periods. If alternate routes are not feasible, then design and construct facility improvements to intersections or road segments to maintain the acceptable level of service. 6. During the planning and analysis of site-specific actions, coordinate with Caltrans and/or other local 	<p>Project is consistent with applicable mitigation measures identified in this section. The Project will include implementation of Mitigation Measure Trans-1: Develop Traffic Control Plan.</p> <p>Mitigation Measure Trans-1: Develop Traffic Control Plan. The contractor would be required to develop a Traffic Control Plan prior to construction, and coordinate all use of public roads with the City of West Sacramento, or other responsible agencies. This plan would include the following measures:</p> <ul style="list-style-type: none"> • Construction vehicles would not be permitted to block any roadways or driveways. • Access will be provided for emergency vehicles at all times. • Signs and flagmen would be used, as needed, to alert motorists, bicyclists, and pedestrians to the presence of haul trucks and construction vehicles at all access points. • Vehicles would be required to obey all speed limits, traffic laws, and transportation regulations during construction. Vehicles would not exceed 15 miles per hour on unpaved levee roads. • Construction workers would be encouraged to carpool and park in designated staging areas. • Closure of levee roads, staging areas, and construction sites would be clearly fenced and delineated with appropriate closure signage. • The contractor would be required to repair any roads damaged by construction. 	Project is consistent with elements 1-18 of Mitigation Measure 19-1

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	<p>agencies with jurisdiction over transportation system features for the purpose of minimizing impacts on bridges, roadways, culverts, or other features that may be affected. Agencies responsible for constructing and maintaining levees on which a public roadway may be located shall also be consulted to ensure consistency with levee design criteria.</p> <p>7. For roads that will be flooded during floodplain operation, prepare and implement vehicular traffic detour planning as necessary. Provide convenient and parallel vehicular traffic detours for routes closed because of inundation. A detour plan shall be prepared and implemented in accordance with current Caltrans Standard Plans and Specifications. (A temporary crossing structure, for example a Bailey Bridge, may be used to maintain circulation and avoid a detour plan.) The detour plan shall be implemented before roadway inundation.</p> <p>8. The detour plan will include an assessment of existing roadway conditions, whether paved or unpaved, and provisions for repair and maintenance if the roadway conditions are substantially degraded from increased use. After the detour route is identified and before flood flows are released that would overtop roads, the condition of the detour road surface will be assessed and documented. The documentation will be submitted to the local agency responsible for maintenance of the road. After the detour is no longer needed, the condition of the road surface will be assessed and documented. The documentation will identify substantial changes in the condition of the road surface, such as potholing or rutting. Repair and maintenance actions needed to restore the road surface to predetour conditions will be identified. In coordination with the local maintenance agency, the repair and maintenance actions may be conducted by the agency conducting the floodplain operation or by the local maintenance agency to be proportionately reimbursed by the flood management authority.</p> <p>9. The detour plan will prioritize paved roads for use as detour routes. If use of paved roadway detours is not feasible during flood flow road inundation periods, the detour plan will require that visible dust emissions from unpaved detour routes will be limited</p>		
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	<p>to the percent opacity indicated by the appropriate air pollution control district. The following dust control measures may be used to stabilize unpaved roadways:</p> <ul style="list-style-type: none"> • Watering • Uniform layer of washed gravel • Roadmix • Paving <p>10. Any other method that can be demonstrated to the satisfaction of the appropriate air pollution control district that effectively limits visible dust emission to the local percent opacity standard and meets the conditions of a stabilized unpaved road.</p> <p>11. Traffic impact reports shall be prepared that meet the applicable agencies' standards to assess potential impacts on appropriate street segments and intersections. The traffic impact reports shall identify impacts that exceed the agencies' guidelines for significance and identify appropriate mitigation. Acceptable mitigation measures may include:</p> <ul style="list-style-type: none"> • Turn restrictions • Roadway widening to add lanes or shoulders • Redesign of freeway on- and off-ramps • Median construction/modification to restrict access • Flaring of intersections to add turn lanes • Provision of passing lanes or turnouts • Acceleration and deceleration lanes • Removal of obstructions • Roundabouts • Restriping to add lanes with or without parking removal and restrictions • Protected left-turn pockets or free right-turn lanes • Parking restrictions, daily or during peak hours • Fair share contributions to approved projects identified in the agency's Capital Improvement Plan • Fair share contributions to traffic signals identified in the agency's traffic signal plan. <p>12. Prepare and implement a waterway traffic control plan to ensure safe and efficient vessel navigation during construction in waterways. The plan shall identify vessel traffic control measures to minimize</p>		
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	<p>congestion and navigation hazards to the extent feasible. Construction areas in the waterway will be barricaded or guarded by readily visible barriers or other effective means to warn boaters of their presence and restrict access. Warning devices and signage will be consistent with the California Uniform State Waterway Marking System and effective during nondaylight hours and periods of dense fog.</p> <p>13. Where temporary partial channel closure is necessary, a temporary channel closure plan shall be developed. The waterway closure plan will identify and implement alternate detour routing and procedures for notifying boaters of construction activities and partial closures, including coordination with the U.S. Coast Guard, local boating organizations and marinas.</p> <p>14. To the extent feasible, ensure that safe boat access to public launch and docking facilities, businesses, and residences is maintained.</p> <p>15. Coordinate with transit system operators to establish appropriate alternate transit system routes to be rerouted during construction activities, as appropriate.</p> <p>16. Boat passage facilities shall be provided as an integral component of operable gate facilities, when feasible. Boat passage facilities shall be designed to provide uninterrupted boat passage when gate are in the "up" position. Floating docks with mooring bits shall be provided along the shoreline on both sides of the boat passage facility for boaters to use while they await passage. Floating barriers will guide boats into the passage facility chambers.</p> <p>17. Implement a program to provide boater education on procedures for waiting at and using the boat passage facility.</p> <p>18. Minimize impacts on bicycle and pedestrian circulation where feasible by avoiding impacts, minimizing closure of paths, and providing for temporary or permanent relocation of the facility to the extent feasible. Consult with the appropriate public works department to determine the most feasible alignment for facility relocation.</p>		
<p>19-2</p>	<p>Develop and implement a program that will include procedures for routine inspections and emergency facility</p>	<p>Regular maintenance activities would include clearance of maintenance roads, rodent control, vegetation maintenance,</p>	<p>Project is consistent with Mitigation</p>

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	<p>operation to allow safe navigation should the facility become damaged or malfunction. The program will include the following specific components:</p> <ul style="list-style-type: none"> • Routine inspections and correction procedures to ensure that facility safety features are in good working order. • Routine inspections and correction procedures for navigational hazards around facilities, including floating or submerged debris and the formation of shoals. • Contingency and emergency operating procedures to address the possibility that a boat colliding with the flow control facilities will damage the facilities or otherwise render them unable to operate as engineered, and provisions to allow safe navigation. 	<p>managing graffiti, annual testing, pump station maintenance, and performing periodic inspections. RD 900 would be responsible for the operation and maintenance of the new pump station to be constructed in segment AD. Because the new pump station is designed to discharge seepage, it would only be used when seepage occurs from floodwaters in the bypass. This is estimated to be once every 7-10 years based on historical events where floodwaters entered the bypass. Though the pumps will not be used often, RD 900 will exercise the pumps annually in the fall to ensure they are functioning properly for potential use in the winter months.</p>	<p>Measure 19-2</p>
19-3	<ol style="list-style-type: none"> 1. Coordinate with responsible local agencies to establish appropriate emergency routes during construction activities and before existing emergency routes are reclassified to a nonemergency route use. 2. Phase construction activities, and use multiple routes to and from offsite locations to minimize the daily amount of traffic on individual roadways. 3. Post warnings about the potential presence of slow-moving vehicles. 4. Use traffic-control personnel when appropriate. 5. Place and maintain barriers, and install traffic-control devices necessary for safety, as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones and in accordance with city and county requirements. 6. Notify appropriate emergency service providers of project construction throughout the construction period to ensure that emergency access through construction areas is maintained. 	<p>N.A. The project does not propose road closures or road work associated with the Project. Therefore, there would be no interference with an emergency evacuation or response plan.</p>	<p>None of the elements of Mitigation Measure 19-3 are applicable</p>
19-4	<p>Projects where construction- and operations conflict with adopted policies, plans, or programs regarding bicycle or pedestrian facilities should implement Mitigation Measure 19-1, above. The portion of the measure that addresses minimizing impacts on bicycle and pedestrian circulation</p>	<p>The Project will not conflict with adopted policies, plans or programs regarding bicycle or pedestrian facilities</p>	<p>Project is consistent with Mitigation Measure 19-4</p>

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	also would be applicable to this measure.		
Utilities and Service Systems			
20-1	<ol style="list-style-type: none"> 1. Establish construction debris disposal fee schedules to promote recycling and minimize solid waste. 2. Limit disposal of construction debris and other solid waste at local landfills if the landfills have limited capacity. 3. Dispose of all construction debris at landfills and disposal facilities that are licensed for the type of wastes to be disposed. If the landfills and disposal facilities are not located near future construction sites, include analysis of transportation of solid waste in future environmental documentation for specific projects. 4. Require construction contractors to prepare construction debris management plans and require reuse or recycling of construction debris. 5. Develop project-specific solid waste plans to maximize practices that reduce and recycle solid waste and sludge generated by water, wastewater, and stormwater treatment facilities; and collect, recycle, or compost litter and solid waste generated at new facilities designed for visitor use (such as parks and visitor centers). 	<p>The Project will implement Mitigation Measure HYD-1: Prepare SWPPP to address waste disposal.</p> <p>Additionally, excavated material from the project not used as immediately as backfill would be temporarily stored within the staging areas for use during final grading. Suitable excavated materials would be transported and stockpiled for use as fill for other flood control or levee protection projects in the area, such as along lower American River in Sacramento. As a result, the construction of the Project would avoid permanent impacts on existing service systems in the area.</p>	Project is consistent with elements 1-5 of Mitigation Measure 20-1.
20-2	<ol style="list-style-type: none"> 1. Relocate or modify existing water, wastewater, and stormwater facilities or electricity transmission systems in a manner that does not affect current operational reliability to existing and projected users. 2. Coordinate utility relocation and modification with utility providers and local agencies to integrate potential other construction projects and minimize disturbance to the communities. 3. Verify utility locations through field surveys and services such as Underground Service Alert. 	<ol style="list-style-type: none"> 1-2. PG&E owns and operates a 12kvpower distribution line that is located east of and running parallel to Segment AA. The Project construction activities would require relocation of the power pole located at station 38+0 and the other would be replaced with a longer pole that would raise the power line to meet CVFPB Title 23 requirements Title 23 requirements. As the owner and operator, PG&E will be responsible for complying with Title 23 requirements, as such, they are preparing the design and engineering documents and will be working on the power line and power pole relocation in parallel to the Project. As such, relocation of the power lines or the poles would have no adverse effects with respect to the utility services in the area. 3. The Project will comply with California Code of Regulations Section 4216-4216.9 which requires an excavator to contact a regional notification center (e.g., Underground Services Alert or Dig Alert) at least two days prior to excavation of any subsurface installations (Any utility provider seeking to begin a project that could damage underground infrastructure can call Underground Service Alert, the regional notification 	Project is consistent with elements 1-3 of Mitigation Measure 20-2.

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		<p>center for southern California. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are then notified and are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area.)</p>	
Climate Change and Greenhouse Gas Emissions			
<p>21-1</p>	<p>A. Implement GHG mitigation measures listed in the most recent California Air Pollution Control Officers Association (CAPCOA), BAAQMD, and other air district guidance documents (e.g., CAPCOA, 2010. Quantifying Greenhouse Gas Mitigation Measures. A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures. Sacramento, California. August, p. 210-232; BAAQMD, 2011. California Environmental Quality Act Air Quality Guidelines. San Francisco, California. Updated May 2011, p. 8-6). Current versions of such guidance documents list the following for construction:</p> <ol style="list-style-type: none"> 1. Use alternative fuels for construction equipment. 2. Use electric and hybrid construction equipment. 3. Limit construction equipment idling beyond regulatory requirements. 4. Institute a heavy-duty off-road vehicle plan. 5. Implement a construction vehicle inventory tracking system. 6. Use local building materials for at least ten percent of total materials. 7. Recycling or reusing at least 50 percent of construction waste or demolition materials. <p>B. In addition, the California Attorney General’s Office has developed a list of various measures that may reduce GHG emissions at the individual project level. A selected list of those proposed measures that could be applied to DWR projects was appended to the DWR guidance document, titled Guidance for Quantifying Greenhouse Gas Emissions and Determining the Significance of their Contribution to Global Climate Change for CEQA Purposes (DWR, 2010e. Guidance for Quantifying Greenhouse Gas Emissions and Determining the Significance of their Contribution to Global Climate Change for CEQA Purposes. California Department of Water Resources Internal Guidance Document. CEQA Climate Change Committee. Sacramento, CA. January, Appendix B).</p>	<p>During construction, the Project would result in temporary emissions of GHGs from use of construction equipment, worker vehicle trips, vendor trips, and haul truck trips. Construction emissions were amortized over the life of the project, assumed to be 30 years. Construction of the Project would result in emissions of approximately 34 MT CO₂e per year over the 30-year life of the project. Furthermore, the Project would not generate increased operational activity beyond the maintenance activities associated with the existing YBEL. Because the Project would not generate operational long-term emissions of GHGs, the Project would have a temporary and less than significant impact on climate change. Mitigation Measure AQ-2 would be implemented to further reduce GHG emissions associated with the project.</p> <p>Efficiency The Project will comply with Title 24 Building Standard requirements.</p> <p>Renewable Energy N.A.</p> <p>Water Conservation and Efficiency N.A. No public facilities, buildings or landscaping is proposed.</p> <p>Solid Waste Measures The Project will implement Mitigation Measure HYD-1: Prepare SWPPP to address waste disposal. Additionally, excavated material from the project not used as immediately as backfill would be temporarily stored within the staging areas for use during final grading. Suitable excavated materials would be transported and stockpiled for</p>	<p>Project is consistent with Mitigation Measure 21-1</p>

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	<p>As appropriate, the measures can be included as design features of a project, required as changes to the project, or imposed as mitigation (whether undertaken directly by the project proponent or funded by mitigation fees). The measures are examples; the list is not intended to be exhaustive. The following may serve as BMPs to be considered and implemented (as applicable) during design, construction, operation, and maintenance of project facilities.</p> <p>Efficiency</p> <ol style="list-style-type: none"> 14. Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use. 15. Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings. 16. Install light colored “cool” roofs, cool pavements, and strategically placed shade trees. 17. Install energy efficient heating and cooling systems, appliances and equipment, and control systems. 18. Install light-emitting diodes for street and other outdoor lighting. 19. Limit the hours of operation of outdoor lighting. 20. Provide education on energy efficiency. <p>Renewable Energy</p> <ol style="list-style-type: none"> 21. Install solar and wind power systems and energy-efficient heating ventilation and air conditioning. 22. Install solar panels over parking areas. 23. Use combined heat and power in appropriate applications. <p>Water Conservation and Efficiency</p> <ol style="list-style-type: none"> 24. Create water-efficient landscapes. 25. Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. 26. Use reclaimed water for landscape irrigation. Install the infrastructure to deliver and use reclaimed water. 27. Design buildings to be water-efficient. Install water-efficient fixtures and appliances. 28. Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff. 	<p>use as fill for other flood control or levee protection projects in the area, such as along lower American River in Sacramento. As a result, the construction of the Project would avoid permanent impacts on existing service systems in the area</p> <p>Transportation and Motor Vehicles</p> <p>Mitigation Measure AQ-2 would be implemented to minimize idling time either by shutting equipment off when not in use or reducing the time of idling to five minutes, as required by the California Code of Regulations, Title 13, sections 2449(d)(3) and 2885. The project proponent would provide clear signage that posts this requirement for workers at the entrances to the site.</p> <p>Carbon Offsets</p> <p>N.A. No need for offsets of carbon emissions is necessary based on modelling of project GHG emissions.</p> <p>SmartWay Truck Efficiency</p> <p>N.A. to this project.</p> <p>Tire Inflation Program</p> <p>Tire inflation of construction vehicles will be the responsibility of the construction contractor. Proper tire inflation is beneficial for not only fuel efficiency, but safety and tire longevity.</p> <p>Blended Cements</p> <p>The type of cement to be used has not yet been specified, but it could involve addition of those additives.</p> <p>Anti-idling Enforcement</p> <p>The California Air Resources Board (CARB) has a regulation for in-use off-road diesel vehicles that is designed to reduce emissions from diesel-powered construction and mining vehicles by imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The regulation requires an operator of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to no more than 5 minutes.</p>	
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	<p>29. Restrict the use of water for cleaning outdoor surfaces and vehicles.</p> <p>30. Implement low-impact development practices that maintain the existing hydrologic character of the site to manage stormwater and protect the environment. (Retaining stormwater runoff on-site can drastically reduce the need for energy-intensive imported water at the site.)</p> <p>31. Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project.</p> <p>32. Provide education about water conservation.</p> <p>Solid Waste Measures</p> <p>33. Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).</p> <p>34. Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.</p> <p>35. Recover by-product methane to generate electricity.</p> <p>Transportation and Motor Vehicles</p> <p>36. Limit idling time for commercial vehicles, including delivery and construction vehicles.</p> <p>37. Use low or zero-emission vehicles, including construction vehicles.</p> <p>38. Institute a heavy-duty off-road vehicle plan and a construction vehicle inventory tracking system for construction projects.</p> <p>39. Promote ride sharing.</p> <p>40. Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).</p> <p>41. Increase the cost of driving and parking private vehicles by, e.g., imposing tolls and parking fees.</p> <p>42. Provide shuttle service to public transit/[work sites].</p> <p>43. Provide information on all options for individuals and businesses to reduce transportation-related emissions.</p>		
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	<p>Carbon Offsets</p> <p>44. If, after analyzing and requiring all reasonable and feasible on-site mitigation measures for avoiding or reducing greenhouse gas-related impacts, the lead agency determines that additional mitigation is required, the agency may consider additional off-site mitigation. The project proponent could, for example, fund off-site mitigation projects (e.g., alternative energy projects, or energy or water audits for existing projects) that will reduce carbon emissions, conduct an audit of its other existing operations and agree to retrofit, or purchase carbon “credits” from another entity that will undertake mitigation.</p> <p>45. The topic of offsets can be complicated, and a full discussion is outside the scope of this summary document. Issues that the lead agency should consider include:</p> <ul style="list-style-type: none"> a. The location of the off-site mitigation. (If the off-site mitigation is far from the project, any additional, non-climate related benefits of the mitigation will be lost to the local community.) b. Whether the emissions reductions from off-site mitigation can be quantified and verified. c. Whether the mitigation ratio should be greater than 1:1 to reflect any uncertainty about the effectiveness of the offset. <p>SmartWay Truck Efficiency</p> <p>The strategy involves requiring existing trucks/trailers to be retrofitted with the best available “SmartWay Transport” and/or ARB approved technology. Technologies that reduce GHG emissions from trucks may include devices that reduce aerodynamic drag and rolling resistance. Aerodynamic drag may be reduced using devices such as cab roof fairings, cab side gap fairings, cab side skirts, and on the trailer side, trailer side skirts, gap fairings, and trailer tail. Rolling resistance may be reduced using single wide tires or low-rolling resistance tires and automatic tire inflation systems on both the tractor and the trailer.</p> <p>Tire Inflation Program</p> <p>The strategy involves actions to ensure that vehicle tire pressure is maintained to manufacturer specifications.</p> <p>Blended Cements</p>		
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	<p>The strategy to reduce CO2 emissions involves the addition of blending materials such as limestone, fly ash, natural pozzolan and/or slag to replace some of the clinker in the production of Portland cement.</p> <p>Anti-idling Enforcement</p> <p>The strategy guarantees emission reductions as claimed by increasing compliance with anti-idling rules, thereby reducing the amount of fuel burned through unnecessary idling. Measures may include enhanced field enforcement of anti-idling regulations, increased penalties for violations of anti-idling regulations, and restriction on registrations of heavy-duty diesel vehicles with uncorrected idling violations.</p>		
<p>21-2</p>	<ol style="list-style-type: none"> 1. Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design for flood protection of the facilities constructed along waterways. Prepare the study in accordance with applicable standards of Federal Emergency Management Agency (FEMA), USACE, DWR, Central Valley Flood Protection Board, San Francisco Bay Conservation and Development Commission (BCDC), as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, Central Valley Flood Protection Board, and BCDC. 2. Design intakes/diversions and outfalls to be operated at multiple surface water elevations between existing conditions and maximum projected surface water elevations during a high flow event with sea level rise for the life of the facility. 3. Prepare a hydrogeologic study that would assess long-term groundwater recharge and safe yield of wells and wellfields under a sustainable groundwater management plan. If the wells can be used to a greater degree in some years in a manner that would support the sustainable groundwater management plan to avoid long-term groundwater overdraft, wells could be drilled to deeper depths than would be required under existing conditions. 	<p>The YBEL performs a critical function as the primary effective flood control structure for West Sacramento. Thus, maintaining the structural integrity of the levee is critical to providing flood protection and alleviating flood risk to the community of West Sacramento, located to the east of the levee, and the surrounding agricultural lands to the west. Implementation of the proposed pump station and drainage infrastructure would alleviate existing flood risk. As such, operation, and maintenance of the project would result in no adverse impacts with respect to flooding; effects would be permanent and beneficial.</p>	<p>Project is consistent with elements 1-2 of Mitigation Measure 21-2. Element 3 is not applicable.</p>

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<p>21-3</p>	<p>Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design for ecosystem habitat restoration, including adjacent areas that would allow for migration of the habitat to higher elevations as the surface water elevations increase. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, and BCDC. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, Central Valley Flood Protection Board, and BCDC.</p>	<p>N.A. The project does not involve ecosystem habitat restoration.</p>	<p>Mitigation Measure 21-3 is not applicable to the project</p>
<p>21-4</p>	<ol style="list-style-type: none"> 1. Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design for projects that reduce risks of floods in the Delta. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, and BCDC. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, Central Valley Flood Protection Board, and BCDC. 2. Based on the results of the drainage or hydrologic and hydraulic study, arrange the length of flood management facilities in the direction of the floodplain flow to maximize surface flows under flood conditions. 3. Install setback levees or bypass channels to maintain channel capacity and to mitigate hydraulic impacts of high flow events and higher surface water elevations due to climate change and sea level rise. 4. Channel modifications for restoration actions would be required to be implemented to maintain or improve flood management functions and would be coordinated with the USACE, DWR, Central Valley Flood Protection Board, BCDC, and other flood control agencies to assess the desirability and feasibility for channel modifications. To the extent consistent with floodplain land uses and flood control requirements, if applicable, woody riparian vegetation would be allowed to naturally establish. 	<p>The YBEL performs a critical function as the primary effective flood control structure for West Sacramento. Thus, maintaining the structural integrity of the levee is critical to providing flood protection and alleviating flood risk to the community of West Sacramento, located to the east of the levee, and the surrounding agricultural lands to the west. Implementation of the proposed pump station and drainage infrastructure would alleviate existing flood risk. As such, operation, and maintenance of the project would result in no adverse impacts with respect to flooding; effects would be permanent and beneficial.</p>	<p>None of the elements of Mitigation Measure 21-4 are applicable for the project</p>