

Palo Alto Flood Basin Tide Gate Structure Replacement Project

First Addendum to the Final Mitigated Negative Declaration

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Prepared by:

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3614



Valley Water Board of Directors

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Appendix A – Revised Mitigation Monitoring and Reporting Program

1. Project Background and Purpose of Addendum

On April 27, 2021, The Santa Clara Valley Water District (Valley Water) approved the Palo Alto Flood Basin Tide Gate Structure Replacement Project (approved project) after preparing a Final Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP). The document, titled Final Mitigated Negative Declaration (Final MND, SCH NO. 2020090237), was prepared as an environmental review document to comply with the California Environmental Quality Act (CEQA). The Final MND was adopted by the Valley Water Board of Directors on April 27, 2021.

The approved project is located along the San Francisco Bay (Bay) shoreline in the City of Palo Alto, east of the Palo Alto Municipal Airport and Palo Alto Baylands Nature Preserve. The levees forming the PAFB, and tide gate structure were constructed in 1957 by Valley Water with support from the City of Palo Alto to prevent flooding in the lower creek reaches and avoid coastal flooding and future loss in the level of service of flood protection. The tide gate structure is regularly inspected and maintained by Valley Water, and the motorized sluice gate is regularly inspected and maintained by the City of Palo Alto. In 2011, the City of Palo Alto and Valley Water discovered that water was flowing beneath the structure, undermining the function of the tide gates and potentially, its structural stability. Temporary emergency repairs to arrest flow were completed in 2012.

In October 2018, Valley Water met with the City of Palo Alto, City of Mountain View, and San Francisquito Creek Joint Powers Authority to promote interagency coordination during the planning, design, and construction of a new tide gate structure. As a result of the meeting, Valley Water learned that the SAFER Bay Project and Shoreline Project, which could involve shoreline improvements that would preclude the need for tide gate structure replacement, were expected to complete planning in eight years and the Mountain View Ponds Project was expected to begin construction in 2021. The new tide gate structure was included in one of the three SAFER Bay Project’s conceptual alternatives to protect the communities of East Palo Alto, Menlo Park, Palo Alto, Mountain View, and surrounding infrastructure (i.e., U.S. Highway 101 [US-101]) from flooding and was also included as one of the potential Shoreline Project alignments. Given the age of the tide gate structure, the interagency group agreed Valley Water should proceed with planning, design, and construction of a new tide gate structure rather than wait for the issue to be addressed by a future project.

In late 2022, the USACE made a determination that there was no federal interest until the year 2060 to pursue the Shoreline Phase II Project, which covers economic impact areas where the existing tide gate structure is located. During this time, a significant construction cost increase was estimated, exceeding Valley Water’s available funds for constructing a replacement tide gate structure. Following the USACE’s decision not to progress the Shoreline Phase II Project, and the tide gate structure replacement project’s need for additional funding, further project development was put on hold indefinitely by Valley Water’s Board of Directors at its January 10, 2023, meeting.

Originally Approved Project

The approved project, as originally evaluated in the Final MND, includes the construction of a new 132-foot-wide tide gate structure slightly inboard (upstream) and southeast of the existing 113-foot-wide deteriorating tide gate structure, removal of the existing tide gate structure and levee, and construction of a new levee that ties into the new tide gate structure.

The approved project site limits would include the area of construction (new tide gate structure and levee), demolition (existing tide gate structure and levee), and two staging areas. The work footprint would total approximately 8.9 acres in the vicinity of the tide gate structure replacement work, and an additional 3.9 acres of existing access road would be improved to allow for adequate equipment access.

Subsequent Modified Project

In response to withdrawn federal interest related to the Shoreline Phase II Project, Valley Water proposes to implement a modified, lesser scope project in the short term to address seismic vulnerabilities and extend the existing structure’s service life (modified project). The modified project would reduce the nature and extent of activities, and would have several key differences from the approved project. Rehabilitation work would be reduced to a 5-month construction period as compared to the approved project’s 43-month construction period. In addition, the project area would be reduced to 3-acres surrounding the existing tide gate structure as compared to the approved project area of 8.9-acres. The modified project would not require dewatering or in-channel work. This addendum covers the retrofit and rehabilitation work and analyzes the environmental impacts associated with the modified project. Details about the modified project are provided below.

2. CEQA Requirements

When there are changes to a project and the lead agency will take further discretionary action, CEQA provides various levels of documentation which the lead agency may prepare to evaluate project changes in the context of environmental impacts.¹ Under CEQA Guidelines Section 15162(a), the appropriate level of review is based, among other factors, on whether the changes to the project or project circumstances, or new information of substantial importance that was not known at the time of approval of the original project (approved project), create new significant effects or result in a substantial increase in the severity of previously identified significant effects.

However, if none of these conditions as stated in Section 15162(a) apply, CEQA Guidelines Section 15164(a) provides for the use of an Addendum to document the basis for a lead agency’s decision not to prepare a Subsequent Negative Declaration for a project that has already been evaluated under a previously certified Negative Declaration. The lead agency’s decision to use an Addendum must be supported by substantial evidence that the conditions that would trigger preparation of a Subsequent Negative Declaration, described above and as provided in CEQA Guidelines Section 15162, are not present. An Addendum need not be circulated for public review, but CEQA requires the decision-making body to consider the Addendum, together with the adopted MND, prior to making a decision on the project (CEQA Guidelines Sections 15164(c) and (d)).

3. Description of Proposed Changes to the Project

Valley Water proposes to modify the approved project to retrofit and rehabilitate the existing 113-foot-long aging reinforced concrete tide gate structure. The main modified project elements are described below:

¹ Public Resources Code Section 21000 et seq. and California Code of Regulations Section 15000 et seq.

3.1. Site Preparation

The Final MND identified the limits of site mobilization, staging, and access. The originally approved project area would include the area of construction (new tide gate structure and levee), demolition (existing tide gate structure and levee, and two staging areas. The work area would total approximately 8.9 acres in the vicinity of the tide gate structure replacement work, and an additional 3.9 acres of existing access road that would be improved for adequate equipment access. This would require closure of the Adobe Creek Loop Trail to pedestrian and bicycle access for a total of 43 months. Prior to the start of work, the area would be dewatered to facilitate construction and demolition. The dewatered area would total approximately 4.6-acres.

For the modified project, pre-construction activities such as surveys, staging, and materials/equipment delivery would begin in summer of 2025. The existing tide gate structure and a portion of the Adobe Creek Loop Trail approximately 0.25 mile to the west and 0.55 mile to the east of the existing tide gate structure (total of ± 0.8 mile) would be closed during the construction work window of September 1, 2025, to January 31, 2026 (5 consecutive months). Signage would be provided to notify trail users regarding construction and trail closure information. Furthermore, flaggers would be present to ensure trail users' safety during mobilization and demobilization of heavy equipment. A detour route along the south side of the PAFB would be marked with signs to direct pedestrians and cyclists around the closed section of the Adobe Creek Loop Trail.



Figure 2. Trail Closure and Detour Route for the Palo Alto Flood Basin Tide Gate Structure Seismic Retrofit and Rehabilitation

Two staging areas would be established to support construction activities. The first staging area (Staging Area 1) would be approximately 0.35 acre and located just west of the existing tide gate structure in a previously disturbed area northwest of the Adobe Creek Trail. Contractor may flatten Staging Area 1 before utilizing it. The second staging area (Staging Area 2) would be approximately 0.5 acre and would be located on the east side of an area where a borrow ditch is circled by the levee (creating a large turnaround area). Contractor would place aggregate-base rock cover over geotextile fabric on staging areas during construction. The staging areas would be enclosed with chain link fence. Staging areas would occur in uplands or on barren ground only. The modified project would not require dewatering in any of the work areas.

Construction vehicle and equipment access would occur from both directions along the levee (Adobe Creek Trail), including from Embarcadero Road to the west (0.6 mile to the work area) and from San Antonio Road to the south and east (approximately 2.2 miles to the work area). If any damage such as rutting occurs to the access roads, Valley Water would have the Contractor perform in-kind repairs as needed during construction to repair any damage to pre-construction conditions, i.e., compacted dirt would be repaired with compacted dirt, and compacted gravel would be replaced with compacted gravel. No geotextile fabric would be used outside of the staging areas.

3.2. Construction

Construction on the existing Tide Gate Structure would include retrofit and rehabilitation elements. On-site work would occur from September 1, 2025, through January 31, 2026, to avoid and minimize impacts on biological resources. The modified project is expected to require approximately 15 workers to be present during the 5 months of construction to retrofit and rehabilitate the existing tide gate structure.

In comparison, the original approved project was scheduled to occur during the September 1st through January 31st work window, to avoid and minimize impacts on biological resources. Construction would have required approximately 15 workers for 4 or 5 work seasons including an initial shorter season to perform trail surface improvements in 2021, followed by four years of construction to replace the tide gate structure in 2022/2023, 2023/2024, 2024/2025 and a shorter final work season in Fall 2025. Similar equipment would be required for both the approved and modified project; however, the number of required workdays would be substantially reduced by approximately 4 work seasons.

Descriptions for each main project element are provided below. The work sequence to construct project elements would be determined by the Contractor and would be performed following site mobilization, fencing installation, and utility relocation.

Utility relocation work would involve relocating an existing 1-inch diameter steel conduit to prevent interference with the new deep foundation system on the west end of the structure. This conduit is buried approximately 1 foot below the levee crest, and it connects the south water level sensor and the electrical panel on the west end of the structure. Contractor would perform shallow excavation and move the conduit to be attached to the west wall of the structure. New conduit of the same material as the existing one may be necessary to encase the electrical line.

3.2.1 Retrofit Element – Deep Foundation System

The retrofit element includes the installation of two deep foundation systems, one system per side of the existing structure. Each system would consist of two 24-inch diameter by 60-foot-deep maximum reinforced concrete cylindrical piles, connected to a rectangular reinforced concrete cap with dimensions not exceeding 14-foot-long by 8-foot-wide by 5-foot deep. A positive connection between the deep foundation system and the existing structure would be provided by steel dowels. The anticipated pile construction would be carried out as follows:

1. A drill rig and a crane would create each pile hole individually by rotating a continuous flight hollow stem auger into the soil until the designed depth is achieved. Two holes would be drilled on each end of the existing structure.
2. Concrete would then be pumped down through the hollow stem, filling the hole from the bottom. Concurrently with the pumping concrete operation, the auger would be slowly withdrawn to create a continuous concrete column.
3. Steel reinforcement for the pile column would be lowered into the freshly placed concrete pile with a crane as soon as the auger is removed from the concrete-filled hole.

Once the pile work is complete, concrete formwork, steel reinforcement for the pile cap, and steel dowels for connection to the existing structure would be installed. For the steel dowels, holes would be drilled on the side of the existing structure exposed from the levee excavation.

Epoxy adhesive would be injected into the drilled holes and a partial length of the dowels would be inserted into the epoxied holes. The method of pile cap concrete placement would most likely be via a concrete pump, but placing concrete directly from the chute is also possible when site condition allows. Once pile cap concrete placement is complete and approval for backfilling is obtained, the areas surrounding the new concrete cap would be backfilled and compacted. Excavated soils would be tested for contaminants and then removed from the site and transported to an appropriate landfill. Excavated soils include soils generated during pile drilling, excavation of the existing levee for the pile caps, and other excess soils generated during construction.

3.2.2 Rehabilitation Element 1 – PPC Overlay

The expected activities for PPC overlay placement would be as follows:

1. Once the existing fence and catwalk plates have been removed from the deck, a temporary containment system would be installed to control fugitive dust during the PPC overlay placement process. Dust and debris collected within the containment system during work would be taken off-site and properly disposed of.
2. Large cracks or spalls would be repaired.
3. Existing concrete deck surface would be prepared by shot blasting with a shot blasting machine which includes a dust collector to contain debris and blasting pellets.
4. A form would be secured along the perimeter of the deck to contain PPC.
5. Immediately prior to placement, the deck area would be vacuumed.
6. Methacrylate resin primer coat would be placed with squeegees or rollers before replacing the PPC.
7. The mobile mixer would then mix and deposit PPC on the deck surface. Roller screed would be utilized to compact material and smooth out the surface.
8. The temporary containment system and the perimeter form would be removed once the PPC work has been accepted.

3.2.3 Rehabilitation Element 2 – Fence and Catwalk Steel Plates

The existing fence would be replaced with a taller galvanized or black vinyl steel fence and extended to the existing concrete wingwalls to enhance safety. Additionally, existing catwalk steel plates mounted on three pairs of catwalk walls would be replaced with new galvanized steel plates. For the fence, each fence post is held down to the concrete deck by a set of anchor bolts. Before taking out the fence posts, nuts and washers of the anchor bolts would be removed. Once the post has been lifted out, the anchor rod protruding above the deck surface would be cut with a rod cutter, leaving the embedded rod portion in place. The anchor bolts securing the existing catwalk plates to the concrete deck would be removed in a similar manner, and the existing catwalk plates would be taken out and disposed of properly.

Work would then switch over to other project elements necessary to be completed prior to installing the new fence and the new catwalk plates. Post-installed anchor bolts, matching the fence and the catwalk plate material, would be utilized to secure them to the existing structure.

3.2.4 Rehabilitation Element 3 – Maintenance Access

A maintenance access would be created to allow entry from the deck to the area below the deck. An opening not exceeding 3.5 feet by 3.5 feet will be formed on one of the trash racks on the existing structure to allow a single-person entry. The opening would be created by cutting the existing trash rack bars, welding perimeter steel bars around the newly formed opening, and welding necessary steel shapes to reinforce the openings. A new door comprising steel bars of the same size and spacing as the existing trash rack bars would be attached to the opening with hinges on one side. To reach the opening from the existing deck, a steel ladder assembly would be installed on the concrete side wall and steel bar rungs would be welded on the modified trash rack. Steel ladder assembly would be mounted to the wall by either post-installed expansion or adhesive anchors.

3.3. Site Restoration and Revegetation

As described in the MND, following the completion of work, the modified project area would be restored to a natural, salt marsh habitat to the maximum extent practicable. Areas of temporarily disturbed natural substrate that are designated for planting would be hydroseeded or revegetated with native species. The modified project area includes two revegetation zones, these zones are located both within the two staging areas (Staging Area 1 and Staging area 2).

The area mapped as Estuarine Intertidal Unconsolidated Shore is unvegetated channel bank under pre-project conditions and would not be seeded. Following any disturbance from equipment access, the channel bank would be restored to its preconstruction contours to the maximum extent practicable. Areas of temporarily disturbed salt marsh habitat would be hydroseeded with native species and any unsuitable material would be removed from the project site. The modified project would reduce the work area required to perform rehabilitation work from 8.9 acres to 3 acres. As a result of the reduced footprint, no dewatering would occur in the Palo Alto Flood Basin or Bay wetlands, and no in-water or in-channel work would be required.

3.4. Other Regulatory Requirements

In adherence to the CEQA review process, Valley Water collaborated with both trustee and responsible agencies that had authority or responsibility for carrying out or approving portions of the original approved project. These public agencies made a discretionary decision to issue permits related to carrying out the proposed work. In this instance, the California Department of Fish and Wildlife (CDFW) (permit issued May 5, 2022), San Francisco Bay Regional Water Quality Control Board (RWQCB) (permit issued April 8, 2022), San Francisco Bay Conservation and Development Commission (BCDC) (permit issued September 15, 2022), and the City of Palo Alto were considered responsible agencies for purpose of CEQA. In addition, several federal agencies, including U.S. Army Corps of Engineers (USACE) (permit issued November 21, 2022), U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS), and the Federal Aviation Administration (FAA) also had regulatory authority over the original approved project.

The approved project required project-specific permitting as summarized in the **Table 1** below.

Table 1. Summary of Applicable Regulatory Requirements under Original Approved Project

Agency	Authorization
CDFW	California Fish and Game Code (FGC) Section 1602 Lake and Streambed Alteration Agreement
RWQCB	Clean Water Act (CWA) Section 401 Water Quality Certification
RWQCB	Construction General Permit
USACE	CWA Section 404 and Section 10 Permit
BCDC	McAteer-Petris Act Administrative (Minor) Permit
USFWS	Federal Endangered Species Act (FESA) Section 7 Consultation
NMFS	FESA Section 7 Consultation
FAA	Obstruction Evaluation / Airport Airspace Analysis

To adequately account for the project modifications, Valley Water plans to amend and renegotiate permit conditions to be commensurate with reduced impacts of the modified project.

4. Environmental Analysis

The following analysis evaluates the potential environmental impacts of the modified project relative to the environmental impacts disclosed in the MND. Applicable BMPs and mitigation measures that were included in the MND would be implemented during construction and operation of the modified project are also noted. **Table 2** includes a brief assessment for the following resource topics for which Valley Water has determined that the modified project would result in impacts that are substantially the same or less than the impacts as evaluated in the MND: aesthetics; air quality; agriculture and forestry resources; cultural resources; energy; geology and soils; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; noise; population and housing; public services; transportation; tribal cultural resources; utilities and service systems and; wildfire.

Table 2. Resource Areas with Substantially Same or Less Impacts Compared to MND

Resource Area	Rationale for Impact Evaluation
Aesthetics	The MND concluded that the approved project would result in less than significant impacts related to scenic vistas and degradation of the existing visual character or quality of the area. Scenic vista and visual character or quality impacts would be caused by temporary construction obstructions. The modified project would continue to have construction impacts, although for a shorter overall duration. Once completed, there would be no substantive changes to the existing conditions and aesthetic qualities of the surrounding area. The modified project would have less impacts on aesthetics than the approved project. No impacts were identified for State scenic highway scenic resources and creation of a new source of substantial light or glare. Therefore, the levels of significance for the aesthetic impacts from the modified project would be the same as the approved project.

Air Quality	The MND concluded that the approved project would result in no impacts related to conflicts with an applicable air quality plan and identified less than significant impacts related to violation of any air quality standards, exposure of sensitive receptors to substantial pollutant concentrations, and exposure of people to objectionable odors. Since the modified project would require a substantially reduced number of vehicles, workers, equipment, and construction durations as the approved project, the air quality impacts from the modified project would be substantially less than the impacts from the approved project. BMPs AQ-1 through AQ-3 would continue to be incorporated into the modified project. No further analysis is needed. The modified project would result in no changes to the levels of significance for air quality impacts.
Agriculture and Forestry Resources	As concluded in the MND, there are no agricultural lands or forestry resources in the project area. Since the modified project would occur in the same area as the approved project, the project modifications would not result in any impacts on agricultural or forestry resources. The modified project would have the same levels of significance for agriculture and forestry resources as the approved project.
Cultural Resources & Tribal Cultural Resources	The MND concluded that the project would result in no impact to historical resources and less than significant impacts related to archaeological resources, tribal cultural resources, and human remains. Construction of the modified project would require substantially less excavation in the project area. As described in the MND, the project area does not contain any known historical resources, and the likelihood of encountering any archaeological or tribal cultural resources is low. However, in the unlikely event such resources are encountered during construction, Valley Water would implement the following measures to avoid or minimize potential impacts: BMP CU-1 (Accidental Discovery of Archaeological Artifacts, Tribal Cultural Resources, or Burial Remains) . Therefore, impacts on cultural and tribal cultural resources from the modified project would be less than the impacts described in the MND, and the modified project would have the same levels of significance on cultural and tribal cultural resources as the approved project.
Energy	As concluded in the MND, energy use during construction and operation would be negligible. Since the modified project would use a substantially fewer vehicles and equipment and occur over a much shorter duration than the approved project, the modified project would use less energy and there would be no changes to the significance levels of impacts related to energy.
Geology and Soils	The MND concluded that the project would result in less than significant impacts related to seismic ground shaking, liquefaction, erosion, unstable or expansive soils, and paleontological resources; and no impacts related to earthquake fault rupture, landslides, or soils incapable of supporting septic tanks. Rehabilitation work for the modified project would occur in the same area as the existing Tide Gate Structure but would not require demolition of the existing tide gate, or additional fill to create a new levee alignment. Therefore, impacts related to seismic ground shaking, liquefaction, erosion, and unstable or expansive soils would be substantially reduced as previously identified in the MND. As described in the MND, the project area is not known to contain paleontological resources, and the impact of discovering such resources is low. Construction of the modified project would require substantially less excavation, reducing the potential for inadvertent paleontological resources. The modified project would have no impacts related to earthquake fault rupture, landslides, or soils incapable of supporting septic tanks. The modified project would have the same levels of impact significance as the approved project.
Greenhouse Gas Emissions	The MND concluded that the approved project would result in no impacts related to conflicts with adopted plan, policy, or regulation for greenhouse gas and a less than significant impact related to generation of greenhouse gas emissions. Since the project modifications would use a substantially reduced number of vehicles, workers, equipment, and construction duration as the approved project, the modified project's impacts on greenhouse gas emissions would be substantially

	less than the impacts from the approved project. The modified project would result in no changes to the levels of significance for greenhouse gas emissions.
Hazards and Hazardous Materials	The MND concluded that the approved project would result in no impacts related to emissions of hazardous materials near schools, being located on a hazardous material site, safety hazards near an airport, or exposure to wildland fires; and less than significant impacts related to hazards through transport, use, storage or disposal of hazardous materials; upset and accident conditions involving release of hazardous materials; and impairment of or physical interference with an adopted emergency response or evacuation plan. Since the modified project would occur in the same area as the approved project and the nature and extent of the work activities would be substantially reduced, the project modifications would result in reduced or similar level of impacts as the approved project. BMPs HM-1 through HM-6 would continue to be incorporated into the modified project. The modified project would have the same levels of significance related to hazards as the approved project.
Hydrology and Water Quality	The MND concluded that the approved project would result in less than significant impacts related to water quality and waste discharge requirements; altering the existing drainage pattern causing erosion or siltation on- or off-site, increasing the rate of surface runoff on- or off-site, or impeding flood flows; and flood hazard zones. The approved project would not result in any impacts to groundwater supplies, stormwater drainage, or conflict with implemented water control/management plans. Hydrology and water quality impacts would primarily be caused by temporary construction and earthmoving activities. The modified project would continue to require construction, although at a smaller scale and for a shorter overall duration. Large scale levee construction and dewatering activities would be removed from the approved project. Upon completion of the modified project, there would be no appreciable changes to the current existing conditions and existing operations would continue. BMPs WQ-1 through WQ-11 , and HM-2 through HM-5 would continue to be incorporated into the modified project. Therefore, the modified project would not result in any changes to levels of significance related to Hydrology and Water Quality.
Land Use and Planning	The MND concluded that the approved project would not divide an established community or conflict with any applicable land use plan, policy, or ordinance. Since the modified project would occur in the same area as the approved project, the modifications would not result in any changes in the levels of significance related to land use and planning.
Mineral Resources	The MND concluded that the project would not result in any impacts related to mineral resources because the project areas do not contain any mineral resources and are not delineated as locally important mineral resource recovery sites in a local general plan, specific plan, or other land use plan. Since the modified project would occur in the same area as the approved project, the modified project would not result in any change to the levels of significance related to mineral resources compared to the approved project.
Noise	The MND concluded that the approved project would result in a less than significant impact related to generation of substantial temporary or permanent increase in ambient noise, and generation of excessive ground borne vibration or ground borne noise levels. The approved project would have no impact related to exposing people to noise from nearby airports. Since the modified project would occur in the same area as the approved project and the construction duration would be substantially reduced from 43 months to 5 months, the modified project would result in less noise impacts than the approved project. The modified project would result in no changes to the levels of significance of noise impacts.
Population and Housing	As concluded in the MND, the approved project would have no impacts related to population and housing. Since the modified project would occur in the same area as the approved project and would not appreciably change existing conditions, the

	modified project would not result in any change in levels of significance for population and housing impacts.
Public Services	The MND describes that a portion of the Adobe Creek Loop Trail would be temporarily closed during construction of the approved project and park users would use established trail detours during construction. However, the impact would be temporary and would not require construction of additional park facilities, and the MND concludes that the impact on park facilities would be a less than significant impact. The MND concludes that the approved project would have no impact related to other public services. The nature and extent of the work activities for the modified project would be reduced compared to the approved project, and construction impacts on the Adobe Creek Loop Trail would be shorter. The levels of significance for public services impacts for the modified project would be the same as the levels of impact significance from the approved project.
Transportation	The MND concluded that the approved project would result in less than significant impacts related to conflicting with a program, plan, or policy regulation for transportation facilities; conflicting with CEQA Guidelines Section 15064.3; increases in hazards due to geometric design or incompatible uses; and inadequate emergency access. Transportation impacts would primarily be caused by temporary construction activities and associated trail closures. The nature and extent of the work activities under the modified project would be reduced as compared to the approved project. Overall construction durations would be reduced, and BMP TR-1 (Incorporate Public Safety Measures) would continue to be incorporated into the modified project. Therefore, the modified project would not result in any change in levels of significance for impacts related to transportation.
Utilities and Service Systems	As concluded in the MND, the project would have less than significant impacts related to the availability of sufficient water supplies and generation of solid waste, and would have no impacts related to the relocation or construction of utilities, adequate capacity for wastewater treatment, and conflicts with solid waste regulations. The nature and extent of the work activities under the modified project would be reduced in comparison to the approved project and would not increase demand on utilities or water supplies. Debris generated during construction of the modified project would be less than would be generated by the approved project. Therefore, levels of significance for impacts on utilities and service systems from the modified project would be the same as the approved project.
Wildfire	As concluded in the MND, the approved project would have no impacts related to wildfire. Since the modified project would occur in the same area as the approved project, the modified project would not result in any changes in levels of significance for impacts related to wildfire.
Mandatory Findings of Significance	As concluded in the MND, the approved project would have a less than significant impact with mitigation incorporated to the quality of the environment, plants, fish, wildlife, and important historical resources. The modified project would reduce the magnitude of impacts to environmental resources, including plants, fish, wildlife, sensitive habitats, and important historical resources, by eliminating in-water work and greatly reducing earthwork associated with levee construction. Valley Water would continue to implement MM-BIO-9 to compensate for any loss of wetlands that could occur. The approved project was found to have less than significant cumulatively considerable effects and direct or indirect environmental effects on human beings. Upon the completion of construction, the modified project would largely be a return to existing conditions. Being smaller in scope and shorter in duration, the modified project would not change the evaluated impacts of other projects within the vicinity. As with the approved project, the modified project would continue to result in temporary impacts, primarily resulting from construction activities, but mitigation measures would sufficiently reduce impacts to a less-than-significant level. Therefore, with the incorporation of applicable BMPs and implementation of adopted mitigation measures, the modified project would not

	result in any changes in levels of significance for impacts related to mandatory findings of significance.
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Only the following environmental resources that have the potential for different impacts caused by the modified project are discussed: biological resources and recreation. Operations and maintenance activities for the project modifications would be the same as the approved project evaluated in the MND; therefore, the below evaluation is limited to construction-related impacts.

4.1 Biological Resources

The MND identified significant impacts related to effects on special-status species (plants, California Ridgway’s rail, California black rail, burrowing owl, salt marsh harvest mouse, salt marsh wandering shrew, and migratory birds) or their habitat, effects on salt marsh habitat or other sensitive natural communities, and effects on State or federally protected wetlands. However, as described in the MND, implementation of the following Mitigation Measures (MM) would reduce these impacts to less than significant: **MM-BIO-1** (*Pre-Construction Surveys for Special-Status Plants*); **MM-BIO-2** (*Qualified Biologist and Biological Monitoring*); **MM-BIO-3** (*Worker Environmental Awareness Training*); **MM-BIO-4** (*Environmentally Sensitive Area Fencing*); **MM-BIO-5** (*Install Raptor Perching Deterrents*), **MM-BIO-6** (*Conduct Preconstruction Surveys for Wintering Burrowing Owl*); **MM-BIO-7** (*Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Protection Measures*); and **MM-BIO-9** (*Compensate for Impacts to Jurisdictional Wetlands*). In addition, the MND identified a less than significant impact related to interference with habitat connectivity and wildlife movement, and identified no impacts related to conflict with any policies, ordinances, and adopted conservation plans protecting biological resources.

As described in the Final MND, construction of the approved project could impact special-status species within the project area. Although smaller in scope, the modified project would occur within the impact footprint evaluated in the MND. Impacts on biological resources, and by extension special-status species, would be avoided and minimized through incorporation of the following biological BMPs: **BI-1** (*Remove Temporary Fill*), **BI-2** (*Avoid Impacts to Nesting Migratory Birds*), **BI-3** (*Avoid Impacts to Nesting Migratory Birds from Pending Construction*), **BI-4** (*Choose Local Ecotypes of Native Plants and Appropriate Erosion Control Seed Mixes*), **BI-5** (*Avoid Animal Entry and Entrapment*), **BI-6** (*Minimize Predator Attraction*), **BI-7** (*Avoid Relocating Mitten Crabs*), and **BI-8** (*Minimize Spread of Invasive Plants*).

Although greatly reduced from the approved project, the modified project would continue to include ground disturbing activities, which could impact special-status plants. Accordingly, **MM-BIO-1** (*Pre-Construction Surveys of Special-Status Plants*) will continue to be implemented to take preventative action to ensure there would be no direct loss of special-status plants.

The California Ridgway’s rail and California black rail, designated Species of Special Concern (SSC), are known to be present within the project area. Black rail is not known to nest in the study area, so impacts to nesting black rails would be unlikely, but Ridgway’s rails are known to nest in marshes surrounding the project area. Rails could be disturbed or injured during tide gate rehabilitation work, equipment access, or other activities such as construction of the deep foundation system. However, the modified project would require a substantially reduced construction timeline. Rehabilitation work would be reduced to a 5-month construction period as compared to the approved project’s 43-month construction period. In addition, the modified project area would be reduced to 3-acres surrounding the existing tide gate structure as compared to the approved project area of 8.9-acres. The modified project would not require

dewatering or in-channel work, further reducing the limits of impact on special-status species. Valley Water would implement the appropriate mitigation measures to avoid and minimize impacts on the species during construction of the modified project. Pursuant to **MM-BIO-3**, all new construction workers and personnel would be required to complete an environmental awareness training prior to working onsite. In addition, pursuant to **MM-BIO-2**, preconstruction surveys for rail nests would be conducted within 48 hours prior to the onset of site preparation and construction activities with the potential to disturb rails or their habitat. Pursuant to **MM-BIO-4**, ESA fencing shall be identified in the project plans around sensitive habitats (i.e., wetlands and non-wetland waters, special-status species habitat) not identified to be impacted, as appropriate, in coordination with a qualified biologist. The construction contractor, in coordination with the qualified biologists, shall install the fencing on the project site prior to construction activities to ensure these areas are avoided. Lastly, pursuant to **MM-BIO-5**, perching deterrents will be installed and maintained for the duration of construction.

The modified project would continue to use the same access roads. Due to the shorter construction duration, vehicle traffic on the access roads would be reduced. However, similar to the approved project, modified project traffic could disturb burrowing owl if they are present. Pursuant to **MM-BIO-6**, qualified biologists will conduct pre-construction surveys and apply appropriate buffers in coordination with CDFW.

Two other State-listed SSC, the salt marsh harvest mouse and the salt marsh wandering shrew, may also be present within the project area, and could be found foraging or nesting in salt marsh habitat. Similar to the approved project, construction of the modified project could impact the salt marsh harvest mouse and the salt marsh wandering shrew during work activities such as equipment access and clearing and grubbing of salt marsh habitat. However, during construction of the modified project, Valley Water would implement **MM-BIO-7** which requires pre-construction surveys for mice and shrews to be conducted within 48 hours prior to the onset of site preparation and construction activities with the potential to disturb mice or shrews or their habitat and will include close inspection of vegetation clearing. If mice or shrews are found, an appropriate buffer will be established as determined by the qualified biologist.

Construction of the modified project could also impact migratory birds and raptors protected under the Migratory Bird Treaty Act (MBTA) and Fish and Game Code during equipment access and tree or vegetation removal. However, pursuant to **BMP BI-2** which would be implemented during construction, a focused survey for active nests would be conducted by a qualified biologist prior to the beginning of construction. If an active nest is discovered, an appropriate no-work buffer would be established by the qualified biologist. Pursuant to **BMP BI-3**, nesting exclusion devices may be installed. Construction activities are not anticipated to result in impacts to birds protected under the MBTA, including special-status species, due to the scheduling of construction from September 1 through January 31, which is largely outside of the bird nesting period (January 15 to September 1).

With incorporation of the identified BMPs and implementation of the recommended mitigation measures the modified project would not result in new or substantially more severe significant impacts related to special-status species and their habitats as compared to the approved project.

No riparian habitat occurs within the study area; therefore, the modified project would have no impact on riparian habitat. Wetlands that qualify as sensitive natural communities per the CDFW Natural Communities List (CDFW 2019c) occur within the study area. Wetlands that qualify as

sensitive natural communities within the study area include estuarine intertidal emergent wetland (pickleweed mats, also referred to as northern coastal salt marsh) and palustrine emergent wetland (pickleweed mats). The MND identified that permanent impacts to aquatic resources would occur through removal of the existing levee, and placement of fill to construct the new tide gate structure and levee. Additionally, temporary impacts would occur through dewatering and grading of substrate to establish the work area. The modified project would only include work to rehabilitate and repair the existing tide gate structure, therefore, levee removal and construction fill would no longer occur in the project area. The modified project would not require dewatering as there would be no new configuration of the tide gate and levees. As a result, **BMPs BI-9** (Monitor Project Area for Erosion during Dewatering) and **WQ-4** (Isolate Work in Tidal Areas with Use of Cofferdam) and mitigation measure **MM BIO-8** (Implement Fish Exclusion and Relocation) would no longer provide any functional value to reduce potential impacts of the modified project. Accordingly, Valley Water would not implement these measures for the modified project, and has prepared a revised MMRP (Appendix A) to remove those measures. Rehabilitation and construction would be performed from the top of bank, and Valley Water would continue to implement construction BMPs to further avoid and/or minimize potential impacts to wetlands. **MM BIO-4** would require a qualified biologist identify wetland areas abutting the modified project area and install exclusion fencing or markers prior to construction. Furthermore, although unexpected with the modified project, should any adjacent jurisdictional wetlands be impacted, Valley Water would purchase mitigation bank credits pursuant to **MM BIO-9**. Therefore, the modified project would not result in new significant impacts related to State or federally protected wetlands as compared to the approved project.

As described in the Final MND, work within the project area is not anticipated to substantially interfere with fish and wildlife movement. The project area currently provides limited habitat linkages and wildlife corridors between patches of salt marsh (i.e., from salt marsh located west of the study area to salt marsh on Hooks Island) and aquatic habitats (i.e., movement along the Bay margin). The modified project would occur on the existing tide gate structure in the same area as the approved project. Impacts to migratory wildlife, anadromous fish, or resident fish are not expected to occur. The modified project would reduce the construction timeline from five work seasons to one season in comparison to the approved project. Therefore, the modified project would not result in new significant impacts related to habitat connectivity and wildlife movement as compared to the approved project.

As described in the Final MND, the approved project is consistent with the Natural Environment Element of the City of Palo Alto's Comprehensive Plan (City of Palo Alto 2017a). The approved project would not conflict with policies in the Comprehensive Plan relating to the protection of natural resources and endangered species. The approved project would also be consistent with the policies in the Palo Alto Baylands Master Plan (City of Palo Alto 2008), including measures requiring any new levee construction that intrudes into wetlands be appropriately mitigated. The modified project is consistent with the Palo Alto Baylands Comprehensive Conservation Plan and Palo Alto Baylands Master Plan. The modified project would not result in removal of any trees and therefore the City's tree ordinance does not apply. Therefore, the modified project would not result in new significant impacts related to conflict with any local policies or ordinances protecting biological resources as compared to the approved project.

4.2 Recreation

As described in the Final MND, the approved project would not induce population growth, and demand for existing neighborhood and regional parks would not increase after the completion of the approved project. The analysis identified a temporary increase in pedestrian and bicycle

traffic on trails within the immediate vicinity of the project area, while a 0.5-mile section of the Adobe Creek Loop Trail would be closed for a 43-month period. The modified project would reduce the period of active construction to a 5-month period and would include established detour routes for commuters and other trail users. Full trail access would be restored after a very limited work window (September 1 to January 31, 2025) in comparison to the approved project. Therefore, the modified project would not result in new significant impacts related to existing park and recreational facilities as compared to the approved project.

Similar to the approved project, the modified project would include recreational facilities, but would not require the construction or expansion of recreational facilities. The original approved project included the reconstruction of the tide gate structure and a realignment of the levee that supports the existing Adobe Creek Loop Trail. Following the completion of construction the trail would be restored to its pre-project function. The modified project would focus on rehabilitating the existing tide gate structure, meaning no levee realignment would take place, nor would the existing Adobe Creek Loop Trail be modified in any manner. Therefore, the modified project would not result in new significant impacts related to the construction or expansion of recreational facilities as compared to the approved project.

5. Conclusion

As described in the analysis above, the modified project would not create new significant environmental impacts or substantially increase the severity of significant impacts identified in the MND. The modified project would not cause any of the conditions listed in CEQA Guidelines Section 15162 to occur, nor are there substantial changes in circumstances or new information of substantial importance that would warrant preparation of a subsequent MND. Therefore, a subsequent MND is not required. Decisionmaker(s) will consider this Addendum along with the MND before taking action on the proposed project modifications.

Table 3 includes the significance level of impacts identified in the MND and the significance level of impacts caused by the modified project.

Table 3. Comparison of Environmental Impact Significance Levels

Impact	MND Level of Impact for Approved Project	Level of Impact for Modified Project	Change in Level of Impact with Modified Project
AES (a), (c)	LTS	LTS	No change
AES (b), (d)	NI	NI	No change
AG (a), (b), (c), (d), (e)	NI	NI	No change
AQ (a)	NI	NI	No change
AQ (b), (c), (d)	LTS	LTS	No change
BIO (a)	LTSM	LTS, LTSM	No change for terrestrial species; Decrease for fish species (impacts to special-status fish less than significant with no mitigation)
BIO (b), (c)	LTSM	LTSM	No change
BIO (d)	LTS	LTS	No change

BIO (e), (f)	NI	NI	No change
CUL (a)	NI	NI	No change
CUL (b), (c)	LTS	LTS	No change
ENG (a), (b)	NI	NI	No change
GEO (a)(i),(a)(iv), (e)	NI	NI	No change
GEO (a)(ii), (a)(iii), (b), (c), (d), (f)	LTS	LTS	No change
GHG (a)	LTS	LTS	No change
GHG (b)	NI	NI	No change
HAZ (a), (b), (f)	LTS	LTS	No change
HAZ (c), (d), (e), (g)	NI	NI	No change
HYD-WQ (a), (c)(i), (c)(ii), (c)(iv), (d)	LTS	LTS	No change
HYD-WQ (b), (c)(iii), (e)	NI	NI	No change
LU (a), (b)	NI	NI	No change
MR (a), (b)	NI	NI	No change
NO (a), (b)	LTS	LTS	No change
NO (c)	NI	NI	No change
POP (a), (b)	NI	NI	No change
PS (a), (b), (c), (e)	NI	NI	No change
PS (d)	LTS	LTS	No change
REC (a)	LTS	LTS	No change
REC (b)	NI	NI	No change
TR (a), (b), (c), (d)	LTS	LTS	No change
TCR (a)	NI	NI	No change
TCR (b)	LTS	LTS	No change
UTL (a), (c), (e)	NI	NI	No change
UTL (b), (d)	LTS	LTS	No change
WILD (a), (b), (c), (d)	NI	NI	No change
MFS (a)	LTSM	LTSM	No change
MFS (b), (c)	LTS	LTS	No change
NI: No impact LTS: Less than significant LTSM: Less than significant with mitigation			

6. References

Santa Clara Valley Water District (Valley Water). 2021. Palo Alto Flood Basin Tide Gate Structure Replacement Project Final Mitigated Negative Declaration. State Clearinghouse No. 202009023. March 2021.

City of Palo Alto. 2022. Draft Palo Alto Baylands Comprehensive Conservation Plan. May 2022

Appendix A

Revised Mitigation Monitoring and Reporting Program

The following table summarizes the revised Mitigation Monitoring and Reporting Program (MMRP) for the modified project, which includes the Valley Water's best management practices (BMPs) as well as mitigation measures identified in the Mitigated Negative Declaration and addendum. For each measure, the table provides description of the measure, implementation timing, the entity responsible for implementing the measure, and the entity responsible for oversight of the measure. Strikeout text is used to indicate changes implemented through the August 2024 Addendum to the Final MND.

The MMRP will be adopted by Valley Water for implementation. Additionally, implementation of the MMRP will be reported and tracked consistent with CEQA Guidelines Section 15097 and permit reporting conditions.

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
AIR QUALITY					
Use Dust Control Measures	BMP AQ-1	<p>The following Bay Area Air Quality Management District (BAAQMD) Dust Control Measures will be implemented:</p> <ol style="list-style-type: none"> All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day; All haul trucks transporting soil, sand, or other loose material off-site shall be covered; 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; Water used to wash the various exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, etc.) will not be allowed to enter waterways; All vehicle speeds on unpaved roads shall be limited to 15 mph; 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; Idling times shall be minimized either by shutting equipment 	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Avoid Stockpiling Odorous Materials	BMP AQ-2	<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 California Code of Regulations), and this requirement shall be clearly communicated to construction workers (such as verbiage in contracts and clear signage at all access points). Idling shall also remain consistent with the City of Palo Alto Idling Ordinance (see Chapter 10.62 of the City Municipal Code), which requires idling not exceed 3 minutes on public property unless specific circumstances are met);</p> <p>8. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications, and all equipment shall be checked by a certified visible emissions evaluator;</p> <p>9. Correct tire inflation shall be maintained in accordance with manufacturer's specifications on wheeled equipment and vehicles to prevent excessive rolling resistance; and,</p> <p>10. Post a publicly visible sign with a telephone number and contact person at the lead agency to address dust complaints; any complaints shall be responded to and take corrective action within 48 hours. In addition, a BAAQMD telephone number with any applicable regulations will be included.</p> <p>Materials with decaying organic material, or other potentially odorous materials, will be handled in a manner that avoids impacting residential areas and other sensitive receptors, including:</p> <ol style="list-style-type: none"> 1. Avoid stockpiling potentially odorous materials within 1,000 feet of residential areas or other odor sensitive land uses; and 2. Odorous stockpiles will be disposed of at an appropriate landfill. 	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Reduce Construction-related NOX Emissions	BMP-AQ-3	<p>Nitrogen oxide (NOX) construction mitigation measures recommended by BAAQMD will be implemented, including the following:</p> <ul style="list-style-type: none"> Minimize idling time either by shutting equipment off when not in use or by reducing the time of idling to 5 minutes [required by 13 CCR Sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. Maintain all construction equipment in proper working condition in accordance with manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated. Provide a plan for approval by Valley Water demonstrating that the construction contractors' heavy-duty off-road vehicles (50 horsepower or more) to be used in Project construction, including owned, leased, and subcontractor vehicles, will achieve a Project-wide fleet-average 20 percent NOX reduction and 45 percent particulate reduction compared to the most recent California Air Resources Board fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. Ensure that emissions from Valley Water's construction contractors' off-road diesel-powered equipment used on the Project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) will be repaired immediately. A visual survey of all in-operation equipment will be made at least weekly. 	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Biological Resources					
Remove Temporary Fill	BMP BI-1	Temporary fill materials, such as for work pads or dewatering, will be removed upon finishing the work or as appropriate. The work area will be re-contoured to match pre-construction conditions to the extent possible.	Throughout construction	Valley Water or the construction contractor	Valley Water
Avoid Impacts to Nesting Migratory Birds	BMP BI-2	Nesting birds are protected by State and federal laws. Valley Water will protect nesting birds and their nests from abandonment, loss, damage, or destruction. Nesting bird surveys will be performed by a qualified biologist during the bird nesting season (January 15 to September 1) prior to any activity that could result in the abandonment, loss, damage, or destruction of birds, bird nests, or nesting migratory birds. If a lapse in Project-related work of 15 days or longer occurs, another survey would be conducted. Inactive bird nests may be removed with the exception of raptor nests. Birds, nests with eggs, or nests with hatchlings will be left undisturbed.	Throughout construction	Valley Water or the construction contractor	Valley Water
Avoid Impacts to Nesting Migratory Birds from Pending Construction	BMP BI-3	Nesting exclusion devices may be installed to prevent potential establishment or occurrence of nests in areas where construction activities would occur. All nesting exclusion devices will be maintained throughout the nesting season or until completion of work in an area makes the devices unnecessary. All exclusion devices will be removed and disposed of when work in the area is complete.	Throughout construction	Valley Water or the construction contractor	Valley Water
Choose Local Ecotypes of Native Plants and Appropriate Erosion-Control Seed Mixes	BMP BI-4	Whenever native species are prescribed for installation the following steps will be taken by a qualified biologist or vegetation specialist: 1. Evaluate whether the plant species currently grows wild in Santa Clara County; and,	Prior to and during revegetation activities	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Avoid Animal Entry and Entrapment	BMP BI-5	<p>2. If so, the qualified biologist or vegetation specialist will determine if any need to be local natives, i.e. grown from propagules collected in the same or adjacent watershed, and as close to the Project site as feasible.</p> <p>Also, consult a qualified biologist or vegetation specialist to determine which seeding option is ecologically appropriate and effective, specifically:</p> <ol style="list-style-type: none"> 1. For areas that are disturbed, an erosion control seed mix may be used consistent with the <i>Valley Water Guidelines and Standards for Land Use Near Streams, Design Guide 5, 'Temporary Erosion Control Options.'</i> 2. In areas with remnant native plants, the qualified biologist or vegetation specialist may choose an abiotic application instead, such as an erosion control blanket or seedless hydro-mulch and tackifier to facilitate passive revegetation of local native species. If a gravel has been used to prevent soil compaction, this material may be left in place [if ecologically appropriate] instead of seeding. 3. Seed selection shall be ecologically appropriate as determined by a qualified biologist, per <i>Guidelines and Standards for Land Use Near Streams, Design Guide 2: Use of Local Native Species.</i> 	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
		<p>species inside stored materials or equipment, work on those materials will cease until a qualified biologist determines the appropriate course of action.</p> <p>To prevent entrapment of animals, all excavations, steep-walled holes or trenches more than 6-inches deep will be secured against animal entry at the close of each day. Any of the following measures may be employed, depending on the size of the hole and method feasibility:</p> <ol style="list-style-type: none"> Hole to be securely covered (no gaps) with plywood, or similar materials, at the close of each working day, or any time the opening will be left unattended for more than one hour; or In the absence of covers, the excavation will be provided with escape ramps constructed of earth or untreated wood, sloped no steeper than 2:1, and located no farther than 15 feet apart; or In situations where escape ramps are infeasible, the hole or trench will be surrounded by filter fabric fencing or a similar barrier with the bottom edge buried to prevent entry. 			
Minimize Predator-Attraction	BMP BI-6	Remove trash daily from the worksite to avoid attracting potential predators to the site.	Throughout construction	Valley Water or the construction contractor	Valley Water
Avoid Relocating Mitten Crabs	BMP BI-7	<p>Sediment potentially containing Chinese Mitten Crabs will not be transported between San Francisco Bay Watersheds and Monterey Bay Watersheds, specifically:</p> <ol style="list-style-type: none"> Sediment removed from the San Francisco Bay watersheds will not be transported south of Coyote Creek Golf Drive in south San Jose, and the intersection of McKean and Casa Loma Roads; and, 	Throughout construction and following construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Minimize Spread of Invasive Plants	BMP BI-8	<p>The spread of invasive nonnative plant species and plant pathogens will be avoided or minimized by implementing the following measures:</p> <ol style="list-style-type: none"> 1. Construction equipment will arrive at the Project clean and free of soil, seed, and plant parts to reduce the likelihood of introducing new weed species. 2. Any imported fill material, soil amendments, gravel, etc., required for construction activities that will be placed within the upper 12 inches of the ground surface will be free of vegetation and plant material. 3. Certified weed-free imported erosion control materials (or rice straw in upland areas) will be used exclusively. 	Throughout construction	Valley Water or the construction contractor	Valley Water
Monitor Project Area for Erosion during Dewatering	BMP BI-9	<p>During dewatering, Valley Water or its contractor will visually monitor areas outside and in the vicinity of the sheet pile cofferdams for evidence of erosion. Specific areas to be evaluated include along the marsh edge of Hooks Island, along the edges of the existing levees, and the island on the interior of the PAFB. While not anticipated, if evidence of erosion is observed to sensitive habitats (e.g., tidal salt marsh), Valley Water will consult with the appropriate environmental agencies regarding appropriate next steps.</p>	During Dewatering	Valley Water or the construction contractor	Valley Water
Pre-Construction Surveys for Special-Status Plants	MM-BIO-1	<p>A qualified botanist will conduct preconstruction surveys for special-status plant species in the Project area during the appropriate species-specific identification periods and within one year of ground disturbance in any given area (i.e., Phase 1 dewatering limits and Phase 2 dewatering limits). The survey(s) will be in accordance with the appropriate State and federal survey protocols for the special-</p>	Prior to the start of construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Qualified Biologist and Biological Monitoring	MM-BIO-2	<p>status species (i.e., time of year for survey). If the survey(s) demonstrate absence of special-status plant species in the Project area, no further actions will be required.</p> <p>If the botanical surveys reveal the presence of special-status plants in the Project area, Valley Water or its contractor will retain a qualified botanist or restoration ecologist who will prepare a salvage, relocation, or propagation and monitoring plan prior to construction to address monitoring, salvage, relocation, and propagation of special-status plant species. Documentation will include provisions that address the techniques, location, and procedures required for the successful establishment of the plant populations. The plan will include provisions for performance that address survivability requirements, maintenance, monitoring, implementation, and the annual reporting requirements. All directly impacted stands of special-status plants will be documented by a qualified botanist. Documentation will include density and percent cover; key habitat characteristics, including soil type, associated species, hydrology, and topography; and photo documentation of preconstruction conditions</p> <p>A qualified biologist will conduct a survey of appropriate habitat for special-status species within the work area, including all staging and access routes, immediately prior to initiation of construction activities. If individuals are observed within or near the work area, the biologist will remain onsite to monitor for unusual or stressed behavior as a result of Project activities and maintain an appropriate no-disturbance buffer. No work will occur within the buffer until a qualified biologist verifies that the individuals have left the area. If an appropriate buffer cannot be maintained, work shall be stopped immediately and the individual will be allowed to leave the area of its own volition. If the individual does not leave the area, the qualified biologist will coordinate with USFWS and CDFW on how to proceed with work activities.</p>	Prior to and throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Worker Environmental Awareness Training Program	MM-BIO-3	A Worker Environmental Awareness Training Program for construction personnel shall be prepared and provided by a qualified biologist retained by Valley Water or its contractor. All construction personnel shall receive the training prior to working on the Project site. The training program shall provide workers with information on their responsibilities with regard to the special-status species and sensitive habitats in the Project area; a physical description of each special-status species that has potential to occur; each species' habitat and legal protections; photographs to assist in identification of the species; as well as an overview of BMPs and applicable terms and conditions in the Project's permits.	Prior to and throughout construction	Valley Water or the construction contractor	Valley Water
Environmentally Sensitive Area Fencing	MM-BIO-4	ESA fencing shall be identified in the Project plans around sensitive habitats (i.e., wetlands and non-wetland waters, special-status species habitat) not identified to be impacted, as appropriate, in coordination with a qualified biologist. The construction contractor, in coordination with the qualified biologists, shall install the fencing on the Project site prior to construction activities to ensure these	Prior to and throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Install Raptor Perching Deterrents	MM-BIO-5	Any temporary chain-link fencing on the Project site that could provide perching opportunities for avian predators of special-status species will be modified to include perch deterrents along the top of the fencing (i.e., repellent spikes). Perch deterrents will be maintained for the duration of the Project in a condition that deters predator access and raptor perching.	Throughout construction	Valley Water or the construction contractor	Valley Water
Conduct Preconstruction Surveys for Wintering Burrowing Owl	MM-BIO-6	To avoid impacts to burrowing owl, a pre-construction burrowing owl survey shall be conducted by a qualified biologist no more than seven days prior to the initiation of Project activities occurring within 150 meters of the Project area.. If a wintering burrowing owl is detected onsite ,an appropriate no-disturbance buffer (based on setback recommendations in the CDFW 2012 Staff Report on Burrowing Owl Mitigation) around the active burrow shall be implemented and maintained until work is finished or a qualified biologist confirms the burrow is no longer in use. If work within the no-disturbance buffer cannot be avoided, Valley Water shall coordinate with CDFW to determine the appropriate course of action to ensure wintering burrowing owls are not impacted.	Prior to and throughout construction	Valley Water or the construction contractor	Valley Water
Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Protection Measures	MM-BIO-7	Valley Water shall develop and implement avoidance and minimization measures specific to salt marsh harvest mice and salt marsh wandering shrew. Measures shall include, but not limited to, the following:	Prior to and throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
		<ul style="list-style-type: none"> • Prior to initiation of work within or adjacent to suitable habitat for salt marsh harvest mouse or salt marsh wandering shrew, a qualified biologist shall conduct a preconstruction survey for mice and shrews in areas where disturbance is planned. Surveys shall take place no more than 48 hours before the onset of work in habitats capable of supporting these species. • A qualified biologist shall survey for salt marsh harvest mice and salt marsh wandering shrew individuals or nests in all areas with suitable habitat prior to removal of vegetation and search for signs of harvest mice or other sensitive wildlife and plant species. Following inspection, personnel, under the supervision of the qualified biologist, should disturb (e.g., flush) vegetation to force movement of SMHM into adjacent marsh areas. Immediately following vegetation flushing, personnel, under the supervision of the qualified biologist should remove vegetation with non-mechanized hand tools so that vegetation is no taller than two inches. After vegetation removal, a fence suitable to exclude salt marsh harvest mice should be placed along the edge of the area removed of vegetation to further reduce the likelihood of salt marsh harvest mice returning to the area prior to construction. The fence should be made of a heavy plastic sheeting material that does not allow salt marsh harvest mice to pass through or climb, and the bottom should be buried to a depth of four inches so that the salt marsh harvest mice cannot crawl under the fence. Fence height should be at least two feet high but no higher than four feet. All supports for the exclusion fencing should be placed on the inside of the work area. Once the site is cleared of mice or shrews, the biologist will supervise the hand (i.e., non-mechanized) 			

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
		<p>removal of any vegetation that could support salt marsh harvest mice and wandering shrews (i.e., salt marsh and immediately adjacent uplands) to avoid impacts to these species. Such monitoring will occur for the duration of all clearing work within suitable habitat. Vegetation clearing should begin at the existing tide gate structure and continue away from the structure to encourage any salt marsh harvest mice and wandering shrews in the area to move into suitable habitat outside of the Project area. Vegetation clearing should extend approximately 2 to 3 feet beyond the ESA fence outside the work area to discourage salt marsh harvest mice and wandering shrews from returning to the Project area. All brush resulting from vegetation clearing will immediately be moved offsite so as not to provide habitat for salt marsh harvest mice and wandering shrews in the Project area.</p> <ul style="list-style-type: none"> • Prior to construction, ESA fencing shall be installed by hand along the limits of disturbance to prevent salt marsh harvest mice and wandering shrews from entering the active work area; to protect habitat within the marsh from earthmoving activities or accidental spills; and to exclude workers from the marsh outside of the impact area. A fencing plan shall be submitted to CDFW and USFWS for review and approval prior to installation. A qualified biologist shall be present onsite to monitor for salt marsh harvest mice and wandering shrews during ESA fence installation. • Work activities within 50 feet of saltmarsh harvest mouse habitat will not occur within two hours before or after extreme high tides (6.5 feet or above measured at the Golden Gate Bridge adjusted to the timing of local tides) or when the marsh plain is inundated, which could prevent individuals 			

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Implement Fish Exclusion and Relocation	MM-BIO-8	<p>from reaching suitable cover, unless fencing has been installed around the work area.</p> <ul style="list-style-type: none"> If individuals are observed in the active work area, all activities in that area shall cease until the qualified biologist determines any individuals have safely left the area. USFWS and CDFW will be notified if work is stopped due to such an observation. Additional avoidance (e.g., allowing individuals to leave of their own volition), protection (e.g., implementation of no-work buffer zones), or relocation measures may be implemented in coordination with USFWS and CDFW, as appropriate. Work may continue away from the observed individual(s) if the qualified biologist determines work can occur without causing harm to the species <p>A qualified fisheries biologist shall develop a Fish Exclusion or Relocation Plan to exclude and/or relocate fish from the Project area to avoid direct fish mortality from stranding during dewatering. The Fish Exclusion or Relocation Plan shall be reviewed and approved by NMFS and CDFW prior to implementation. The plan shall at a minimum identify methods for fish capture and/or exclusion, temporary holding methods, and appropriate release locations.</p>	Prior to and during dewatering	Valley Water or the construction contractor	Valley Water
Compensate for Impacts to Jurisdictional Wetlands	MM-BIO-9	<p>Valley Water shall ensure no net loss of wetlands from Project impacts through purchase of mitigation bank credits from the San Francisco Bay Wetland Mitigation Bank located in Foster City. Valley Water will purchase wetland mitigation credits at a 2:1 mitigation to permanent impact ratio. Proof of credit purchase will be provided to the USACE, RWQCB, and CDFW prior to the start of construction.</p>	Prior to the start of construction and throughout mitigation implementation	Valley Water or the construction contractor	Valley Water
Cultural Resources					

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Accidental Discovery of Archaeological Artifacts, Tribal Cultural Resources, or Burial Remains	BMP CU-1	<p>If historical or unique archaeological artifacts, or tribal cultural resources, are accidentally discovered during construction, work in affected areas will be restricted or stopped until proper protocols are met. Work at the location of the find will halt immediately within 100 feet of the find. A "no work" zone shall be established utilizing appropriate flagging to delineate the boundary of this zone. A Consulting Archaeologist will visit the discovery site as soon as practicable for identification and evaluation pursuant to PRC Section 21083.2 and CCR Section 15126.4. If the archaeologist determines that the artifact is not significant, construction may resume. If the archaeologist determines that the artifact is significant, the archaeologist will determine if the artifact can be avoided and, if so, will detail avoidance procedures. If the artifact cannot be avoided, the archaeologist will develop within 48 hours an Action Plan which will include provisions to minimize impacts and, if required, a Data Recovery Plan for recovery of artifacts in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines. If a tribal cultural resource cannot be avoided, the Action Plan will include notification of the appropriate Native American tribe, and consultation with the tribe regarding acceptable recovery options.</p> <p>If burial finds are accidentally discovered during construction, work in affected areas will be restricted or stopped until proper protocols are met. Upon discovering any burial site as evidenced by human skeletal remains, the County Coroner will be immediately notified, and the field crew supervisor shall take immediate steps to secure and protect such remains from vandalism during periods when work crews are absent. No further excavation or disturbance within 100 feet of the site or any nearby area reasonably suspected to overlie adjacent remains may be made except as authorized by the County Coroner, California Native American Heritage Commission, and/or the County Coordinator of Indian Affairs.</p>	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Hazards and Hazardous Materials					
Prepare a Soil Management Plan	BMP HM-1	<p>Prior to grading and excavation, Valley Water will retain a qualified professional to prepare a Soil Management Plan. The Soil Management Plan will address the concerns associated with releases of contaminated soil within and adjacent to the Project area. The Plan will include specifications for procedures to manage affected soil during construction and shall include engineering controls to minimize human exposure to potential contaminants.</p> <p>During construction activities, Valley Water or its contractor shall employ engineering controls and BMPs to minimize human exposure to potential contaminants and potential negative effects from an accidental release to groundwater and soils. Engineering controls and construction BMPs shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> Contractor employees working on-site shall be certified in OSHA's 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training program. Contractor shall monitor the area around the construction site for fugitive vapor emissions with appropriate field screening instrumentation. Contractor shall water/mist soil as it is being excavated and loaded onto trucks. Contractor shall place any stockpiled soil in areas that are shielded from prevailing winds. Contractor shall cover the bottom of excavated areas with sheeting when work is not being performed. 	Prior to and throughout construction	Valley Water or the construction contractor	Valley Water
Restrict Vehicle and Equipment Cleaning to	BMP HM-2	Vehicles and equipment may be washed only at approved areas. No washing of vehicles or equipment will occur in the Project area.	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Appropriate Locations					
Ensure Proper Vehicle and Equipment Fueling and Maintenance	BMP HM-3	<p>No fueling or servicing will be done in a waterway or immediate flood plain, unless equipment stationed in these locations is not readily relocated (i.e., pumps, generators).</p> <ol style="list-style-type: none"> For stationary equipment that must be fueled or serviced on site, containment will be provided in such a manner that any accidental spill will not be able to come in direct contact with soil, surface water, or the storm drainage system. All fueling or servicing done at the site will provide containment to the degree that any spill will be unable to enter any waterway or damage riparian vegetation. All vehicles and equipment will be kept clean. Excessive build-up of oil and grease will be prevented. All equipment used in the Bay or flood basin will be inspected for leaks each day prior to initiation of work. Maintenance, repairs, or other necessary actions will be taken to prevent or repair leaks, prior to use. If emergency repairs are required in the field, only those repairs necessary to move equipment to a more secure location will be done in a waterway or flood plain. 	Throughout construction	Valley Water or the construction contractor	Valley Water
Ensure Proper Hazardous Materials Management	BMP HM-4	Measures will be implemented to ensure that hazardous materials are properly handled, and the quality of water resources is protected by all reasonable means.	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Utilize Spill Prevention Measures	BMP HM-5	<p>Prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water following these measures:</p> <ol style="list-style-type: none"> 1. Prior to entering the work site, all field personnel will know how to respond when toxic materials are discovered. 2. Contact of chemicals with precipitation will be minimized by storing chemicals in watertight containers with appropriate secondary containment to prevent any spillage or leakage. 3. Petroleum products, chemicals, cement, fuels, lubricants, and non-storm drainage water or water contaminated with the aforementioned materials will not contact soil and not be allowed to enter surface waters or the storm drainage system. 4. All toxic materials, including waste disposal containers, will be covered when they are not in use, and located as far away as possible from a direct connection to the storm drainage system or surface water. 5. Quantities of toxic materials, such as equipment fuels and lubricants, will be stored with secondary containment that is capable of containing 110 percent of the primary container(s). 6. The discharge of any hazardous or non-hazardous waste as defined in Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations will be conducted in accordance with applicable State and federal regulations. 7. In the event of any hazardous material emergencies or spills, personnel will call the Chemical Emergencies/Spills Hotline at 1-800-510-5151. 	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Incorporate Fire Prevention Measures	BMP HIM-6	<ol style="list-style-type: none"> 1. Field personnel will be appropriately trained in spill prevention, hazardous material control, and cleanup of accidental spills; 2. Equipment and materials for cleanup of spills will be available on site, and spills and leaks will be cleaned up immediately and disposed of according to applicable regulatory requirements; 3. Field personnel will ensure that hazardous materials are properly handled and natural resources are protected by all reasonable means; 4. Spill prevention kits will always be in close proximity when using hazardous materials (e.g., at crew trucks and other logical locations), and all field personnel will be advised of these locations; and, 5. The work site will be routinely inspected to verify that spill prevention and response measures are properly implemented and maintained. <ol style="list-style-type: none"> 1. All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors. 2. During the high fire danger period (April 1–December 1), work crews will have appropriate fire suppression equipment available at the work site. 3. An extinguisher shall be available at the project site at all times when welding or other repair activities that can generate sparks (such as metal grinding) is occurring. 	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Hydrology and Water Quality					
Limit Impact of Pump and Generator Operation and Maintenance	BMP WQ-1	<p>Pumps and generators will be maintained and operated in a manner that minimizes impacts to water quality and aquatic species.</p> <ol style="list-style-type: none"> Pumps and generators will be maintained according to manufacturers' specifications to regulate flows to prevent dry-back or washout conditions. Pumps will be operated and monitored to prevent low water conditions, which could pump muddy bottom water, or high-water conditions, which creates ponding. Pump intakes will be screened to prevent uptake of fish and other vertebrates. Pumps will be screened according to NMFS criteria. Sufficient back-up pumps and generators will be on site to replace defective or damaged pumps and generators. 	During dewatering	Valley Water or the construction contractor	Valley Water
Limit Impacts from Staging and Stockpiling Materials	BMP WQ-2	<ol style="list-style-type: none"> To protect on site vegetation and water quality, staging areas should occur on access roads, surface streets, or other disturbed areas that are already compacted and only support ruderal vegetation. Similarly, all equipment and materials (e.g., road rock and spoils) will be contained within the existing access roads or other pre-determined staging areas. 	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Limit Impact of Concrete Near Waterways	BMP WQ-3	<p>2. Building materials and other Project-related materials, including chemicals and sediment, will not be stockpiled or stored where they could spill into water bodies.</p> <p>3. No runoff from the staging areas may be allowed to enter water ways without being subjected to adequate filtration (e.g., vegetated buffer, swale, hay wattles or bales, silt screens).</p> <p>4. The discharge of decant water to water ways from any on site temporary sediment stockpile or storage areas is prohibited.</p> <p>5. During the wet season, no stockpiled soils will remain exposed, unless surrounded by properly installed and maintained silt fencing or other means of erosion control. During the dry season; exposed, dry stockpiles will be watered, enclosed, covered, or sprayed with non-toxic soil stabilizers.</p>	During tide gate structure construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Isolate Work in Tidal Areas with Use of Cofferdam	BMP WQ-4	<p>period may occur. If a sealant is used, water will be excluded from the site until the sealant is dry.</p> <p>An area outside of the channel and floodplain will be designated to clean out concrete transit vehicles.</p> <p>For work in tidal areas, it is preferable to isolate one side of the channel with a cofferdam and allow flows to continue on the other side of the creek. If downstream flows cannot be diverted around the project site, the creek waters will be transmitted around the site through cofferdam bypass pipes. By isolating the work area from tidal flows, water quality impacts are minimized.</p> <ol style="list-style-type: none"> 1. Installation of coffer dams will begin at low tide. 2. Waters discharged through tidal coffer dam bypass pipes or from pumping will not exceed 10 percent in areas where natural turbidity is greater than 50 NTU over the background levels of the tidal waters into which they are discharged. Cofferdams and bypass pipes will be removed as soon as possible. Flows will be restored at a reduced velocity to minimize erosion, turbidity, or harm to habitat. 	During dewatering	Valley Water of the construction contractor	Valley Water
Use Seeding for Erosion Control, Weed Suppression, and Site Improvement	BMP WQ-5	<p>Disturbed areas shall be seeded with native seed as soon as is appropriate after activities are complete. An erosion control seed mix will be applied to exposed soils down to the ordinary high-water mark of the flood basin and the mean high higher tide line on the Bay side of the work area.</p> <p>The seed mix should consist of California native species suitable to the area.</p>	During site restoration	Valley Water or the construction contractor	Valley Water
Maintain Clean Conditions at Work Sites	BMP WQ-6	<p>The work site, areas adjacent to the work site, and access roads will be maintained in an orderly condition, free and clear from debris and discarded materials on a daily basis. Personnel will not sweep,</p>	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Manage Drilling Materials	BMP WQ-7	<p>grade, or flush surplus materials, rubbish, debris, or dust into storm drains or waterways.</p> <p>Materials or equipment left on the site overnight will be stored as inconspicuously as possible and will be neatly arranged. Any materials and equipment left on the site overnight will be stored to avoid erosion, leaks, or other potential impacts to water quality</p> <p>Upon completion of work, all building materials, debris, unused materials, concrete forms, and other construction-related materials will be removed from the work site.</p>	During drilling activities	Valley Water or the construction contractor	Valley Water
Protect Groundwater from Contaminants via Drilling	BMP WQ-8	<p>All materials or waters generated during drilling, CIDH pile construction, or levee ground improvements will be safely handled, properly managed, and disposed of according to all applicable federal, State, and local statutes regulating such. In no case will these materials and/or waters be allowed to enter, or potentially enter waterways. Such materials/waters must not be allowed to move off the property where the work is being completed.</p> <p>Any substances or materials that may degrade groundwater quality will not be allowed to enter any boring. Lubricants used on drill bits, drill pipe, or tremie pipe will not be comprised of oily or greasy substances or other materials that may degrade groundwater quality.</p> <p>Well openings or entrances will be sealed or secured in such a way as to prevent the introduction of contaminants.</p>	During drilling activities	Valley Water or the construction contractor	Valley Water
Prevent Water Pollution	BMP WQ-9	<p>Oily, greasy, or sediment laden substances or other material that originate from the Project and may degrade the quality of surface water or adversely affect aquatic life, fish, or wildlife will not be allowed to enter, or be placed where they may later enter, any waterway.</p>	Throughout construction	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Prevent Storm Water Pollution	BMP WQ-10	<p>The Project will not increase the turbidity of any watercourse flowing past the construction site by taking all necessary precautions to limit the increase in turbidity as follows:</p> <ol style="list-style-type: none"> Where natural turbidity is between 0 and 50 Nephelometric Turbidity Units (NTU), increases will not exceed 5 percent; and Where natural turbidity is greater than 50 NTU, increases will not exceed 10 percent. Water turbidity changes will be monitored. The discharge water measurements will be made at the point where the discharge water exits the water control system. Natural watercourse turbidity measurements will be made in the receiving water at least 100 feet from discharge site. Natural watercourse turbidity measurements will be made prior to initiation of Project discharges, preferably at least 2 days prior to commencement of work. <p>To prevent stormwater pollution, the applicable measures from the following list will be implemented:</p> <ol style="list-style-type: none"> Soils exposed due to Project activities will be seeded and stabilized using hydroseeding, straw placement, mulching, and/or erosion control fabric. These measures will be implemented such that the site is stabilized, and water quality protected prior to significant rainfall. Areas below the ordinary high-water mark of the flood basin and below the mean high tide line of the Bay are exempt from this BMP. The preference for erosion control fabrics will be to consist of natural fibers; however, steeper slopes and areas that are highly erodible may require more structured erosion control methods. No non-porous fabric will be used as part of a permanent erosion control approach. Plastic sheeting may be used to temporarily protect a slope from runoff, but only if there 	Throughout construction and during site restoration	Valley Water or the construction contractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Manage Sanitary and Septic Waste	BMP WQ-11	<p>are no indications that special-status species would be impacted by the application.</p> <p>3. Erosion control measures will be installed according to manufacturer's specifications.</p> <p>4. To prevent stormwater pollution, the appropriate measures from, but not limited to, the following list will be implemented:</p> <ul style="list-style-type: none"> • Silt Fences • Straw Bale Barriers • Brush or Rock Filters • Storm Drain Inlet Protection • Sediment Traps or Sediment Basins • Erosion Control Blankets and/or Mats • Soil Stabilization (i.e. tackified straw with seed, jute or geotextile blankets, etc.) • Straw mulch. <p>5. All temporary construction-related erosion control methods shall be removed at the completion of the Project (e.g. silt fences).</p> <p>Temporary sanitary facilities will be located in compliance with California Division of Occupational Safety and Health (Cal/OSHA) regulation 8 California Code of Regulations 1526. All temporary sanitary facilities will be located where overflow or spillage will not enter a watercourse directly (overbank) or indirectly (through a storm drain).</p>	Throughout construction	Valley Water or the construction contractor	Valley Water
Traffic and Transportation					

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	BMP or Mitigation Measure	Description of Measures	Implementation Timing	Implementation Responsibility	Responsibility for Oversight
Incorporate Public Safety Measures	BMP TR-1	Fences, barriers, lights, flagging, guards, and signs will be installed as determined appropriate by the public agency having jurisdiction, to give adequate warning to the public of the construction and of any dangerous condition to be encountered as a result thereof.	Throughout construction	Valley Water or the construction contractor	Valley Water