



Central Valley Regional Water Quality Control Board

18 April 2023

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NOTICE OF APPLICABILITY FOR COVERAGE UNDER ORDER WQ 2022-0048-DWQ FOR CLEAN WATER ACT SECTION 401 GENERAL WATER QUALITY CERTIFICATION FOR RESTORATION PROJECTS STATEWIDE, MCCORMACK-WILLIAMSON TRACT LEVEE MODIFY AND HABITAT PROJECT PHASE B (WDID#5A34CR00868), SACRAMENTO COUNTY

On 2 December 2022, Reclamation District 2110 submitted a Notice of Intent (NOI) to enroll under and comply with State Water Resources Control Board (State Water Board) Order No. WQO 2022-0048 DWQ, Order for Clean Water Act Section 401 General Water Quality Certification for Restoration Projects Statewide.

The Central Valley Water Quality Control Board (Central Valley Water Board) has reviewed your enrollment materials and finds the McCormack-Williamson Tract (MWT) Levee Modify and Habitat Project Phase B (Project) meets the requirements of, and is hereby enrolled under, Order No. WQ-2022-0048 DWQ. You may proceed with your Project in accordance with the Order.

A copy of WQ-2022-0048 DWQ

(https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2022/ wqo2022-0048-dwq.pdf) can be found on the State Water Resources Control Board's General Orders webpage and is enclosed.

Please familiarize yourself with the requirements of Order No. WQ-2022-0048 DWQ. You are responsible for complying with all applicable Order requirements. Failure to comply with Order No. WQ-2022-0048 DWQ constitutes a violation of the California Water Code and may result in enforcement action or termination of enrollment under the Order.

PROJECT DESCRIPTION:

The 1,654-acre Project consists of lowering approximately 900 feet of the McCormack-Williamson Tract (MWT) East Levee, from approximately Station 434+00 to Station 447+00, from existing elevations (between 18.0 and 20.0 feet) to 11.1 feet. Lowering the elevation of the MWT East Levee will restore fluvial hydrology, sediment deposition processes, and regular riverine floodplain inundation to the interior of the MWT. Degrading this section of the levee will allow it to act as a weir, bringing tidal water into the tract during flow events in Lost Slough above the 11.1-foot water surface elevation.

The project design includes waterside and landside slopes of 4 to 1 (horizontal to vertical) with a 2.5- to 5.8-foot-thick layer of rock slope protection (RSP) (i.e., 8- to 27inch diameter rock). RSP will extend approximately 10 feet beyond the waterside levee toe to protect against erosion/scour from the approaching flow and 25 feet beyond the landside levee toe to dissipate energy and reduce the potential erosion/scour from water overtopping the degraded levee (Figure 3). The Project evaluated modeled velocities at the levee degrade during post-Project 10- and 100-year storm events and the California Bank and Shore Protection Design Methods (Caltrans 2000), to determine appropriate RSP. RSP will extend up the levee degraded slopes to the top of the existing levee crests at the north and south ends. RSP will prevent erosion and deepening of the levee degrade over time and will allow the degraded levee to be used as an access road when not inundated. The Project includes an additional 3.3 feet of quarter ton RSP for approximately 270 feet along the southern end and slope of the levee degrade to protect from erosion/scour where post-Project velocities were modeled to be higher. One or more layers of filter fabric may be placed under all RSP areas to prevent scouring of the underlying soil. The Project also proposes a rocked access road.

All in-water work during the MWT east levee degrade will be timed, to the extent possible, to occur during low tide. Silt curtains or similar controls will be deployed around in water excavation to reduce turbidity and total suspended solids; and if necessary, will be moved as the working area shifts to different locations.

Breach Mokelumne River Levee

Lowering of the Mokelumne River Levee will restore fluvial hydrology, sediment deposition processes, and regular riverine floodplain inundation to the interior of the MWT. The location of the lowered levee has been relocated to where the Mokelumne River Levee breached during the 2017 flood event at approximately Station 27+00. Following the 2017 breach, the levee at this location was partially restored with rock to an elevation of approximately 12.0 to 13.0 ft. The Project design proposes to lower a 300-foot-long segment of the Mokelumne River levee to elevation 7.0 feet. The west side of the lowered levee will have a 28H:1V slope and the east side a 14H:1V slope.

The RSP design was developed using the same approach discussed above for degrading the MWT East Levee. A 2.5-foot-thick layer of RSP will be placed along the bottom and up the east and west slopes to the top of the adjacent existing levee. RSP will prevent erosion and deepening of the levee degrade over time and will allow the degraded levee to be used as a maintenance access road. Rock excavated from the partially repaired levee in 2017 that will be removed during construction will be salvaged and re-used as the top 1 foot of RSP. One or more filter layers may be placed under all

RSP to prevent scouring of the underlying soil.

The proposed Project design for the Mokelumne River degrade has an elevation above the interior tract ground surface to function as a very low weir, allowing very frequent overtopping and regularly connecting tidal flows on MWT with the Mokelumne River. Design also includes excavating an extensive interior tidal channel network, to provide borrow material and to create higher-quality habitat. This allows for the road along the levee crest to be maintained for access to the southern MWT for maintenance activities, the only route available to the southern MWT.

Completely Degrade a Portion of the MWT Southwest Levee

Lowering the MWT Southwest Levee will allow flood flows to pass out of MWT without causing a surge effect and will reintroduce tidal exchange to MWT. Project design proposes to lower an approximately 1,000-foot-long section of the MWT Southwest Levee, from approximately Station 184+00 to Station 194+00, from existing elevations (between 11.0 and 17.0 feet) to elevation 0.0 feet (Figure 5). There will be an approximately 130-foot-long section of this degrade, from approximately Station 184+40 to Station 150+70 that will be graded to elevation -2.0 feet to connect Dead Horse Cut to proposed tidal channels interior of the MWT. The levee degrade will have 7H:1V slopes up to the adjacent levee crest at the north and south ends. Post-project modeling shows very low velocities, and sediment may accumulate on the degraded area over time. However, to prevent scour along the re-sloped sections of the degraded levee slope, RSP will be installed around the toe of the levee cut banks to an elevation of approximately 8 feet.

The MWT southwest levee degrade will occur in four phases, three of which will occur prior to MWT inundation and will be accomplished using barge-mounted excavators, land-based excavator loading haul trucks, or self-loading scrapers. The first phase, dry excavation of the upper levee, will degrade the full levee width from crown elevation to 7.0 feet. This work will be done above the mean high water surface elevation and will not require any in-water work. In the second phase, wet excavation of a sediment bench in Dead Horse Cut, work will be done in-water to remove approximately 5,980 cubic yards of existing RSP and sediment, over an area of approximately 79,000 square feet, to an elevation of 0.0 foot or -2.0 feet. In the third phase, the landside levee will be excavated from the degraded elevation of 7.0 feet to an elevation of 0.0 foot. Approximately two-thirds of the levee from the land side toward the water side will be removed, leaving a "notch" or berm remaining of the levee to prevent inundation from Dead Horse Cut into the tract. Material from dry excavations (i.e., the first and third phases) will be used for the southwest levee re-slope.

The fourth and final phase of excavation will breach the notch or berm, causing tidal inundation of MWT. Wet excavation will begin during low tide with a small breach at the downstream end of the degrade to an initial elevation of 4.6 feet, allowing for controlled inundation of MWT. Once water surface elevations in Dead Horse Cut and the MWT interior have equalized, excavation will resume and continue to a final grade of 0.0 foot,

proceeding at a controlled pace to prevent significant scour or uncontrolled flow. A barge-mounted or land-based excavator will perform excavation of a total of approximately 9,700 cubic yards of material over an approximately 50,000 square foot area. The material removed during this phase will be placed above 6.0-foot elevation on the landside area to be re-sloped to the north or along the adjacent submerged re-sloped banks. If placed along the submerged re-sloped banks, the area will be enclosed with a silt curtain or other appropriate turbidity control device.

All in-water work during the MWT southwest levee degrade will be timed, to the extent possible, to occur during low tide. Silt curtains or similar controls will be deployed around in water excavation to reduce turbidity and total suspended solids; and if necessary, will be moved as the working area shifts to different locations.

Repair MWT West Levee

An approximately 500-foot-long segment of the MWT West Levee was breached during the 2017 flood event on MWT. The current breach slopes inward from both directions and extends down to an elevation of approximately 10 feet (at the lowest point) and will be repaired to an elevation of approximately 16 feet. The sides of the repair will have 2H:1V slopes. The road along the levee crest at the repair site will be restored with aggregate base. The repair will then be seeded as needed for erosion control. Hydraulic modeling results indicate that this breach will no longer be needed to relieve pressure on the downstream levee after the southwest degrade is constructed.

Enhance Landside Levee Slope and Habitat

The land side of most MWT levees were re-sloped in Phase A. The MWT East and Southwest Levees were not re-sloped in Phase A and sections of these levees that are not degraded in Phase B will now be re-sloped in Phase B, using material excavated when degrading these levees. The land side of the MWT East and Southwest Levees will be re-sloped to the north and south of the degraded segments. Re-sloping consists of grading a bench below the levee crest on the land side of the levee. The bench will be approximately 30 feet wide and sloped at approximately 2H:1V on the landside, towards the tract interior. A 7H:1V slope will be graded from the hinge point of the bench to the ground surface where the new landside levee toe will be formed. The current Phase B design proposes re-sloping approximately 2,650 feet of the MWT East Levee with widths (including the bench and slopes) ranging from 35 to 85 feet and re-sloping approximately 2,580 feet of the MWT Southwest Levee with widths ranging from 80 to 115 feet. A typical cross-section of the MWT interior with re-sloping of the landside of levees following inundation of the tract is shown in Figure 7. Wet soil excavated underwater for levee modifications will be placed on the re-sloped benches (on the landside of levees) and enclosed with sediment fencing and fiber rolls. Soil will then be leveled after it dries.

Interior Grading and Tidal Channel Network

Interior grading on MWT involves excavating a tidal channel network, excavating borrow material from a large subtidal area, and using excavated material to construct marsh plains, riparian berms, and riparian floodplains. Figure 8 shows typical cross-sections of these excavated and constructed features for interior grading.

Up to a 13.3-mile-long network of tidal channels will be excavated in the MWT interior. A single main channel will run roughly north to south down the middle of the tract. The main channel will have a 15-foot minimum bottom width and a channel invert of elevation -1 foot at the north end, connecting a scour pond adjacent to the MWT East Levee, and will gradually widen to a 105-foot bottom width and a channel invert of elevation -2 feet. Side channel networks will connect to the main channel with channel bottom widths varying from approximately 15 to 40 feet. All channels will have approximately 2H:1V side slopes.

Subtidal borrow excavation will generate additional fill material. The subtidal borrow area is located on the southern third of the tract, is already below tidal elevation, and will be excavated to an elevation of approximately -1 foot. The subtidal borrow area and tidal channel excavations are anticipated to extend up to approximately 7 feet below the existing ground surface. Excavators will be used for excavations that encounter groundwater. No groundwater will be pumped or discharged outside of the tract during construction. Excavated material will be used as fill to construct marsh plains, riparian berms, and riparian floodplains. Material excavated for tidal channels will be spread locally, while subtidal borrow will be transported from the southern extent to fill areas elsewhere on the MWT interior.

Marsh plain construction will be completed to raise the elevation of the tract interior to equal approximately the Mean Lower Low Water (MLLW) elevation of 3.5 feet at the tidal channel top of bank, gradually sloping up to the 4-foot contour. The marsh plain will also include high ground in the form of riparian berms adjacent to the tidal channels. Riparian berms will be at least 1 acre in size above Mean Higher High Water (MHHW) to provide ample patch size for nesting birds and riparian recruitment. Riparian berms will be constructed to a top elevation of 7 foot and varying top widths. Constructing slightly higher than MHHW provides resiliency to rising sea levels in coming decades. Most berms will be between 40 and 80 feet wide, although one will be up to 195 feet wide at the widest point. The riparian berms will be set back from the tidal channel 2 feet with channel side slopes of 3H:1V and all remaining side slopes of 7H:1V. Riparian floodplain areas will be constructed adjacent to the restricted height levee and built to a minimum elevation of 5.6 feet (i.e., MHHW) gradually sloping up to a maximum elevation of 7.5 feet with patch sizes ranging from 7.7 to 30.7 acres.

The Project will temporarily impact 3.14 acres/1,500 linear feet of stream bed and permanently impact 16.76 acres of wetland and 20.47 acres/57,300 linear feet of stream bed habitat. Temporarily impacted areas will be restored to pre-Project condition.

The Project is located on a North Delta Island located immediately downstream of the confluence of the Cosumnes and Mokelumne Rivers, just northeast of the Delta Cross Channel. The MWT Phase B project is located approximately 0.5 mile west of Interstate 5 in unincorporated Sacramento County. The approximate center of the Project area is located at latitude 38.250864°N and longitude 121.48944°W.

PROJECT SCHEDULE:

Project construction is anticipated to require up to 3 years. Construction will be conducted in the dry season each year, which is typically April or May through October or whenever conditions are too wet to continue working. Upon approval from the California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS), all in-water work shall be limited to August 1 through October 31, a timeframe when federally listed fish are least likely to be present in the waterways surrounding the MWT. Construction equipment will be mobilized and demobilized each year of construction.

APPLICATION FEE RECEIVED:

\$645.00 was received on 2 December 2022. \$84.00 was received on 8 February 2023.

The fee amount was determined as required by California Code of Regulations, title 23, sections 3833(b)(3) and 2200(a)(3) and was calculated as category D - Ecological Restoration and Enhancement Projects (fee code 85) with the dredge and fill fee calculator.

ENVIRONMENTAL REVIEW:

On 10 February 2022, the California Department of Water Resources (DWR), as lead agency, certified a Final Environmental Impact Report (FEIR) (State Clearinghouse (SCH) No. 200312112) for the Project and filed a Notice of Determination (NOD) at the SCH on 18 November 2022. The Central Valley Water Board is a responsible agency under CEQA (Public Resources Code, section 21069) and in making its determinations and findings, must presume that DWR's certified environmental document comports with the requirements of CEQA and is valid. (Public Resources Code, section 21167.3).

The Central Valley Water Board has reviewed and considered the environmental document and finds that the environmental document prepared by DWR addresses the Project's water resource impacts. (California Code of Regulations, title 14, section 15096, subd. (f).) The environmental document includes the mitigation monitoring and reporting program (MMRP) developed by DWR for all mitigation measures that have been adopted for the Project to reduce potential significant impacts. (Public Resources Code, section 21081.6, subd. (a)(1); California Code of Regulations, title 14, section 15091, subd. (d).).

AVOIDANCE AND MINIMIZATION MEASURES:

- The general construction season shall be from June 15 to October 31. Restoration and construction within any wet or flowing stream channel shall only occur within this period. Revegetation outside of the active channel may continue beyond October 31, if necessary.
- Upon approval from CDFW, USFWS, and NMFS, all in-water work shall be limited to August 1 through October 31, a timeframe when federally listed fish are least likely to be present in the waterways surrounding the MWT. No fish relocation or dewatering are anticipated as part of the MWT Phase B Project.
- Prior to construction, any contractor shall be provided with the specific protective measures to be followed during implementation of the project. In addition, a qualified biologist shall provide the construction crew with information on the listed species and State Fully Protected Species in the project area, the protection afforded the species by the federal Endangered Species Act (ESA), and guidance on those specific protection measures that must be implemented as part of the project.
- All contractors and equipment operators will be provided with Worker Environmental Awareness Program training to educate them on the environmental resources of the MWT and vicinity, including special-status plants, fish, and wildlife species with potential to occur in the MWT vicinity and required protection measures. Training will include information about the ESA and the consequences of non-compliance with the ESA. Workers will be informed about the presence, life history, and habitat requirements of all special-status species that may be affected in the MWT vicinity. Training also will include information on state and federal laws protecting nesting birds and aquatic resources. This training will be conducted prior to construction for each year of the MWT Phase B Project implementation, if applicable, and will be provided to any new staff/contractors added during construction.
- During in-water work, construction equipment shall be operated from a barge or an upland berm/levee. Equipment will not be operated in water. Equipment will avoid disturbing woody material and vegetation that is outside the MWT Phase B Project's construction footprint. Prior to excavation or rock placement, equipment operators will initiate benign disturbance such as agitating water with excavator buckets before scooping or placing material.
- Silt curtains, sediment booms, or other appropriate turbidity control methods will be installed and maintained during in-water work to prevent silt from entering surrounding waterways and downstream reaches. Siltation control devices will be inspected regularly, and any sediment removed from them shall be used as landform grading fill or disposed of in areas above the tidal inundation zone on the tract.

- To minimize the amount of in-water work, landside construction will occur prior to the inundation of the MWT interior and work on the waterside levees will be timed to occur during low tide when feasible.
- The amount and spatial extent of RSP material used to protect the levee from erosion shall not exceed the minimum amount required.
- Prior to initiation of any work, a Stormwater Pollution Prevention Plan (SWPPP) including Best Management Practices (BMPs) to avoid erosion will be developed for the MWT Phase B Project. BMPs described in the SWPPP will be implemented throughout all phases of construction in areas where silt and/or earthen fill have the potential to enter waterways. The SWPPP will include, but not be limited to, the following list of BMPs to avoid and minimize potential effects from hazards and hazardous materials:
- Equipment staging areas will be located within the MWT interior away from waterways and sensitive resources and no potentially hazardous materials will be stored in a location where there is potential to enter surrounding waterways and/or contaminate aquatic resources.
- Routine washing and servicing of construction equipment and vehicles will occur in upland areas (e.g., designated staging or parking areas). Due to the size of the MWT Action Area, refueling and minor maintenance may take place at the work site if chemical containment equipment and cleanup materials are available at the work site.
- On-site vehicles will be monitored for fluid leaks and receive daily inspection and as-needed maintenance to reduce the chance of leakage.
- Bulk fuel or lubricating oil dispensers will have a valve that must be manually held open to allow the flow of fuel into construction vehicles.
- Construction equipment used for in-water work will employ a double containment system for diesel and oil fluids. Additionally, equipment will use hydraulic fluid that does not contain organophosphate esters.
- All construction materials with the potential to pollute runoff will be handled with care and stored under cover or otherwise contained (e.g., surrounded by berms) when rain is forecast or during wet weather.
- Materials, fuels, liquids and lubricants, and equipment supplies will be stored in upland areas in a neat, orderly manner, in tightly sealed containers with the original manufacturer's label, and in an enclosure if possible.

- Any hazardous materials will be stored, labeled, and used according to local, state, and federal regulations.
- If drums must be stored without overhead cover, they will be stored at a slight angle to reduce corrosion and ponding of rainwater on the lids.
- Manufacturer's recommendations for proper use and disposal of a product will be followed. Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used before disposal of its container.
- If surplus product must be disposed of, the manufacturer or the local- and staterecommended methods for proper disposal will be followed.
- All waste that could attract predators on native aquatic or terrestrial species will be properly contained, removed from the work site, and disposed of each day.
- The following are measures to prevent, control, and minimize impacts from a spill of a hazardous, toxic, or petroleum substance during construction of the MWT Phase B Project:
- If a spill occurs, no additional work shall commence until the source of the spill has been identified and rectified, the spill has been contained, and appropriate agencies have been contacted.
- Minor spills are those that can be controlled by on-site personnel. The following actions will occur upon discovery of a minor spill:
- The spread of the spill will be contained.
- If the spill occurs on impermeable surfaces, such as any temporary surfaces installed for pollution prevention during construction, it will be cleaned up using "dry" methods (i.e., absorbent materials, cat litter, and/or rags).
- If the spill occurs in permeable substrate areas, it will be immediately contained by constructing an earthen dike or other appropriate containment method. The contaminated soil will be excavated and disposed of properly.
- If the spill occurs during rain, the impacted area will be covered to avoid runoff, and appropriate clean-up steps will be taken after precipitation has ceased.
- All steps taken to report and contain the spill will be recorded.
- On-site personnel should not attempt to control major spills until qualified emergency response staff have arrived at the site. Failure to report major spills can result in significant fines and penalties. The following actions will occur upon discovery of a major spill:
- If a major spill occurs, the California State Warning Center will be notified at (800) 852-7550 in addition to local authorities.

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- For spills of federal reportable quantities, the National Response Center will also be notified at (800) 424-8802. The federal reportable spill quantity for petroleum products is any oil spill that (1) violates applicable water quality standards, (2) causes a film or sheen upon or discoloration of the water surface or adjoining shoreline, or (3) causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
- A written report will be sent to all notified authorities.
- The following additional spill control and cleanup practices will be followed:
- Manufacturer's methods for spill cleanup of a material will be followed as described on the material safety data sheet to be kept with product containers.
- Materials and equipment needed for cleanup procedures will be kept readily available on site, either at an equipment storage facility or on construction vehicles. Equipment to be kept on site may include, but not be limited to, brooms, dust pans, shovels, granular absorbents, sand, sawdust, absorbent pads and booms, plastic and metal trash containers, gloves, and goggles.
- On-site personnel will be made aware of cleanup procedures, the location of spill cleanup equipment, and proper disposal procedures.
- An Erosion Control Plan will be developed as part of the SWPPP for the MWT Phase B Project that will include, but not be limited to, the following BMPs to avoid and minimize potential impacts on waters from erosion resulting from MWT Phase B Project construction. BMPs included in the SWPPP will be implemented throughout all phases of construction in areas where silt and/or earthen fill have the potential to enter waterways. Erosion control measures will be maintained in place until the risk of erosion has subsided, at which point they will be removed.
- Construction will occur only during dry periods in areas with a risk of erosion to adjacent waterways. Prior to storm events, all construction activities in these areas shall cease, and appropriate erosion control measures will be implemented.
- Prior to initiation of any waterside work, erosion control measures will be utilized throughout all phases of operation where silt and/or earthen fill threaten to enter waterways.
- When waterside work is occurring or has recently occurred erosion control devices will be inspected at least every two weeks during construction until they are no longer needed and at 24hour intervals during extended storm events (during which construction will cease).
- Soil, silt, or other organic materials will not be placed, stockpiled, or stored where such materials could pass into surface water or surface water drainage courses during rain events. Material excavated during in-water work will be hauled to

upland areas as soon as feasible to minimize potential erosion and sediment delivery to watercourses.

- All areas disturbed by MWT Phase B Project activities each year where erosion will have potential to affect adjacent waterways will be protected from washout or erosion prior to the onset of the rainy season.
- Temporary erosion control measures such as fiber rolls and silt fencing will be maintained in place until the risk of erosion to adjacent waterways has subsided, at which point they will be removed.
- In addition, RD 2110 is committed to following the General Protection Measures for water quality protection as described in the Proposed General Order Attachment A, as necessary and practical.
- You must implement the mitigation and minimization measures proposed in your Mitigation Plan.

NOTICE OF COMPLETION:

Upon completion of the Project, you shall submit a Notice of Completion (NOC) no later than 30 days after Project completion. The NOC shall demonstrate the Project was carried out in accordance with the Project description, include a map of the Project location with final boundaries of the restoration area, and include post-project photographs. More information on the NOC is listed in section B.6 of the Order.

If you have questions concerning this matter, please contact Peter Minkel by phone at (916) 464-4684 or by email at <u>Peter.Minkel2@waterboards.ca.gov</u>.

Original Signed by Anne Walters for: Patrick Pulupa Executive Officer

- Enclosure: Order for Clean Water Act Section 401 General Water Quality Certification for Restoration Projects Statewide Order WQ 2022-0048-DWQ
- cc: Distribution List, page 12

DISTRIBUTION LIST [Via email only]

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