SUPPLEMENTAL MITIGATED NEGATIVE DECLARATION YUBA RIVER BASIN, CALIFORNIA PROJECT MARYSVILLE RING LEVEE PHASE 2B AND 3

Project Background

The Yuba River Basin, California Project – Marysville Ring Levee (MRL Project) is a cooperative effort between U.S. Army Corps of Engineers (USACE), Central Valley Flood Protection Board (Board), and the Marysville Levee District (MLD) to address under seepage, through seepage, and embankment stability for the ring levee around Marysville. The MRL Project is part of the Yuba River Basin, California Project, authorized by the Water Resources Development Act (WRDA) 1999 (Public Law 106-53) Section 101(a)(10) and WRDA 2007 (Public Law 110-114), Section 3041.

Although the MRL Project was one of the original elements identified in the 1999 congressionally authorized Yuba River Basin, California Project, the MRL Project portion was approved to be a separable element. An Engineering Documentation Report (EDR) was completed in 2010 which found that, although design changes were necessary, they did not constitute a change in the project scope, and the project could proceed to construction. As a result, a Project Partnership Agreement was executed and the MRL Project initiated construction in 2010.

An Environmental Assessment / Initial Study (EA/IS) for the MRL Project was circulated in 2010. The USACE adopted a Finding of No Significant Impact (FONSI) to complete the National Environmental Policy Act (NEPA) process. The FONSI was later adopted by the Board as a Mitigated Negative Declaration (MND) for California Environmental Quality Act (CEQA) purposes. The EA/IS/MND evaluated the potential effects of the proposed design and construction of improvements to the Marysville Ring Levee. Since 2010, changes to the project design and schedule have occurred for Phase 2B and 3 (Proposed Project), resulting in the need for a Supplemental EA/IS/MND.

Project Description

Levee improvements to the Marysville Ring Levee were originally covered in the 2010 EA/IS/MND which recommended implementation in multiple phases. Phase 1 of the MRL Project was constructed from 2010 through 2012 and portions of Phase 4 were constructed from 2016 through 2017. To better facilitate design and construction, Phase 2 was further subdivided into Phase 2A North, 2A South, 2B, and 2C. Phase 2A North began construction in spring 2018, Phase 2A South will begin construction in spring 2019, and Phase 2C will begin construction in spring 2020. As the current phases being evaluated, this MND describes refinements only for Phase 2B and 3.

Phase 2B:

Levee improvements in Phase 2B are identified as segments described as K1, K2, and L1. All levee segments require improvements, including the addition of a soil bentonite (SB) cutoff wall in each segment to prevent through-seepage and under-seepage. Design challenges include management of existing utilities and encroachments such as the historic sewer tunnels, proximity to the Union Pacific Railroad (UPRR), as well as a Pacific Gas & Electric (PG&E) substation and service center. Cutoff wall windows are to remain at State Highway 70 and the UPRR.

Cutoff Wall Construction

A SB cutoff wall will be constructed through the center of the levee crown and will span approximately 5,100 feet (0.97 miles) in length, have a maximum depth of 55 feet, and minimum thickness of 3 feet. The cutoff wall in Phase 2B will be constructed by utilizing the open trench method. This method requires excavation of a trench backfilled with an SB slurry.

Phase 3:

Levee improvements along Phase 3 have been identified in segments described as Reach 1, Reach 2, and Reach 3 to define the cutoff wall type and method of construction. All levee segments require improvements to meet flood protection criteria, including a SB and/or soil cement bentonite (SCB) cutoff wall (depending on wall depth) to prevent through-seepage and under-seepage.

Cutoff Wall Construction

Reach 1 and Reach 3 will be constructed using Soil-Cement-Bentonite (SCB), and the method of construction will be deep mix/mix in place. The deep mix/mix in place method will be used as the wall depth will exceed 80 feet. Reach 2 will be constructed using SB with the open trench method described in Phase 2B.

The cutoff wall will be constructed along the centerline of the levee crown between Ramirez Street and the PG&E substation. The combined length of the walls will be approximately 9,700 feet (1.84 miles), have a maximum depth of 130 feet, and a minimum thickness of 3 feet.

Project Location

The City of Marysville is located approximately 50 miles north of Sacramento, California in Yuba County and is surrounded by 7.5 miles of levee. These levees vary in height from 17 to 28 feet and protect the City of Marysville from flooding. The Proposed Project is located along the existing levee south of 1st Street, north and west of the Yuba River, and east of A Street, 12th Street, and Highway 20.

Mitigation Measures

The following mitigation measures summarize the measures detailed in the Supplemental EA/IS. These measures, in addition to those from the 2010 EA/IS/MND, will reduce impacts to less-than-significant.

Air Quality impacts will be temporary and mitigated to less-than-significant by these measures:

- The Contractor will submit to USACE and the Feather River Air Quality Management District (FRAQMD), a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of eight (8) or more hours during any phase of the Proposed Project.
 - The inventory will include the California Air Resources Board (CARB)
 equipment identification number, equipment type, horsepower rating,
 engine model year, and projected hours of use for each piece of off-road
 equipment;
 - The Contractor will submit a current Certificate of Reported Compliance for CARB's In-Use Off-Road Regulation to FRAQMD;
 - O At least 4 business days prior to equipment use, the Contractor will submit the construction equipment inventory information, the anticipated construction timeline including start date, as well as the name, phone number and email address of the Project Manager and on-site foreman to FRAQMD. The Sacramento Metropolitan Air Quality Management District (SMAQMD) Construction Mitigation Tool, Version 7.0 (October 2016) will be used to submit this information (or the most recent version);
 - At the end of the season, phase, or calendar year, the Contractor will be responsible for updating the off-road equipment inventory information as well as haul truck activity to FRAQMD
- Off-road vehicles used for Proposed Project construction will meet CARB Tier 4 Standards;
- Diesel-fueled on-road equipment manufactured in 2010 and newer will be used. Equipment manufactured prior to 2010 will require installation of engine retrofit technology. Low-emission diesel products, alternative fuels, after-treatment products, zero emission technologies and/or other options as they become available;
- A Fugitive Dust Control Plan will be submitted to FRAQMD for approval prior to commencing site activities or delivering materials to the site. The Plan will include mitigation measures and best management practices (BMPs) identified in the 2010 EA/IS and this environmental document;
- Minimize the amount of concrete for paved surfaces or utilize a low carbon concrete option. Produce concrete on-site if determined to be less emissive than transporting ready mix;
- Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes;

- Reduce electricity use in the construction office by using light-emitting diode (LED) bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones;
- Use locally sourced or recycled materials for construction materials (goal of at least 20 percent based on costs for building materials, and based on volume for roadway, parking lot, sidewalk and curb materials). Wood products utilized should be certified through a sustainable forestry program;
- Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75 percent by weight);
- Minimize vehicle and equipment idling time either by shutting off when not in use or reducing the time of idling to no more than 3 minutes, which will save fuel and reduce emissions. Provide clear signage that posts this requirement for workers at the entrances to the site;
- U.S. Environmental Protection Agency (EPA) SmartWay, a program to improve transportation efficiency, certified trucks will be utilized for deliveries and equipment transport;
- After implementation of on-site mitigation measures, any emissions that remain in excess of local thresholds will be reduced by the Contractor contributing to the FRAQMD's off-site mitigation program (Carl Moyer Program) to further reduce air quality impacts below the applicable threshold of significance; and
- USACE, FRAQMD, and/or other responsible officials may conduct periodic site inspections to determine compliance with applicable federal, state, and/or local air quality laws and regulations.

Greenhouse gas (GHG) impacts will be mitigated to less-than-significant by these measures:

- The Contractor will submit monthly construction emissions to USACE and FRAQMD. If these monthly reports show that emissions may eventually exceed the CO2e thresholds, the Contractor will be required to prepare a GHG emissions reduction plan for approval by USACE and sponsors, then implement the approved plan. Elements of such a plan could include one or more of the following:
 - Minimize the idling time of construction equipment to no more than 3 minutes, or shut equipment off when not in use;
 - Encourage carpools, shuttle vans, and/or alternative modes of transportation for construction worker commutes;
 - o Use of CARB-approved low carbon fuel;
 - Use of equipment with new technologies (repowered engines, electric drive trains).
- If actual CO2e emissions during construction of a given phase of the Proposed Project do exceed any of the thresholds, then compensatory mitigation will be provided in the form of purchasing sufficient carbon credits to mitigate for the excess CO2e. Carbon offset credits will be purchased by the Contractor and potential sources for these credits include; California Air Pollution Control Officers Association GHG Reduction Exchange Program, the Climate Action

Reserve, the American Carbon Registry, or a similar carbon credit registry that is acceptable to FRAQMD, USACE, and sponsors. Thus, if the actual CO2e emissions of the Proposed Project exceed the established significance threshold for CO2e, the purchase of carbon credits will reduce the Proposed Project's climate change effect to less-than-significant.

Vegetation and Wildlife impacts will be mitigated to less-than-significant by these measures:

- Where possible, protect in place all mature trees (13 inches diameter breast height or larger).
- The Supplemental Coordination Act Report (CAR), discusses the total mitigation acreage requirements necessary to compensate for the loss of riparian woodland habitat permanently impacted by the Proposed Project. The mitigation acreage totals 12.21 acres for combined impacts in the Proposed Project. The acreage calculations are a product of the habitat evaluation procedures (HEP) analysis conducted by the U.S. Fish and Wildlife Service (USFWS) in December 2018 and represent increases from the totals assessed in 2010.

No tree trimming, or removal will occur within the drip-line of any elderberry shrub. If tree trimming must occur within the established buffer of any elderberry shrub a USACE biologist will monitor the work during all trimming activities.

- For oak tree removals and transport protocols as well as planting and maintenance guidelines, the Contractor will be required to follow the California Sudden Oak Mortality Task Force (http://www.suddenoakdeath.org) BMPs relevant to construction work;
- All off-road equipment and vehicles used for construction are required to be weed-free. All equipment and vehicles will be cleaned of all attached mud, dirt, and plant parts prior to arriving to the Proposed Project. This will be done at a vehicle washing station or steam cleaning facility (power or high-pressure cleaning) before the equipment and vehicles enter the Proposed Project;
- Weed infestations identified before construction that are within the Proposed Project will be hand treated or "flagged and avoided" according to the species present and constraints of the Proposed Project;
- Staging areas for equipment, materials, or crews will not be sited in weed infested areas:
- Use weed-free equipment, mulches, and seed sources. Salvage topsoil from the Proposed Project for use in on-site revegetation, unless contaminated with noxious weeds;
- Minimize the amount of ground and vegetation disturbance in the construction areas. Re-establish vegetation on all disturbed bare ground with native forbs and grasses to minimize weed establishment and infestation;
- An overview of general bat ecology will be included in the worker awareness training; and
- Down case lighting will be implemented during night work to minimize potential impacts to local wildlife.

Special Status Species impacts will be mitigated to less-than-significant by these measures:

- A USFWS-approved biologist will identify boundaries of woodland habitat, individual trees and elderberry shrubs that are to be avoided and will have the Contractor fence those areas with orange construction fencing. Erosion control fencing will be placed at the edges of construction where the construction activities are upslope of wetlands and channels to prevent washing of sediments off-site. All fencing will be installed prior to initiating any construction activities and will be maintained throughout the construction period;
- During construction, stockpiling of construction materials, portable equipment, vehicles, and supplies will be restricted to the designated construction staging areas. To eliminate an attraction to predators of listed species, all food-related trash items, such as wrappers, cans, bottles, and food scraps, will be disposed of in closed containers. Revegetation will occur on all areas temporarily disturbed during construction;
- The number of access routes, number and size of staging areas, and the total area of the Proposed Project activity will be limited to the minimum necessary. Routes and boundaries will be clearly demarcated. Movement of heavy equipment to and from the Proposed Project will be restricted to established roadways to minimize habitat disturbance. Project-related vehicles will observe a 20-mile-per-hour speed limit within construction areas, except on country roads and on state and federal highways;
- Trees identified for removal will be removed outside the typical nesting season (October 1st through January 31st). Any trees removed during nesting season will require surveying prior to removal to identify active nests. Appropriate avoidance and minimization measures (in coordination with USFWS and the California Department of Fish and Wildlife (CDFW)), will be incorporated to ensure that migratory bird species are not adversely affected during construction activities:
- Prior to beginning construction activities, a USFWS-approved biologist will provide worker awareness training to identify giant garter snake (GGS), valley elderberry longhorn beetle (VELB), general bat ecology, and their habitat. Workers will be provided with information on their responsibilities, a life history overview, measures to minimize potential for take, and an explanation of the possible penalties for not properly implementing. All on-site personnel shall be required to attend a worker awareness training seminar prior to the initiation of ground disturbing activities. Special status raptor species and migratory birds will also be discussed in the training. Written documentation of the training by all personnel will be submitted to the USFWS within 30 days of its completion;
- Pre-construction and post-construction surveys will be done of the elderberry shrubs. Pre-construction surveys are designed to detect elderberry shrubs that may have become established in the work areas since the original surveys. The post-construction survey will confirm that there was no additional damage to any of the elderberry shrubs;

- Forty-six (46) elderberry shrubs or shrub clusters are present within the construction footprint and will be transplanted to a USFWS-approved conservation bank or to an approved mitigation area in the vicinity of the Proposed Project. To the extent feasible given their location on flood risk management levees or within the floodway, shrubs will be transplanted between November and the first two weeks of February, as specified in the USFWS's 1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle (Conservation Guidelines);
- A USFWS-approved biologist (monitor) will be on-site for the duration of the
 excavation and transplanting of the elderberry shrubs to ensure that procedures
 outlined in the Conservation Guidelines are followed. The monitor will have the
 authority to stop work until corrective measures have been completed if those
 procedures are not being followed. If a conservation bank accomplishes the
 excavation and transplanting, they may provide a USFWS-approved biological
 monitor from their staff. In this case, the monitor will have the authority to stop
 the excavation and transplanting work until corrective measures have been
 completed;
- All areas to be avoided during construction activities will be fenced and flagged. In most cases, fencing will be placed at least 100 feet from the dripline of the shrub. In some cases, construction activity may be required within 100 feet of a shrub. In these cases, exclusion fencing will be placed at the greatest possible distance from the shrubs;
- Signs will be posted every 50 feet along the edge of the avoidance areas with the following information: "This area is the habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.";
- Dirt roadways and other areas of disturbed bare ground within 100 feet of elderberry shrubs will be watered at least twice a day to minimize dust emissions;
- All construction activity within GGS habitat (i.e., upland areas within 200 feet of aquatic habitat) will be conducted between May 1 and October 1. This is the active period for the snake and direct mortality is lessened because the snakes can actively move to avoid danger;
- In potential GGS habitat (i.e., upland areas within 200 feet of aquatic habitat) a
 GGS survey will be conducted by a USFWS-approved biologist within 24 hours
 of the start of construction. This area will be re-inspected when a lapse in
 construction activity of two weeks or greater occurs. The biologist will be
 available throughout the construction period and will conduct regular monitoring
 visits to ensure avoidance and minimization measures are being properly
 implemented;
- Habitat designated as environmentally sensitive to the GGS will be flagged and avoided by all construction personnel;
- Within two weeks of the start of construction activities, K-rails (or an equivalent barrier) will be placed along the Jack Slough ditch to reduce the potential for GGS to enter the construction area and to keep equipment and people out of the GGS habitat;

- All GGS habitat temporarily affected during construction will be restored by
 October 1 of the year in which the construction occurs, as specified in the
 Guidelines for Restoration and/or Replacement of Giant Garter Snake Habitat and
 the Standard Avoidance and Minimization Measures during Construction
 Activities in Giant Garter Snake Habitat (USFWS 1997); and
- If a GGS is encountered during construction, activities shall cease until the snake moves away from the area on their own volition. If any incidental take occurs, report to the USFWS immediately by telephone at (916) 414-6600.

Recreation impacts will be mitigated to less-than-significant by these measures:

- All areas affected by construction activities as well as any recreational roadways and paths will be restored to their original condition;
- All closed construction and recreational areas will have large and identifiable closure signs to assist in public safety; and
- Closed recreational routes will have detour signs to provide recreationists with an alternate route.

Cultural Resource impacts will be less-than-significant since cultural resources will be avoided, or the Proposed Project will not impact those characteristics that make the resource eligible for listing in the National Register of Historic Places. In addition, in the event that previously unknown cultural resources are found during Proposed Project activities, work will be stopped pursuant to 36 CFR 800.13(b), "Discoveries without prior planning", to determine the significance of the find and, if necessary, complete appropriate discovery procedures.

Traffic and Circulation impacts will be mitigated to less-than-significant by these measures:

- The Contractor is responsible for preparing a Traffic Control Plan to minimize traffic flow interference from construction activities. The Plan may include appropriate placement of signs, flaggers, barricades, and traffic delineation to minimize disruption and ensure public safety;
- The Contractor will be responsible for obtaining the necessary traffic-related permits and approvals in coordination with Yuba County, the City of Marysville, California Department of Transportation (CalTrans), and other responsible agencies prior to reduce adverse effects on traffic;
- The Contractor will be responsible for obtaining all applicable permits (including a Construction Encroachment Permit for work that will be performed on the public Right-Of-Way (ROW)).

Noise and Vibration impacts will be mitigated to less-than-significant by these measures:

• Contractor is responsible for obtaining all applicable permits from the Community Development and Services Agency's Director of the Planning and Building Services Department prior to initiating any night work activities.

Public Utilities impacts will be less-than-significant since no public services will be disrupted as a result of the Proposed Project construction. Any utility line relocations will be conducted in a manner that will not affect any of the services provided. Since no effects to public utilities are expected, no mitigation beyond those outlined in the 2010 EA/IS/MND will be required.

Water Resources and Quality impacts will be mitigated to less-than-significant by these measures:

- A work exclusion buffer will be established along the Yuba River beginning at the ordinary high-water mark and extending 25 feet landward (horizontally). No construction-related work, or operation and maintenance activities would occur within the work exclusion buffer or below the ordinary high-water mark.
- A 25-foot work exclusion buffer will be established around identified wetland areas. Prior to the start of construction activities, a Government biologist will flag the wetland buffer. The buffer will be demarcated with silt fencing in combination with high visibility construction fencing.
- Upon completion of the Project, disturbed areas will be restored as closely as possible to the pre-construction condition, including contours and vegetation. Local or California native plant species will be used to vegetate disturbed areas.
- The Contractor is responsible for obtaining a National Pollutant Discharge Elimination System permit and developing and implementing a Stormwater Pollution Prevention Plan to prevent impacts to water quality.

Findings

Based on the information in the 2010 EA/IS/MND (State Clearinghouse # 2010024001), the Supplemental EA/IS, and the administrative record for the MRL Project, the Board finds that the Proposed Project, with mitigation measures listed above and those from the 2010 EA/IS/MND, will not result in a significant impact on the environment.

This MND reflects the Board's independent judgment and analysis.

The environmental document and other materials, which constitute the record, are located at 3310 El Camino Avenue, Room 170, Sacramento, California 95821. In accordance with California Code of Regulations, title 14, section 15075, Board staff will file a Notice of Determination (NOD) with the State Clearinghouse within five days of adopting the MND.

I hereby approve this project:	
Leslie M. Gallagher	Date
Executive Officer	
Central Valley Flood Protection Board	