Meeting of the Central Valley Flood Protection Board
December 15, 2017

Staff Report

Western Pacific Interceptor Canal Culvert Replacement Project
Initial Study/Mitigated Negative Declaration

1.0 – ITEM

Consider adoption of Resolution 2017- 12 (Attachment A) to:

1. Approve the Western Pacific Interceptor Canal (WPIC) Culvert Replacement Project (Project).
2. Certify the Western Pacific Interceptor Canal Culvert Replacement Project Initial Study/Mitigated Negative Declaration (Attachment E) completed in accordance with the California Environmental Quality Act (CEQA) Guidelines.
3. Adopt the Mitigation Monitoring and Reporting Plan (Attachment F).
4. Direct the Executive Officer to take the necessary actions to prepare and file a Notice of Determination (Attachment G) pursuant to CEQA.

2.0 – BACKGROUND

The purpose of this Project is to remove and replace a failed drainage culvert located on Sacramento-San Joaquin Drainage District (SSJDD) (parcel No. 014-400-014-000) property, through the eastern embankment of the WPIC, approximately 450 feet north of Plumas Arboga Road. The culvert has a corroded inlet that has collapsed and the culvert is no longer conveying water adequately.

The WPIC is located in Yuba County north of Rio Oso and just east of California State Route 70 (Attachment B). The WPIC is part of the United States Army Corps of Engineers (USACE) federal Sacramento River Flood Control Project. The failed drainage culvert is located on land owned in-fee by the SSJDD. The proposed Project is located within the boundaries of Reclamation District 784.

3.0 – PROJECT LOCATION

The proposed Project is located near the town of Arboga and Plumas Lake subdivision in Yuba County on land owned in-fee by SSJDD. The proposed project footprint extends from Plumas Arboga Road north approximately 450 feet (Attachment C).

4.0 – PROJECT DESCRIPTION

The Board proposes to replace a failed drainage culvert located through the eastern embankment of the WPIC. The culvert has a corroded inlet that has collapsed and a sinkhole exists in the embankment. The sinkhole spans from the inlet structure to the embankment crown.

This project will consist of the removal of approximately 80 linear feet of 24-inch diameter corrugated metal pipe (CMP), the pipe will be replaced in-kind with a reinforced concrete pipe (RCP). Additional project activities include, replacement of the landside concrete headwall and installation of a new trash rack and flash board weir, installation of a new waterside concrete headwall, and the installation of a new gate riser structure with positive shutoff device at the waterside hinge of the embankment. After replacement of the culvert, the existing haul road on the embankment will be resurfaced with gravel from Plumas Arboga Road approximately 450 feet north to the project location. Additional native grass reseeding will be provided where necessary on embankment slopes to prevent erosion.

The preliminary project plans are shown in Attachment D. GEI Consultants Inc. (GEI) is contracted to perform the survey and design activities for the proposed project and Department of Water Resources (DWR) Sutter Maintenance Yard (SMY) will be contracted by the Board for construction activities. Final design plans for the project will be reviewed by Board staff to ensure compliance with all applicable Title 23 standards prior to construction.

At least 15 days prior to the commencement of ground-disturbing activities, de-watering activities will take place in the aquatic area directly adjacent to the eastern embankment, where the failed culvert meets the water. The construction work will begin with the excavation and removal of the current deteriorated pipe, removal of the existing headwall, and over-excavation of the area where erosion is occurring to determine site condition and to repair any potential voids outside the piping footprint. The pipe will be replaced with approximately 80 feet of 24-inch RCP. The RCP pipe will be installed in accordance with California Code of Regulations (CCR) Title 23 standards for pipelines

through a levee. The excavation will be backfilled per CCR Title 23 standards for embankment fill using the excavated native soil and additional imported fill as necessary. Compaction testing will be performed. Prior to placement of the 24-inch RCP the over-excavated area within the levee prism shall be backfilled to above the top of proposed pipe. Once the area is backfilled to an elevation above the top of pipe, a trench will be excavated into the compacted material at a minimum width of 48 inches (two times the pipe diameter) and the RCP pipe will be installed. New precast or cast-in-place (CIP) headwall structures will be installed at the landside and waterside toes. The landside structure will include a flash board weir and trash rack. The waterside structure will include a flap gate. A new gate riser structure with a positive shutoff device will be installed within the waterside hinge of the embankment.

Equipment will include: a dozer, excavator, vibratory compactor, water truck, dump trucks, backhoe and other typical light construction equipment will be used by SMY to complete the repair.

The site will be returned to the condition that existed prior to culvert replacement. The embankment will be reseeded with a native grass mix to prevent erosion and the haul road atop the embankment will be resurfaced with gravel.

The Project will take approximately three weeks to complete. The construction will take place May 1 through September 15, corresponding with U.S. Fish and Wildlife Service (USFWS) recommendations for avoiding potential impacts to the giant garter snake. The project could result in potential impacts to giant garter snake; therefor prior to the start of construction, Board environmental staff will coordinate with California Department of Fish and Wildlife (CDFW) to develop and implement an appropriate mitigation strategy to compensate for temporary habitat disturbance and reduce the potential for take of giant garter snake. Mitigation would likely include obtaining and incidental take permit (ITP) and purchasing created giant garter snake habitat at a CDFW-approved mitigation bank. Appropriate mitigation ratios shall be developed during consultation with CDFW. The Board shall obtain incidental take authorization if deemed necessary by CDFW. The performance standard is anticipated to result in no net loss of giant garter snake habitat. The U.S. Army Corps of Engineers has conducted informal consultation with U.S. Fish and Wildlife Service through the Clean Water Act Section 404 permitting process, resulting in revised mitigation measures, which Board staff incorporated into the IS/MND and mitigation monitoring and reporting plan (MMRP).

DWR cultural resource specialist, Monica Notle, conducted a field survey of the Project site, coordinated with historical societies and Native American tribal members and

prepared a confidential archeological survey report. Board staff will coordinate with Ms. Notle prior to commencement of construction to ensure interested tribes will be properly notified of construction dates.

In addition, Board staff intends to secure the following permits:

- U.S. Army Corps of Engineers Clean Water Act Section 404 Nationwide Permit 3 (Maintenance)
- Clean Water Act Section 401 Water Quality Certification from the California Regional Water Quality Control Board, Central Valley Region
- California Department of Fish and Wildlife Streambed Alteration Agreement
- California Endangered Species Act Incidental Take Permit

U.S. Army Corps of Engineers has determined that this project is considered maintenance as the existing drainage facility is identified on the 'levee as constructed drawings'. Therefore, Section 408 approval is not required.

4.1 – Hydraulic Analysis

The proposed project will replace a failed drainage culvert in kind to restore the drainage functionality; therefore, a hydraulic analysis was not performed.

4.2 – Geotechnical Analysis

The eastern embankment of the WPIC is not identified as a flood control facility; therefore, a geotechnical analysis was not performed. However, the drainage culvert design and backfill, with compaction, will conform to all applicable Title 23 standards.

5.0 – AUTHORITY OF THE BOARD

California Water Code § 8534, 8590 – 8610.5, and 8685 – 8698

California Code of Regulations, Title 23, Division 1 (Title 23):

- § 19, District Lands
- § 112, Streams Regulated and Nonpermissible Work Periods
- § 121, Erosion Control
- § 123, Pipelines, Conduits, and Utility Lines

6.0 – FUNDING

The Project will cost approximately $261,000.00. The individual costs breakdown is as follows:

- Total funds needed to conclude CEQA, permitting and permit fees: $21,000.00
- GGS mitigation bank credits: $21,000.00
- Construction/environmental monitoring: $22,000.00
- Construction costs: $197,000.00

The funding source will be the Department of Water Resources, as directed by the California Department of Finance, through an approved 2016-2017 Budget Change Proposal.

The Board plans to contract with DWR's SMY to construct the Project. The SMY has submitted the Board an approximate cost to the work, as well as a tentative construction schedule for 2018. As required by the MMRP, construction can only take place from May 1 through September 15. Within this time period the SMY will take a three-week construction window to initiate and complete the project schedule.

7.0 – PUBLIC ENGAGEMENT

The IS/MND (State Clearinghouse Number 2015102075) was circulated for public review and comment for a period of 30 days starting on October 27, 2015 and ending November 25, 2015. On October 27, 2015, a Notice of Availability was filed with the State Clearinghouse (SCH) and was also published in the Appeal-Democrat newspaper. Hard copies of the IS/MND were available for public review at the Board office, and the Yuba County Library and the Yuba County Clerk's Office.

The Board received one comment letter from the Central Valley Regional Water Quality Control Board (RWQCB) during the public comment period, which is included in the Final IS/MND (Attachment E). The letter stated the RWQBC regulatory authority and the potential need for the Project to obtain a 401 Water Quality Certification Permit. Board staff provided a response to RWQCB, stating that the Board would be applying for a 401 certification, once the CEQA document is certified by the Board.

8.0 – CEQA ANALYSIS

Pursuant to Resolution No. 2017-12, the Board prepared an IS/MND evaluating the environmental effects of the proposed Project. The analysis set forth in the IS/MND found the Project would not have any significant adverse effects on the physical environment after implementation of mitigation measures, as follows:

1. The proposed Project would have no or less than significant impacts on aesthetics, agricultural and forestry resources, geology and soils, greenhouse gas emissions, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, utilities and public services.
2. The proposed Project could have potentially significant impacts on air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality but mitigation measures are proposed to avoid or reduce these effects to less-than-significant levels.

Recommended mitigation measures are summarized below and included in the IS/MND and the MMRP (Attachment E and F):

- Preparing an air pollution prevention plan, including dust suppression measures;
- Surveying for and avoiding sensitive species, including plants and nesting birds;
- Conducting environmental awareness training, and implement construction monitoring;
- Avoiding and minimizing disturbance to special-status species through construction timing and other measures;
- Avoiding riparian vegetation and compensating for removed trees;
- Implementing proper notification actions should a cultural resource be found on-site;
- Preparing grading, erosion control, spill prevention, and storm water pollution prevention plans; and
- Repairing damaged roads (if any) following construction.

The Board has independently considered the IS/MND and the comments received, as set forth in Attachment B, and determined that the proposed project will not have a significant effect on the environment because the Board, as lead agency, has incorporated mandatory mitigation measures that will mitigate all potentially significant impacts to less than significant. These mandatory mitigation measures have been incorporated into the project plans to avoid potential impacts or to mitigate such impacts to a point where no significant impacts will occur. These mitigation measures are included in the Board's Final IS/MND and MMRP and address potential impacts to air quality, biological resources, cultural resources, and hazards and hazardous materials, and hydrology and water quality. The documents and other materials which constitute

the record of the Board's proceedings in this matter are in the custody of the Executive Officer, Central Valley Flood Protection Board, 3310 El Camino Ave., Suite 170, Sacramento, California 95821.

9.0 – CALIFORNIA WATER CODE SECTION 8610.5 CONSIDERATIONS

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

   The Board will make its decision based on the evidence in the IS/MND and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that relate to the scientific issues presented by the executive officer, legal counsel, the Department of Water Resources or other parties that raise credible scientific issues.

   The accepted industry standards for the work proposed for this Project as regulated by Title 23 will be applied to the project and construction requirements.

3. Effects of the decision on facilities of the State Plan of Flood Control, and consistency of the proposed project with the Central Valley Flood Protection Plan Update as adopted by Board Resolution 2017-10 on August 25, 2017:

   The project is a replacement in kind to restore the failed drainage culvert back to its operating conditions with very minimal to no impacts to the Western Pacific Interceptor Canal channel. Furthermore, the eastern embankment of the WPIC is not identified as a flood control facility; therefore, the proposed project is expected to have no adverse effects on any SPFC facilities and is consistent with the CVFPP.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

   There will be no effects to the proposed Project from reasonable projected future events, replacing the failed culvert will benefit the flood system by allowing water to adequately drain into the WPIC at that location.

10.0 – STAFF RECOMMENDATION

Staff Recommends that the Board:

Certify:

- The Initial Study/Mitigated Negative Declaration for the Western Pacific Interceptor Canal Culvert Replacement Project

Adopt:

- The Mitigation Monitoring Reporting Plan

Approve:

- The Project

Direct:

- The Executive Officer to take the necessary actions to file a Notice of Determination pursuant to CEQA with the State Clearinghouse.

11.0 – LIST OF ATTACHMENTS

A. Resolution 2017-12
B. Regional Map
C. Site Map
D. Project Plans
E. Final Initial Study Mitigated Negative Declaration
F. Mitigation Monitoring and Reporting Plan
G. Draft Notice of Determination

Environmental Review:	Ruth Darling, Senior Environmental Scientist (Specialist)
Design Review:	Ming Chieng, P.E., Permitting Section Staff
Document Review:	Andrea Buckley, Environmental Services and Land Management Branch Chief
Legal Review:	Kanwarjit Dua, Board Counsel