



Central Valley Regional Water Quality Control Board

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER

Effective Date: 30 April 2020

Expiration Date: 30 April 2020

Program Type: Restoration

Project Type: Ecological Aquatic/Stream/Habitat Restoration

Project: East Sand Slough Side Channel Project (Project)

Applicant: United States Bureau of Reclamation

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Water Board Contact Person: If you have any questions, please call Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) Staff listed above or (530) 224-4845 and ask to speak with the Water Quality Certification Unit Supervisor.

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I. Order

This Clean Water Act (CWA) section 401 Water Quality Certification action and Order (Order) is issued at the request of U.S. Bureau of Reclamation (hereinafter Permittee) for the Project. This Order is for the purpose described in application and supplemental information submitted by the Permittee. The application was received on 21 February 2020. The application was deemed complete on 13 March 2020.

Central Valley Water Board staff requested additional information necessary to supplement the contents of the complete application and the Permittee responded to the request for supplemental information on the following dates:

Date of Request for Supplemental Information: **5 March 2020**

Date all requested information was received: **7 April 2020**

II. Public Notice

The State Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 from 28 February 2020 to 20 March 2020. The Central Valley Water Board did not receive any comments during the comment period.

III. Project Purpose

The Project proposes to achieve three primary objectives: create juvenile salmonid rearing habitat in East Sand Slough during low flows in the Sacramento River; reduce stranding pools within East Sand Slough; and create in-stream habitat structure within the main channel of East Sand Slough.

IV. Project Description

The proposed channel design consists of excavating material from six distinct features including the main channel (entrance to pond), main channel (pond to exit), high flow entrance, split channel, secondary channel, and secondary split channel. An estimated 113,500 cubic yards of material will be excavated from an area of approximately 23 acres. Most channel excavation upstream of the Antelope Boulevard/Highway 36 Bridge will occur along the toe of the bank within the ordinary high-water mark (OHWM), leaving the majority of existing vegetation and trees along the bank to provide shade and canopy. Downstream of the bridge, the channel will be excavated in the barren cobble bottom of the slough. Heavy equipment will travel along the existing floodway corridor to minimize disturbance to existing vegetation and sensitive areas. Large woody material will also be placed in the channel to provide habitat complexity.

Main Channel (Entrance to Pond): The main channel entrance is located along the left bank of the Sacramento River. The 20-foot-wide main channel entrance will be excavated to an elevation of about 248 feet North American Vertical Datum 88 (NAVD 88), where water in the main channel will be approximately one foot deep at a design low flow of 3,700 to 5,000 cubic feet per second (cfs) in the Sacramento

River. The main channel entrance will connect flows to an existing perennial pond approximately 2,000 feet downstream. At the design low flow, the main channel will flow at about 15 cfs, representing less than one percent of the total flow within the Sacramento River.

Main Channel (Pond to Exit): The 16 to 20-foot-wide main channel will be excavated to have 2:1 side slopes for a depth of 2 feet, then will transition to a 3:1 side slope or greater. The new channel will be constructed along the toe of the existing bank to minimize disturbance to existing vegetation. The channel will meander downstream along the left bank for approximately 2,200 feet before splitting into two channels. During excavation, existing historical bridge piers located within the existing pond along the main channel will remain intact and will be avoided during construction. The 20-foot-wide channel will continue downstream of the Antelope Boulevard/Highway 36 Bridge for approximately 6,000 feet before flowing back into the Sacramento River. The landscape below the Antelope Boulevard/Highway 36 Bridge is a wide and barren flood channel that provides significant opportunities for floodplain development. Excavation within this section of the channel was designed to create 2:1 side slopes for a depth of 2 feet and then gentle slopes of 6:1 and greater for floodplain habitat. Because test pit results indicate that portions of the channel consist mostly of sand, the channel will need to be over-excavated and backfilled with existing gravel.

High-Flow Entrance: The high-flow entrance, located about 200 feet downstream from the main channel entrance, will be excavated to an elevation of about 250 feet (NAVD 88). The 8-foot-wide high flow entrance will activate at a Sacramento River flow of 8,000 cfs at the Sacramento River at Bend Bridge stream gage. At this flow, the high-flow entrance will add about 1 cfs to the main channel.

Split Channel: A portion of the flow from the main channel will travel southwesterly in an excavated 8-foot-wide channel with 3:1 side slopes or greater. The secondary channel will be excavated to create a 12-foot width with 3:1 side slopes. The secondary split channel will be excavated to create an 8-foot width with 3:1 side slopes.

Bank Stabilization: To prevent closure of the new channel habitat, the side slopes of the main channel entrance will be lined with larger native rock to stabilize the banks at a slope of 3:1 or greater. If suitable material is available, rock will be obtained from the excavated channel material. Otherwise, rock material that has been cleaned and is free from organic matter or other deleterious substances will be imported from an existing local quarry.

Bridge Scour Protection: Existing slabs of broken concrete under the bridge will be removed and hauled offsite to the Tehama County landfill. The large boulders under the bridge will be removed and later placed in the channel to provide instream habitat structure. Guide banks at the inlets and outlets will consist of large rock engineered by Caltrans and installed according to Caltrans specifications.

Excavation under the bridge will occur in two locations between two bridge bents and three bridge bents, respectively. H-piles will be encapsulated with a marine-grade reinforced epoxy coating made of low toxicity ingredients. The channel will be over-excavated and lined with large rock, unless the Caltrans scour analysis indicates that concrete lining is necessary. If suitable material is available, rock will be obtained from the excavated channel material. Otherwise, rock material that has been cleaned and is free from organic matter or other deleterious substances will be imported from an existing local quarry. The existing suspended concrete walls between the H-piles will remain but will either be lowered to the channel grade or concrete will be poured to infill the gaps.

Gravel will be processed onsite in a designated spoil area, staging area, or along designated portions of the slough channel. Suitable larger rock and boulders will be placed along the side slopes at the main channel entrance and within the Antelope Boulevard/Highway 36 Bridge section of the channel to eliminate any potential for erosion or scour. Downstream of the Antelope Boulevard/Highway 36 Bridge, the remaining gravel/cobble will be used to line the channel bottom. Sand and silt may be used for planting. The remaining material will be disposed of in designated spoil areas and hauled to upland offsite locations within 5 miles of the Project Area. Test pit results indicate that excavated material will yield enough rock to meet the Project's needs. However, if additional material is needed, it will be imported from an existing stockpile location located on U.S. Fish and Wildlife Service land approximately 8.5 miles from the Project Area.

Utilities: Pacific Gas and Electric (PG&E) gas and electric lines, are located downstream of the Antelope Boulevard/Highway 36 Bridge. Both utility lines will be lowered by PG&E. An excavator or vacuum truck will excavate down to the gas and electric lines and all excavated materials will be stored onsite. PG&E personnel will remove the electrical conduit/line and the gas pipe. PG&E crews will continue excavation down at least three feet below the bottom of the new side channel. New electrical conduit will be installed, and the lines replaced. Once the function of the utilities is confirmed, the site will be backfilled with the excavated materials. The excavated materials will then be replaced and compacted back to existing ground level.

An AT&T 12-duct telecommunications line crosses East Sand Slough upstream of the Antelope Boulevard/Highway 36 Bridge. The 12-duct system consists of twelve 4-inch diameter pipes that hold fiber optics and copper wire. Where excavation is required, the site will be backfilled with excavated material and regraded to existing ground level.

Staging and Spoil Areas: Staging Area 1 will be located on Forest Service managed land outside of the floodway in an area adjacent to an existing small parking lot along Sale Lane. This 1.4-acre area will primarily be used to refuel equipment, store equipment and construction supplies, and stockpile excavated material, if needed. Staging Area 2 will be located within the slough just upstream of the Antelope

Boulevard/Highway 36 Bridge. Staging Area 2 will be approximately 0.8 acres in size. Disturbed areas will be planted and/or hydroseeded following project construction.

Spoil Area 1 will be just under 7 acres and located within the floodway. A temporary access road connected to Sale Lane will be created within Spoil Area 1 to allow dump trucks direct access to stockpile materials for loading. An existing fence along Sale Lane will be altered to allow direct access and will be restored to pre-Project conditions following completion of truck haul activities. Approximately 14,300 cubic yards of material could be permanently placed in Spoil Area 1. Modeling results confirm that spoils in this area will not impact the 100-year flood elevation. Up to 3 feet of spoils will be placed in this area to an elevation of 262 feet with 2:1 side slopes. Spoil Area 2 will be located along Interstate 5 (I-5). This spoil area will be approximately 1.5 acres in size and located outside the floodway. Within this spoil area, approximately 7,800 cubic yards of material could be placed along the existing bank to an elevation of 268 feet with 3:1 side slopes. Both spoil areas will be planted and/or hydroseeded with vegetation that is compatible with the spoil material following construction.

Access and Haul Roads: The Project Area will be accessed via I-5, Antelope Boulevard, and Sale Lane. Five access roads and two haul roads may also be used.

V. Project Location

Address: Sale Lane

County: Tehama County

Assessor's Parcel Number(s): 039-180-16-1, 039-190-15-1, 039-190-13-1, 041-040-19-1, 041-050-21-1, 041-050-22-1, 041-050-28-1, 041-310-12-1, 041-200-01-1, 041-430-15-1, 041-430-16-1, 041-430-17-1, 041-360-38-1, 041-430-05-1, 041-430-13-1, 041-430-14-1, 041-430-18-1, and 041-430-19-1

Nearest City: Red Bluff

Section 20, Township 27 North, Range 3 West, MDB&M.

Latitude: 40.178° and Longitude: -122.221°

Maps showing the Project location are found in Attachment A of this Order.

VI. Project Impact and Receiving Waters Information

The Project is located within the jurisdiction of the Central Valley Water Board. Receiving waters and groundwater potentially impacted by this Project are protected in accordance with the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fifth Edition, May 2018 (Basin Plan). The plan for the region and other plans and policies may be accessed at the [State Water Resources Control Board's Plans and Policies Web page](http://www.waterboards.ca.gov/plans_policies/) (http://www.waterboards.ca.gov/plans_policies/). The Basin Plan includes water

quality standards, which consist of existing and potential beneficial uses of waters of the state, water quality objectives to protect those uses, and the state and federal antidegradation policies.

It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.

Project impact and receiving waters information can be found in Attachment B. Table 1 of Attachment B shows the receiving waters and beneficial uses of waters of the state impacted by the Project. Individual impact location and quantity is shown in Table 2 of Attachment B.

VII. Description of Direct Impacts to Waters of the State

Total Project fill/excavation quantities for all impacts are summarized in Tables 1 through 2. Permanent impacts are categorized as those resulting in a physical loss in area and also those degrading ecological condition.

Table 1: Total Project Fill/Excavation Quantity for Temporary Impacts¹

Aquatic Resources Type	Acres	Cubic Yards	Linear Feet
Stream Channel	13.87		

Table 2: Total Project Fill/Excavation Quantity for Permanent Physical Loss of Area Impacts

Aquatic Resources Type	Acres	Cubic Yards	Linear Feet
Stream Channel	21.29	113, 500	
Wetland	1.2		

VIII. Description of Indirect Impacts to Waters of the State – Not Applicable

IX. Avoidance and Mitigation

To minimize the potential effects of construction on water quality and resources, the Permittee shall implement all measures required as described in the Order. According to the Permittee, the following measures will be in place during construction activities to avoid, reduce, and minimize impacts to waters of the state:

¹ Includes only temporary direct impacts to waters of the state and does not include area of temporary disturbance which could result in a discharge to waters of the state. Temporary impacts, by definition, are restored to pre-project conditions and therefore do not include a physical loss of area or degradation of ecological condition.

- Heavy equipment will travel along the existing floodway corridor to minimize disturbance to existing vegetation and sensitive areas.
- The new channel will be constructed along the toe of the existing bank to minimize disturbance to existing vegetation.
- Floodplain planting will consist of native, flexible-stemmed plant species that will not impede flood flows.
- Disturbed areas will be planted and/or hydroseeded following project construction.
- Minimal grading may be required in this area to access the slough. Little to no earthwork will otherwise be needed to make these access roads suitable for construction equipment. Any disturbed areas associated with use or slight modification of the access roads will be planted and/or hydroseeded as appropriate once construction is completed.
- Material excavation will occur between October 1 and February 15 when flows within the Sacramento River are reduced and within National Marine Fisheries Service approved biological windows.

X. Compensatory Mitigation – Not Applicable

No compensatory mitigation for permanent impacts is required for the project due to the scope and nature of the impacts and the water body affected. The overall purpose of the project is to create and improve salmonid habitat.

XI. California Environmental Quality Act (CEQA)

On 21 August 2019, the Resource Conservation District of Tehama County, as lead agency, adopted an Initial Study/Mitigated Negative Declaration (IS/MND) (State Clearinghouse (SCH) No. 2019079011) for the Project and filed a Notice of Determination (NOD) at the SCH on 26 August 2019. Pursuant to CEQA, the Central Valley Water Board has made Findings of Facts (Findings) which support the issuance of this Order and are included in Attachment C.

XII. Petitions for Reconsideration

Any person aggrieved by this action may petition the State Water Board to reconsider this Order in accordance with California Code of Regulations, title 23, section 3867. A petition for reconsideration must be submitted in writing and received within 30 calendar days of the issuance of this Order.

XIII. Fees Received – Not Applicable

Federal applicants applying for a 401 certification for a dredge and fill project subject to section 404 of the Clean Water Act are not charged fees identified in Section 3833(b)(3)(A) and Section 2200(a)(3) of the California Code of Regulations.

XIV. Conditions

The Central Valley Water Board has independently reviewed the record of the Project to analyze impacts to water quality and designated beneficial uses within the watershed of the Project. In accordance with this Order, the Permittee may proceed with the Project under the following terms and conditions:

A. Authorization

Impacts to waters of the state shall not exceed quantities shown in Tables 1 through 2.

B. Reporting and Notification Requirements

The following section details the reporting and notification types and timing of submittals. Requirements for the content of these reporting and notification types are detailed in Attachment D, including specifications for photo and map documentation during the Project. Written reports and notifications must be submitted using the Reporting and Notification Cover Sheet located in Attachment D, which must be signed by the Permittee or an authorized representative.

The Permittee must submit all notifications, submissions, materials, data, correspondence, and reports in a searchable Portable Document Format (PDF). Documents less than 50 MB must be emailed to centralvalleyredding@waterboards.ca.gov.

In the subject line of the email, include the Central Valley Water Board Contact, Project name, and WDID No. Documents that are 50 MB or larger must be transferred to a disk and mailed to the Central Valley Water Board Contact.

1. Project Reporting

- a. Monthly Reporting:** The Permittee must submit a Monthly Report to the Central Valley Water Board on the **1st day of each month** beginning the month after the submittal of the Commencement of Construction Notification. Monthly reporting shall continue until the Central Valley Water Board issues a Notice of Project Complete Letter to the Permittee.
- b. Annual Reporting** – Not Applicable

2. Project Status Notifications

- a. Commencement of Construction:** The Permittee shall submit a Commencement of Construction Report at least seven (7) days prior to start of initial ground disturbance activities and corresponding Waste Discharge Identification Number (WDID#) issued under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ; NPDES No. CAS000002).

- b. Request for Notice of Completion of Discharges Letter:** The Permittee shall submit a Request for Notice of Completion of Discharges Letter following completion of active Project construction activities, including any required restoration and permittee-responsible mitigation. This request shall be submitted to the Central Valley Water Board staff within thirty (30) days following completion of all Project construction activities. Upon acceptance of the request, Central Valley Water Board staff shall issue a Notice of Completion of Discharges Letter to the Permittee which will end the active discharge period.
- c. Request for Notice of Project Complete Letter:** The Permittee shall submit a Request for Notice of Project Complete Letter when construction and/or any post-construction monitoring is complete, and no further Project activities will occur. Completion of post-construction monitoring shall be determined by Central Valley Water Board staff and shall be contingent on successful attainment of restoration and mitigation performance criteria. This request shall be submitted to Central Valley Water Board staff within thirty (30) days following completion of all Project activities. Upon approval of the request, the Central Valley Water Board staff shall issue a Notice of Project Complete Letter to the Permittee which will end the post discharge monitoring period.

3. Conditional Notifications and Reports:

The following notifications and reports are required as appropriate.

a. Accidental Discharges of Hazardous Materials²

Following an accidental discharge of a reportable quantity of a hazardous material, sewage, or an unknown material, the following applies (Water Code, Section 13271):

- i. As soon as (A) Permittee has knowledge of the discharge or noncompliance, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures then:
 - first call – 911 (to notify local response agency)

² "Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. (Health & Safety Code, Section 25501.)

- then call – Office of Emergency Services (OES) State Warning Center at:(800) 852-7550 or (916) 845-8911
 - Lastly, follow the required OES, procedures as set forth in the [Office of Emergency Services' Accidental Discharge Notification Web page](http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill_Booklet_Feb2014_FINAL_BW_Acc.pdf) (http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill_Booklet_Feb2014_FINAL_BW_Acc.pdf)
- ii. Following notification to OES, the Permittee shall notify Central Valley Water Board, as soon as practicable (ideally within 24 hours). Notification may be delivered via written notice, email, or other verifiable means.
 - iii. Within five (5) working days of notification to the Central Valley Water Board, the Permittee must submit an Accidental Discharge of Hazardous Material Report.
- b. Violation of Compliance with Water Quality Standards:** The Permittee shall notify the Central Valley Water Board of any event causing a violation of compliance with water quality standards. Notification may be delivered via written notice, email, or other verifiable means.
- i. This notification must be followed within three (3) working days by submission of a Violation of Compliance with Water Quality Standards Report.
- c. In-Water Work and Diversions:**
- i. The Permittee shall notify the Central Valley Water Board at least forty-eight (48) hours prior to initiating work in water or stream diversions. Notification may be delivered via written notice, email, or other verifiable means.
 - ii. Within three (3) working days following completion of work in water or stream diversions, an In-Water Work/Diversions Water Quality Monitoring Report must be submitted to Central Valley Water Board staff.
- d. Modifications to Project**
- Project modifications may require an amendment of this Order. The Permittee shall give advance notice to Central Valley Water Board staff if Project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority by submitting a Modifications to Project Report. The Permittee shall inform Central Valley Water Board staff of any Project modifications that will interfere with the Permittee's compliance with this Order. Notification may be made in accordance with conditions in the certification deviation section of this Order.

e. Transfer of Property Ownership:

This Order is not transferable in its entirety or in part to any person or organization except after notice to the Central Valley Water Board in accordance with the following terms:

- i. The Permittee must notify the Central Valley Water Board of any change in ownership or interest in ownership of the Project area by submitting a Transfer of Property Ownership Report. The Permittee and purchaser must sign and date the notification and provide such notification to the Central Valley Water Board at least 10 days prior to the transfer of ownership.
- ii. Until such time as this Order has been modified to name the purchaser as the permittee, the Permittee shall continue to be responsible for all requirements set forth in this Order.

f. Transfer of Long-Term BMP Maintenance:

If maintenance responsibility for post-construction BMPs is legally transferred, the Permittee must submit to the Central Valley Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer or designer specifications. The Permittee must provide such notification to the Central Valley Water Board with a Transfer of Long-Term BMP Maintenance Report at least 10 days prior to the transfer of BMP maintenance responsibility.

C. Water Quality Monitoring**1. General:**

If surface water is present continuous visual surface water monitoring shall be conducted during active construction periods to detect accidental discharge of construction related pollutants (e.g. oil and grease, turbidity plume, or uncured concrete). Sampling is not required in a wetland where the entire wetland is being permanently filled, provided there is no outflow connecting the wetland to surface waters. The Permittee shall perform surface water sampling:

- a. when performing any in-water work;
- b. during the entire duration of temporary surface water diversions;
- c. in the event that the Project activities result in any materials reaching surface waters; or
- d. when any activities result in the creation of a visible plume in surface waters.

2. Accidental Discharges/Noncompliance:

Upon occurrence of an accidental discharge of hazardous materials or a violation of compliance with a water quality standard, Central Valley Water Board staff may require water quality monitoring based on the discharge constituents and/or related water quality objectives and beneficial uses.

3. In-Water Work or Diversions:

During planned in-water work or during the entire duration of temporary water diversions, any discharge(s) to waters of the state shall conform to the following water quality standards:

- a. Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
- c. Activities shall not cause pH to be depressed below 6.5 nor raised above 8.5 in surface water.
- d. Activities shall not cause turbidity increases in surface water to exceed:
 - i. where natural turbidity is less than 1 Nephelometric Turbidity Units (NTUs), controllable factors shall not cause downstream turbidity to exceed 2 NTU;
 - ii. where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU;
 - iii. where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent;
 - iv. where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs;
 - v. where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected. Averaging periods may only be used with prior permission of the Central Valley Water Board Executive Officer.

Sampling during in-water work or during the entire duration of temporary water diversions shall be conducted in accordance with Table 3 sampling

parameters.³ The sampling requirements in Table 3 shall be conducted upstream out of the influence of the Project, and approximately 300 feet downstream of the work area.

The sampling frequency may be modified for certain projects with written approval from Central Valley Water Board staff. An In-Water Work and Diversion Water Quality Monitoring Report, as described in Attachment D, shall be submitted within two weeks on initiation of in-water construction, and every two weeks thereafter. In reporting the data, the Permittee shall arrange the data in tabular form so that the sampling locations, date, constituents, and concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the Project complies with Order requirements. The report shall include surface water sampling results, visual observations, and identification of the turbidity increase in the receiving water applicable to the natural turbidity conditions specified in the turbidity criteria in XIV.C.3.

If no sampling is required, the Permittee shall submit a written statement stating, "No sampling was required" within two weeks on initiation of in-water construction, and every two weeks thereafter.

Table 3: Sample Type and Frequency Requirements

Parameter	Unit of Measurement	Type of Sample	Minimum Frequency
pH	Standard Units	Grab	Every 4 hours
Turbidity	NTU	Grab	Every 4 hours
Visible construction related pollutants ⁴	Observations	Visual Inspections	Continuous throughout the construction period

4. Post-Construction:

Visually inspect the Project site during the rainy season for one year to ensure excessive erosion, stream instability, or other water quality pollution

³ Pollutants shall be analyzed using the analytical methods described in 40 Code of Federal Regulations Part 136; where no methods are specified for a given pollutant, the method shall be approved by Central Valley Water Board staff. Grab samples shall be taken between the surface and mid-depth and not be collected at the same time each day to get a complete representation of variations in the receiving water. A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring shall be maintained onsite.

⁴ Visible construction-related pollutants include oil, grease, foam, fuel, petroleum products, and construction-related, excavated, organic or earthen materials.

is not occurring in or downstream of the Project site. If water quality pollution is occurring, contact the Central Valley Water Board staff member overseeing the Project within three (3) working days. The Central Valley Water Board may require the submission of a Violation of Compliance with Water Quality Standards Report. Additional permits may be required to carry out any necessary site remediation.

D. Standard

- 1.** This Order is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330, and California Code of Regulations, Title 23, Chapter 28, article 6 commencing with sections 3867-3869, inclusive. Additionally, the Central Valley Water Board reserves the right to suspend, cancel, or modify and reissue this Order, after providing notice to the Permittee, if the Central Valley Water Board determines that: the Project fails to comply with any of the conditions of this Order; or, when necessary to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (Water Code, section 13000 et seq.) or federal Clean Water Act section 303 (33 U.S.C. section 1313). For purposes of Clean Water Act section 401(d), the condition constitutes a limitation necessary to assure compliance with water quality standards and appropriate requirements of state law.
- 2.** This Order is not intended and shall not be construed to apply to any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to subsection 3855(b) of chapter 28, Title 23 of the California Code of Regulations, and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- 3.** This Order is conditioned upon total payment of any fee required under Title 23 of the California Code of Regulations and owed by the Permittee.
- 4.** In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under state and federal law. For purposes of Clean Water Act, section 401(d), the applicability of any state law authorizing remedies, penalties, processes, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Order.

E. General Compliance

1. Failure to comply with any condition of this Order shall constitute a violation of the Porter-Cologne Water Quality Control Act and the Clean Water Act. The Permittee and/or discharger may then be subject to administrative and/or civil liability pursuant to Water Code section 13385.
2. Permitted actions must not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses for receiving waters as adopted in the Basin Plans by any applicable Regional Water Board or any applicable State Water Board (collectively Water Boards) water quality control plan or policy. The source of any such discharge must be eliminated as soon as practicable.
3. In response to a suspected violation of any condition of this Order, the Central Valley Water Board may require the holder of this Order to furnish, under penalty of perjury, any technical or monitoring reports the Water Boards deem appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The additional monitoring requirements ensure that permitted discharges and activities comport with any applicable effluent limitations, water quality standards, and/or other appropriate requirement of state law.
4. The Permittee must, at all times, fully comply with engineering plans, specifications, and technical reports submitted to support this Order; and all subsequent submittals required as part of this Order. The conditions within this Order and Attachments supersede conflicting provisions within Permittee submittals.
5. This Order and all of its conditions contained herein continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the Project. For purposes of Clean Water Act, section 401(d), this condition constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements of state law.
6. The Permittee shall adhere to all requirements in the mitigation monitoring and reporting program (MMRP) which is incorporated herein by reference and any additional measures as outlined in Attachment C, CEQA Findings of Fact.
7. **Construction General Permit Requirement:** The Permittee shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ; NPDES No. CAS000002), as amended, for discharges to surface waters comprised of storm water associated with construction activity, including, but not limited to, demolition, clearing, grading, excavation, and other land

disturbance activities of one or more acres, or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres.

F. Administrative

1. Signatory requirements for all document submittals required by this Order are presented in Attachment E of this Order.
2. This Order does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & Wildlife Code, sections 2050-2097) or the federal Endangered Species Act (16 U.S.C. sections 1531-1544). If a "take" will result from any act authorized under this Order held by the Permittee, the Permittee must comply with the California Endangered Species Act and federal Endangers Species Act prior to any construction or operation of the portion of the Project that may result in a take. The Permittee is responsible for meeting all requirements of the applicable endangered species act for the Project authorized under this Order.
3. The Permittee shall grant Central Valley Water Board staff, or an authorized representative (including an authorized contractor acting as a Water Board representative), upon presentation of credentials and other documents as may be required by law, permission to:
 - a. Enter upon the Project or compensatory mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records are kept.
 - b. Have access to and copy any records that are kept and are relevant to the Project or the requirements of this Order.
 - c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order.
 - d. Sample or monitor for the purposes of assuring Order compliance.
4. A copy of this Order shall be provided to any consultants, contractors, and subcontractors working on the Project. Copies of this Order shall remain at the Project site for the duration of this Order. The Permittee shall be responsible for work conducted by its consultants, contractors, and any subcontractors.
5. A copy of this Order must be available at the Project site(s) during construction for review by site personnel and agencies. All personnel

performing work on the Project shall be familiar with the content of this Order and its posted location at the Project site.

G. Construction

1. Dewatering – Not Applicable

- a. No dewatering will occur within the Project area.

2. Directional Drilling

- a. If installation or relocation of dry and/or wet utility lines is anticipated, the Permittee shall develop and implement a Dry and Wet Utility Work Plan prior to commencement of dry and wet utility construction. The Dry and Wet Utility Plan must cover all phases of the certified project that will impact waters of the United States and shall be consistent with this Certification.

The Dry and Wet Utility Plan shall include the types of dry and wet utilities to be removed and installed, method and duration of activities, structure configuration, construction materials, equipment, erosion and sediment controls, and a map or drawing indicating the location(s) of dry and wet utility work, as related to any water of the United States in the Project area.

Should the methodology for dry and wet utility work include directional drilling, the Dry and Wet Utility Plan shall incorporate a Directional Drilling Plan to address potential frac-outs. The Directional Drilling Plan shall include, but not be limited to, a description of directional drilling activities, dry and wet utility routes, crossing locations and methods, and other geotechnical considerations (i.e., surficial overburden deposits, clays and shales, bedrock formations, hydrogeology), and a reporting procedure should any level of discharge from a frac-out occur, regardless of the discharge size.

The Directional Drilling Plan must be stamped by a California Registered Geologist or Engineer.

The Utility Work Plan and Direction Drilling Plan must be submitted to the Central Valley Water Board staff upon request.

3. Dredging – Not Applicable

4. **Fugitive Dust:** Dust abatement activities can cause discharges of sediment to streams and uplands through application of water or other fluids. Dust abatement chemicals added to water can be hazardous to wildlife and, if allowed to enter streams, detrimental to water quality. Therefore, dust abatement activities shall be conducted so that sediment or dust abatement chemicals are not discharged into waters of the state. Dust abatement products or additives that are known to be detrimental to water quality or

wildlife shall not be used, unless specific management needs are documented, and product-specific application plans are approved by Central Valley Water Board staff.

5. Good Site Management “Housekeeping”

- a. The Permittee shall develop and maintain onsite a project-specific Spill Prevention, Containment and Cleanup Plan outlining the practices to prevent, minimize, and/or clean up potential spills during construction of the Project. The Plan must detail the Project elements, construction equipment types and location, access and staging and construction sequence. The Plan must be made available to the Central Valley Water Board staff upon request.
- b. Refueling of equipment within the floodplain or within 300 feet of the waterway is prohibited. If critical equipment must be refueled within 300 feet of the waterway, spill prevention and countermeasures must be implemented to avoid spills. Refueling areas shall be provided with secondary containment including drip pans and/or placement of absorbent material. No hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, or other construction-related potentially hazardous substances should be stored within a floodplain or within 300 feet of a waterway. The Permittee must perform frequent inspections of construction equipment prior to utilizing it near surface waters to ensure leaks from the equipment are not occurring and are not a threat to water quality.
- c. All materials resulting from the Project shall be removed from the site and disposed of properly.

6. Hazardous Materials

- a. The discharge of petroleum products, any construction materials, hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete or the washing thereof, asphalt, paint, coating material, drilling fluids, or other substances potentially hazardous to fish and wildlife resulting from or disturbed by project-related activities is prohibited and shall be prevented from contaminating the soil and/or entering waters of the state. In the event of a prohibited discharge, the Permittee shall comply with notification requirements in sections XIV.B.3.a and XIV.B.3.b.
- b. Wet concrete will be placed into stream channel habitat when the work area is naturally dry.
- c. Concrete must be completely cured before coming into contact with waters of the United States and waters of the state. Surface water that contacts wet concrete must be pumped out and disposed of at an appropriate off-site commercial facility, which is authorized to accept concrete wastes.

7. Invasive Species and Soil Borne Pathogens

Prior to arrival at the project site and prior to leaving the project site, construction equipment that may contain invasive plants and/or seeds shall be cleaned to reduce the spread of noxious weeds.

8. Post-Construction Storm Water Management

a. The Permittee must minimize the short and long-term impacts on receiving water quality from the Project by implementing the following post-construction storm water management practices and as required by local agency permitting the Project, as appropriate:

- i. Minimize the amount of impervious surface;
- ii. Reduce peak runoff flows;
- iii. Provide treatment BMPs to reduce pollutants in runoff;
- iv. Ensure existing waters of the state (e.g., wetlands, vernal pools, or creeks) are not used as pollutant source controls and/or treatment controls;
- v. Preserve and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones.

9. Roads

- a. The number of access routes, number and size of staging areas, and the total area of the activity must be limited to the minimum necessary to achieve the project goal. Routes and work area boundaries must be clearly demarcated.
- b. Bridges, culverts, dip crossings, or other structures must be installed so that water and in-stream sediment flow is not impeded. Appropriate design criteria, practices and materials must be used in areas where access roads intersect waters of the state.
- c. Temporary materials placed in any water of the state must be removed as soon as construction is completed at that location, and all temporary roads must be removed or re-contoured and restored according to approved re-vegetation and restoration plans.
- d. Any structure, including but not limited to, culverts, pipes, piers, and coffer dams, placed within a stream where fish (as defined in California Fish and Game Code section 45) exist or may exist, must be designed, constructed, and maintained such that it does not constitute a barrier to upstream or downstream movement of aquatic life, or cause an avoidance reaction by fish due to impedance of their upstream or downstream movement. This includes, but is not limited to, maintaining the supply of water and maintaining flows at an appropriate depth, temperature, and

velocity to facilitate upstream and downstream fish migration. If any structure results in a long-term reduction in fish movement, the discharger shall be responsible for restoration of conditions as necessary (as determined by the Water Board) to secure passage of fish across the structure.

- e. A method of containment must be used below any temporary bridge, trestle, boardwalk, and/or other stream crossing structure to prevent any debris or spills from falling into the waters of the state. Containment must be maintained and kept clean for the life of the temporary stream crossing structure.

10. Sediment Control

- a. Except for activities permitted by the United States Army Corps of Engineers under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act, soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses.
- b. Silt fencing, straw wattles, or other effective management practices must be used along the construction zone to minimize soil or sediment along the embankments from migrating into the waters of the state through the entire duration of the Project.
- c. The use of netting material (e.g., monofilament-based erosion blankets) that could trap aquatic dependent wildlife is prohibited within the Project area.

11. Special Status Species

California Department of Fish and Wildlife Species of Special Concern Western pond turtle (*Actinemys marmorata*), Western spadefoot (*Spea hammondi*), River lamprey (*Lampetra ayresii*), Pacific lamprey (*Lampetra tridentate*), Hardhead (*Mylopharodon conocephalus*), and Central Valley fall/late fall-run Chinook salmon (*Oncorhynchus tshawytscha*). California-endangered Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*). California-threatened Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*). Federally-threatened Central Valley steelhead (*Oncorhynchus mykiss irideus*), Southern green sturgeon (*Acipenser medirostris*), and Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*).

12. Stabilization/Erosion Control

- a. All areas disturbed by Project activities shall be protected from washout and erosion.
- b. Hydroseeding shall be performed with California native seed mix.

13. Storm Water

- a. During the construction phase, the Permittee must employ strategies to minimize erosion and the introduction of pollutants into storm water runoff. These strategies must include the following:
 - i. An effective combination of erosion and sediment control Best Management Practices (BMPs) must be implemented and adequately working prior to the rainy season and during all phases of construction.

H. Site Specific – Not Applicable**I. Total Maximum Daily Load (TMDL) – Not Applicable****J. Mitigation for Temporary Impacts**

1. The Permittee shall restore all areas of temporary impacts, including Project site upland areas, which could result in a discharge to waters of the state to pre-construction contours and conditions upon completion of construction activities.
2. If restoration of temporary impacts to waters of the state is not completed within 90 days of the impacts, compensatory mitigation may be required to offset temporal loss of waters of the state.

K. Compensatory Mitigation for Permanent Impacts – Not Applicable

No compensatory mitigation for permanent impacts is required for the project due to the scope and nature of the impacts and the water body affected. The project will create juvenile salmonid rearing habitat in East Sand Slough during low flows in the Sacramento River; reduce stranding pools within East Sand Slough; and create in-stream habitat structure within the main channel of East Sand Slough. The project will create and enhance approximately 22.49 acres of habitat, with a minimum of 6.9 acres of new habitat to be created in East Sand Slough at low flows and additional habitat created at higher flows.

L. Certification Deviation

1. Minor modifications of Project locations or predicted impacts may be necessary as a result of unforeseen field conditions, necessary engineering re-design, construction concerns, or similar reasons. Some of these prospective Project modifications may have impacts on water quality. Some modifications of Project locations or predicted impacts may qualify as Certification Deviations as set forth in Attachment F. For purposes of this Certification, a "Certification Deviation" is a Project locational or impact modification that does not require an immediate amendment of the Order, because the Central Valley Water Board has determined that any potential water quality impacts that may result from the change are sufficiently addressed by the Order conditions and the CEQA Findings. After the

termination of construction, this Order will be formally amended to reflect all authorized Certification Deviations and any resulting adjustments to the amount of water resource impacts and required compensatory mitigation amounts.

2. A Project modification shall not be granted a Certification Deviation if it warrants or necessitates changes that are not addressed by the Order conditions or the CEQA environmental document such that the Project impacts are not addressed in the Project's environmental document or the conditions of this Order. In this case a supplemental environmental review and different Order will be required.

XV. Water Quality Certification

I hereby issue the Order for the East Sand Slough Side Channel Project, 5A52CR00198, certifying that as long as all of the conditions listed in this Order are met, any discharge from the referenced Project will comply with the applicable provisions of Clean Water Act sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards).

This discharge is also regulated pursuant to State Water Board Water Quality Order No. 2003-0017-DWQ which authorizes this Order to serve as Waste Discharge Requirements pursuant to the Porter-Cologne Water Quality Control Act (Water Code, section 13000 et seq.).

Except insofar as may be modified by any preceding conditions, all Order actions are contingent on: (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the conditions of this Order and the attachments to this Order; and, (b) compliance with all applicable requirements of Statewide Water Quality Control Plans and Policies, the Regional Water Boards' Water Quality Control Plans and Policies.

Original Signed by Clint Snyder (AEO)

 Patrick Pulupa, Executive Officer
 Central Valley Regional Water Quality Control Board

4/30/20

 Date

- Attachment A:** Project Map
- Attachment B:** Receiving Waters, Impacts, and Mitigation Information
- Attachment C:** CEQA Findings of Facts
- Attachment D:** Report and Notification Requirements
- Attachment E:** Signatory Requirements
- Attachment F:** Certification Deviation Procedures

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Figure 1. Project Location Map

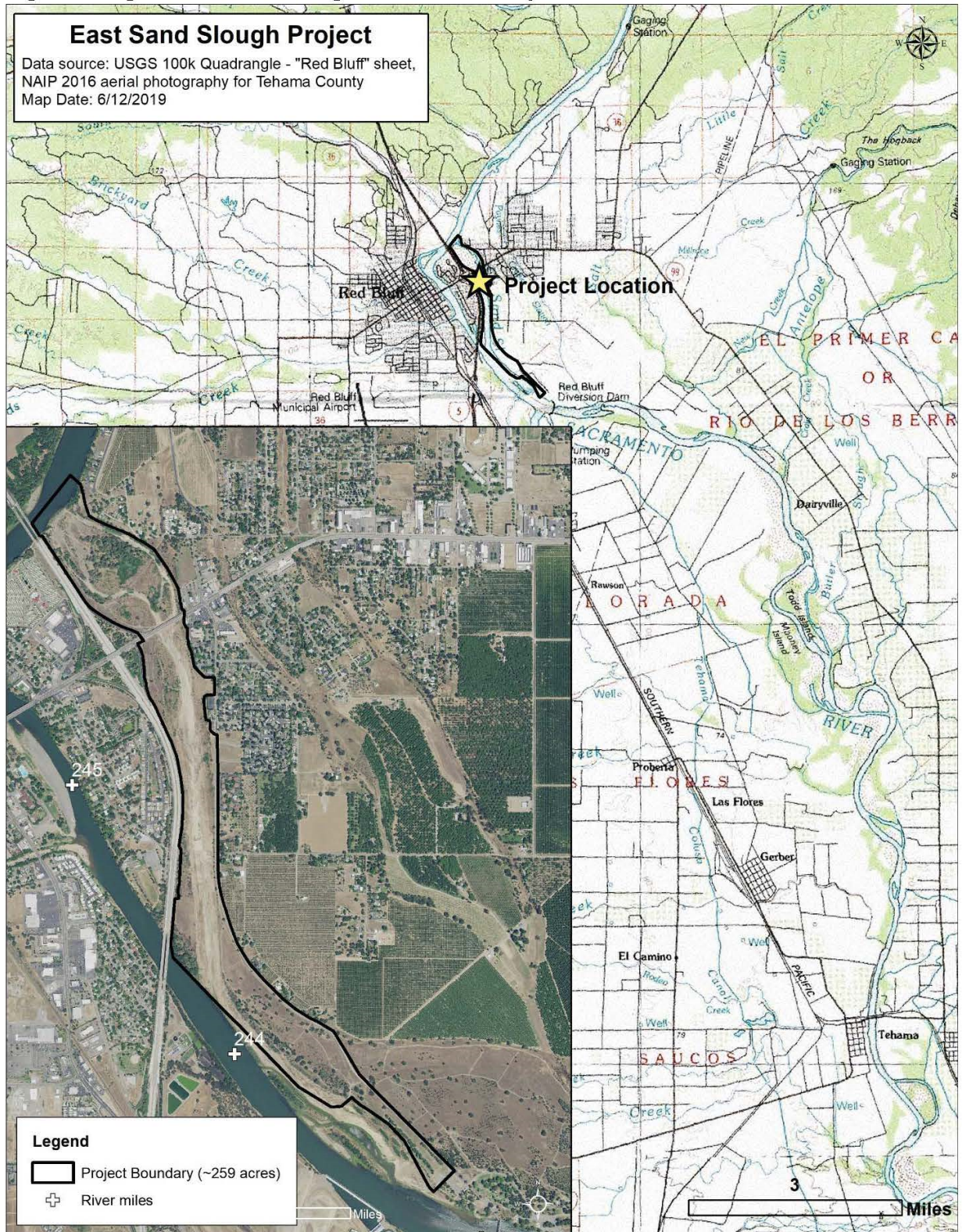


Figure 2. Site Access and Activity Map

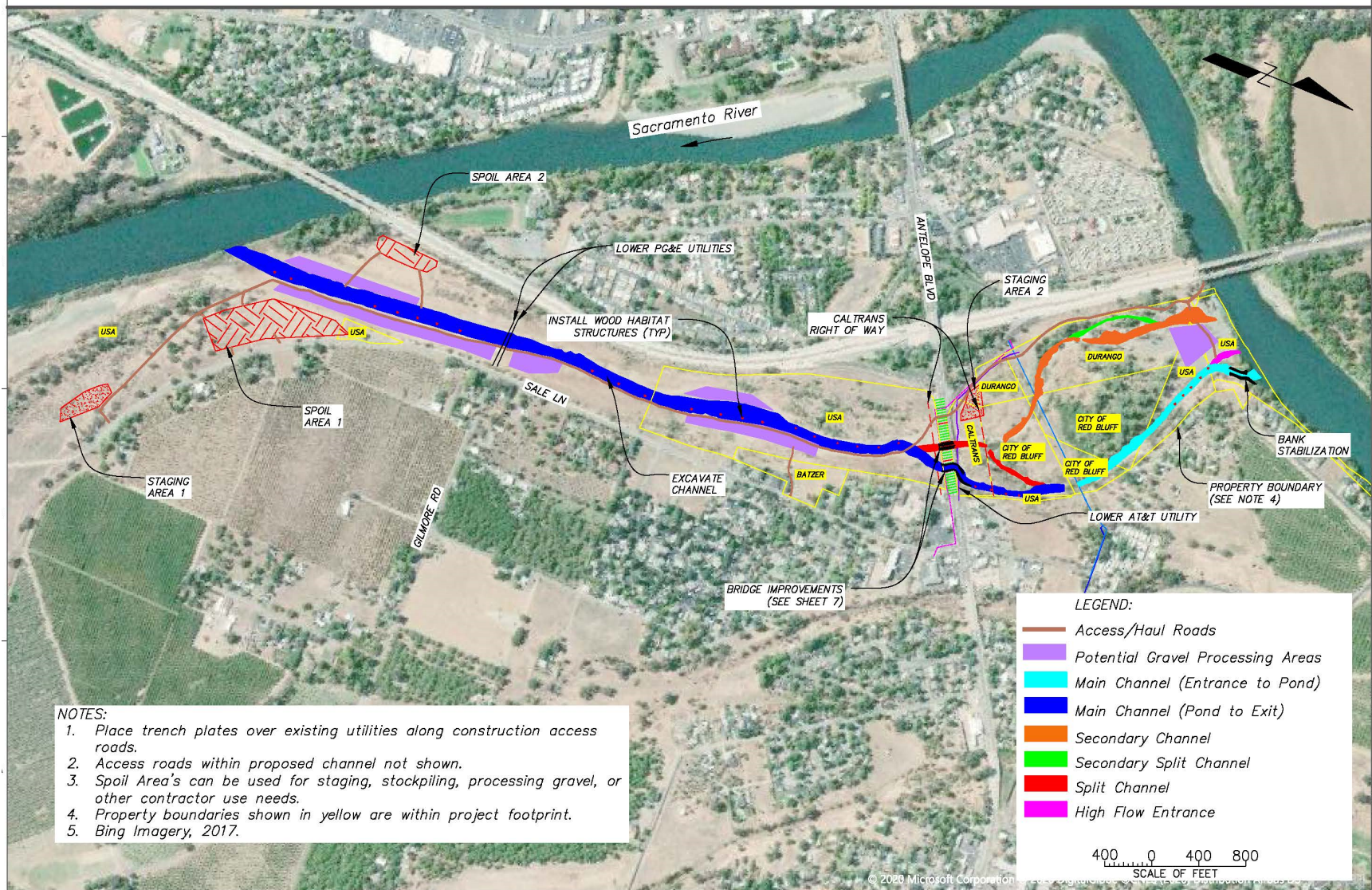


Figure 3. Site Plan Upstream of Bridge

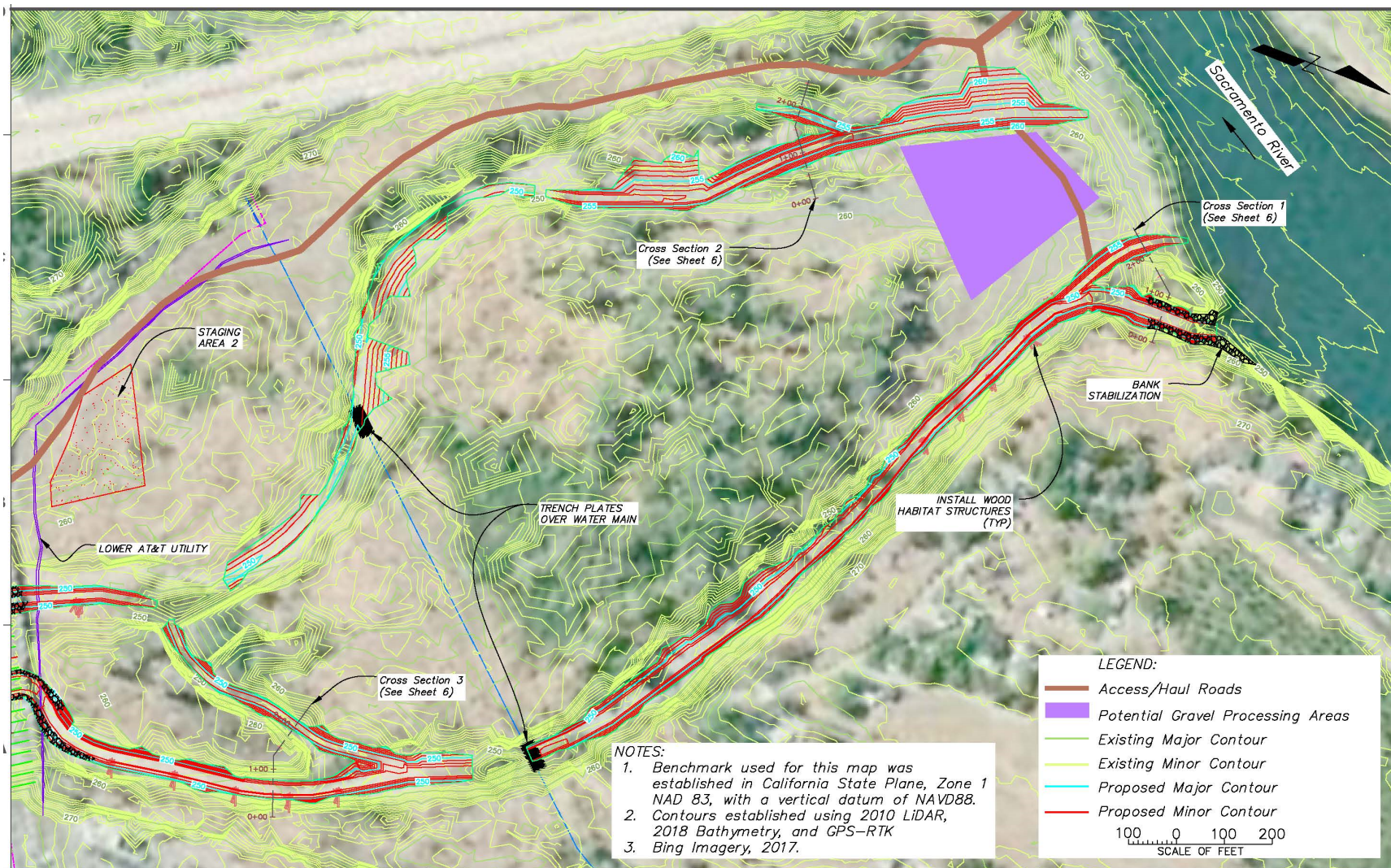
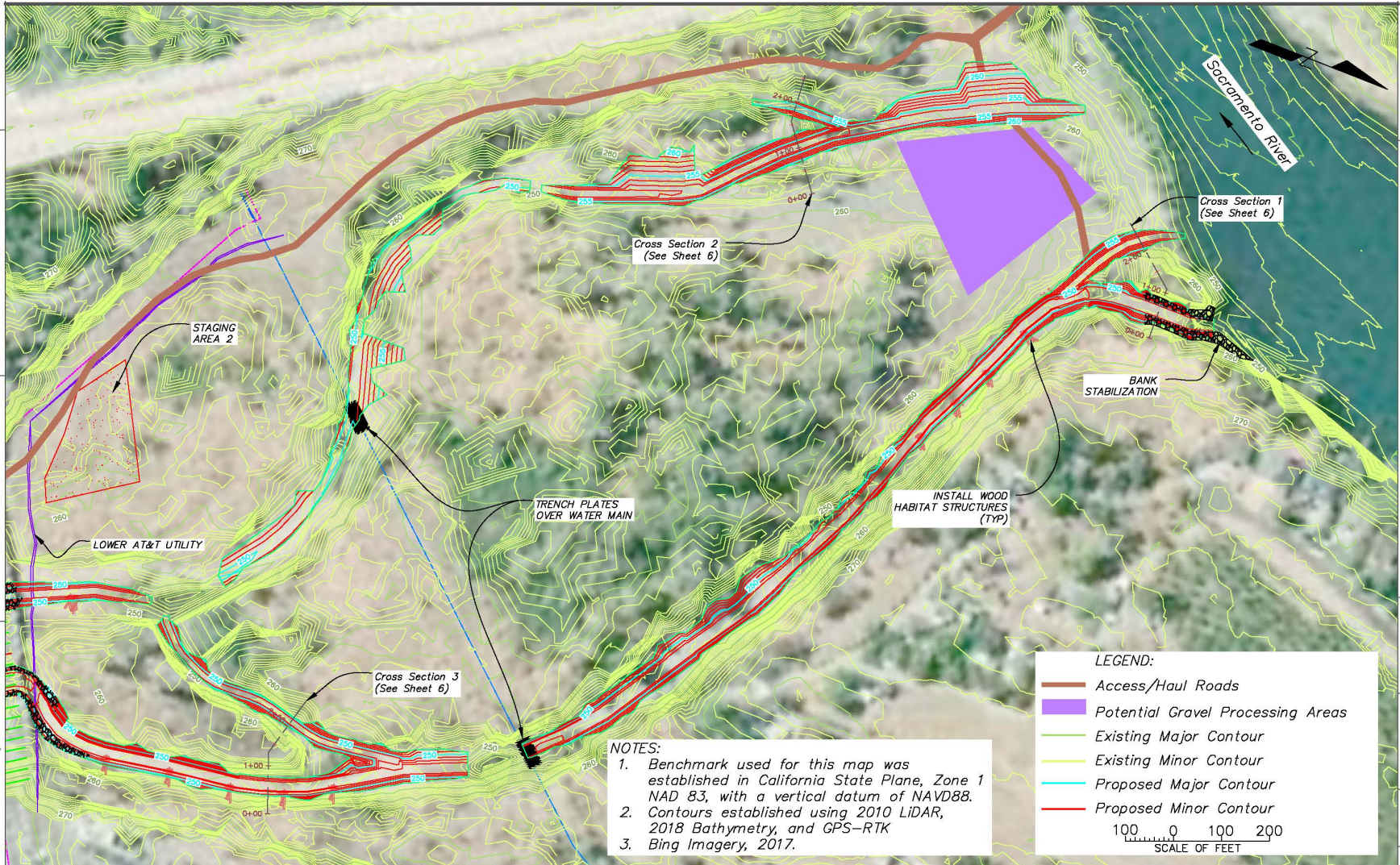


Figure 4. Site Plan Downstream of Bridge



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Receiving Waters, Impacts and Mitigation Information

The following table shows the receiving waters associated with each impact site.

Table 1: Receiving Water(s) Information

Impact Site ID	Waterbody Name	Impacted Aquatic Resources Type	Water Board Hydrologic Units	Receiving Waters	Receiving Waters Beneficial Uses	303d Listing Pollutant	California Rapid Assessment Method (CRAM) ID
East Sand Slough Side Channel Project: Stream Channel	Sacramento River	Stream	504.20	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD, NAV	DDT, Dieldrin, Mercury, PCBs, Unknown Toxicity	Not Applicable
East Sand Slough Side Channel Project: Wetland	Unnamed Wetland	Wetland	504.20	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD, NAV	DDT, Dieldrin, Mercury, PCBs, Unknown Toxicity	Not Applicable

Individual Direct Impact Locations

The following tables show individual impacts.

Table 2: Individual Temporary Fill/Excavation Impact Information

Impact Site ID	Latitude	Longitude	Indirect Impact Requiring Mitigation?	Acres	Cubic Yards	Linear Feet
East Sand Slough Side Channel Project: Stream Channel	40.178	-122.221	No	13.87		

Table 3: Individual Permanent Fill/Excavation Impact Information

Impact Site ID	Latitude	Longitude	Indirect Impact Requiring Mitigation?	Acres	Cubic Yards	Linear Feet
East Sand Slough Side Channel Project: Stream Channel	40.178	-122.221	No	21.29	113,500	
East Sand Slough Side Channel Project: Wetland	40.178	-122.221	No	1.2		

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A. Environmental Review

On 21 August 2019, the Resource Conservation District of Tehama County, as lead agency, adopted an Initial Study/Mitigated Negative Declaration (IS/MND) (State Clearinghouse (SCH) No. 2019079011) for the Project and filed a Notice of Determination (NOD) at the SCH on 26 August 2019. 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 Resource Conservation District of Tehama County's adopted 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 Resource Conservation District of Tehama County 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 Resource Conservation District of Tehama County 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 15074, subd. (d).)

B. Incorporation by Reference

Pursuant to CEQA, these Findings of Facts (Findings) support the issuance of this Order based on the Project IS/MND, the application for this Order, and other supplemental documentation.

All CEQA project impacts, including those discussed in subsection C below, are analyzed in detail in the Project Final IS/MND which is incorporated herein by reference. The Project IS/MND is available at [CEQAnet Web Portal](https://ceqanet.opr.ca.gov/2019079011/2) (<https://ceqanet.opr.ca.gov/2019079011/2>).

Requirements under the purview of the Central Valley Water Board in the MMRP are incorporated herein by reference.

The Permittee's application for this Order, including all supplemental information provided, are incorporated herein by reference.

C. Findings

The IS/MND states that there are no potentially significant environmental effects to water resources after the mitigation measures imposed by the lead agency.

D. Determination

The Central Valley Water Board has determined that the Project, when implemented in accordance with the MMRP and the conditions in this Order, will not result in any significant adverse water resource impacts. (California Code of Regulations, Title 14, section 15096, subd (h).)

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REPORTS AND NOTIFICATION REQUIREMENTS

I. Copies of this form

In order to identify your project, it is necessary to include a copy of the Project specific Cover Sheet below with your report; please retain for your records. If you need to obtain a copy of the Cover Sheet, you may download a copy of this Order as follows:

- A. [Central Valley Regional Water Quality Control Board's Adopted Orders Web page](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/401_wqcerts/)
(https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/401_wqcerts/)
- B. Find your Order based on the County, Permittee, WDID No., and/or Project Name.

II. Report Submittal Instructions

- A. Check the box on the Report and Notification Cover Sheet next to the report or notification you are submitting. **(See your Order for specific reports required for your Project)**
 - **Part A (Project Status Notifications):** Used to notify the Central Valley Water Board of the status of the Project schedule that may affect Project billing.
 - **Part B (Conditional Notifications and Reports):** Required on a case by case basis for accidental discharges of hazardous materials, violation of compliance with water quality standards, notification of in-water work, or other reports.
- B. Sign the Report and Notification Cover Sheet and attach all information requested for the Report Type.
- C. Electronic Report Submittal Instructions:
 - Submit signed Report and Notification Cover Sheet and required information via email to centralvalleyredding@waterboards.ca.gov and cc Katie.Gilman@waterboards.ca.gov.
 - Include in the subject line of the email
ATTN: Katie Gilman; Project Name; and WDID No. 5A52CR00198

III. Definition of Reporting Terms

- A. Active Discharge Period:** The active discharge period begins with the effective date of this Order and ends on the date that the Permittee receives a Notice of Completion of Discharges Letter or, if no post-construction monitoring is required, a Notice of Project Complete Letter. The Active Discharge Period includes all elements of the Project including site construction and restoration, and any Permittee responsible compensatory mitigation construction.
- B. Request for Notice of Completion of Discharges Letter:** This request by the Permittee to the Central Valley Water Board staff pertains to projects that have post construction monitoring requirements, e.g. if site restoration was required to be monitored for 5 years following construction. Central Valley Water Board staff will review the request and send a Completion of Discharges Letter to the Permittee upon approval. This letter will initiate the post-discharge monitoring period and a change in fees from the annual active discharge fee to the annual post-discharge monitoring fee.
- C. Request for Notice of Project Complete Letter:** This request by the Permittee to the Central Valley Water Board staff pertains to projects that either have completed post-construction monitoring and achieved performance standards or have no post-construction monitoring requirements, and no further Project activities are planned. Central Valley Water Board staff will review the request and send a Project Complete Letter to the Permittee upon approval. Termination of annual invoicing of fees will correspond with the date of this letter.
- D. Post-Discharge Monitoring Period:** The post-discharge monitoring period begins on the date of the Notice of Completion of Discharges Letter and ends on the date of the Notice of Project Complete Letter issued by the Central Valley Water Board staff. The Post-Discharge Monitoring Period includes continued water quality monitoring or compensatory mitigation monitoring.
- E. Effective Date:** 30 April 2020

IV. Map/Photo Documentation Information

When submitting maps or photos, please use the following formats.

A. Map Format Information:

Preferred map formats of at least 1:24000 (1" = 2000') detail (listed in order of preference):

- **GIS shapefiles:** The shapefiles must depict the boundaries of all project areas and extent of aquatic resources impacted. Each shape should be attributed with the extent/type of aquatic resources impacted. Features and boundaries should be accurate to within 33 feet (10 meters). Identify datum/projection used and if possible, provide map with a North American Datum of 1983 (NAD83) in the California Teale Albers projection in feet.

- **Google KML files** saved from Google Maps: My Maps or Google Earth Pro. Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. Include URL(s) of maps. If this format is used include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted.
 - **Other electronic format** (CAD or illustration format) that provides a context for location (inclusion of landmarks, known structures, geographic coordinates, or USGS DRG or DOQQ). Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. If this format is used include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted.
 - Aquatic resource maps marked on paper **USGS 7.5 minute topographic maps** or **Digital Orthophoto Quarter Quads (DOQQ)** printouts. Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. If this format is used include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted.
- B. Photo-Documentation:** Include a unique identifier, date stamp, written description of photo details, and latitude/longitude (in decimal degrees) or map indicating location of photo. Successive photos should be taken from the same vantage point to compare pre/post construction conditions.

V. Report and Notification Cover Sheet

Project: East Sand Slough Side Channel
Permittee: United States Bureau of Reclamation
WDID: 5A52CR00198
Reg. Meas. ID: 437056
Place ID: 865317
Order Effective Date: 30 April 2020
Order Expiration Date: 30 April 2025

VI. Report Type Submitted

A. Part A – Project Reporting

Report Type 1 Monthly Report
Report Type 2 Annual Report – Not Applicable

B. Part B – Project Status Notifications

Report Type 3 Commencement of Construction
Report Type 4 Request for Notice of Completion of Discharges Letter
Report Type 5 Request for Notice of Project Complete Letter

C. Part C – Conditional Notifications and Reports

Report Type 6 Accidental Discharge of Hazardous Material Report
Report Type 7 Violation of Compliance with Water Quality Standards Report
Report Type 8 In-Water Work/Diversions Water Quality Monitoring Report
Report Type 9 Modifications to Project Report
Report Type 10 Transfer of Property Ownership Report
Report Type 11 Transfer of Long-Term BMP Maintenance Report

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

Print Name¹

Affiliation and Job Title

Signature

Date

¹STATEMENT OF AUTHORIZATION (include if authorization has changed since application was submitted)

I hereby authorize _____ to act in my behalf as my representative in the submittal of this report, and to furnish upon request, supplemental information in support of this submittal.

Permittee's Signature

Date

***This Report and Notification Cover Sheet must be signed by the Permittee or a duly authorized representative and included with all written submittals.**

A. Part A – Project Reporting

1. Report Type 1 - Monthly Report

- a. Report Purpose** - Notifies Central Valley Water Board staff of the Project status and environmental compliance activities on a monthly basis.
- b. When to Submit** - On the 1st day of each month until a Notice of Project Complete Letter is issued to the Permittee.
- c. Report Contents** -
 - i. Construction Summary

Describe Project progress and schedule including initial ground disturbance, site clearing and grubbing, road construction, site construction, and the implementation status of construction storm water Best Management Practices (BMPs). Best Management Practices (BMPs) is a term used to describe a type of water pollution or environmental control. If construction has not started, provide estimated start date.
 - ii. Event Summary

Describe distinct Project activities and occurrences, including environmental monitoring, surveys, and inspections.
 - iii. Photo Summary

Provide photos of Project activities. For each photo, include a unique site identifier, date stamp, written description of photo details, and latitude/longitude (in decimal degrees) or map indicating location of photo. Successive photos should be taken from the same vantage point to compare pre/post construction conditions.
 - iv. Compliance Summary
 - List name and organization of environmental surveyors, monitors, and inspectors involved with monitoring environmental compliance for the reporting period.
 - List associated monitoring reports for the reporting period.
 - Summarize observed incidences of non-compliance, compliance issues, minor problems, or occurrences.
 - Describe each observed incidence in detail. List monitor name and organization, date, location, type of incident, corrective action taken (if any), status, and resolution.

2. Report Type 2 - Annual Report – Not Applicable

- a. **Report Purpose** - Notify the Central Valley Water Board staff of Project status during both the active discharge and post-discharge monitoring periods.
- b. **When to Submit** - Annual reports shall be submitted each year on the 1st day of May. Annual reports shall continue until a Notice of Project Complete Letter is issued to the Permittee.
- c. **Report Contents** - The contents of the annual report shall include the topics indicated below for each project period. Report contents are outlined in Annual Report Topics below.

During the Active Discharge Period

- **Topic 1: Construction Summary**
- **Topic 2: Mitigation for Temporary Impacts Status**
- **Topic 3: Compensatory Mitigation for Permanent Impacts Status**

During the Post-Discharge Monitoring Period

- **Topic 2: Mitigation for Temporary Impacts Status**
- **Topic 3: Compensatory Mitigation for Permanent Impacts Status**

- i. Annual Report Topic 1 - Construction Summary

When to Submit - With the annual report during the Active Discharge Period.

Report Contents - Project progress and schedule including initial ground disturbance, site clearing and grubbing, road construction, site construction, and the implementation status of construction storm water best management practices (BMPs). If construction has not started, provide estimated start date and reasons for delay.

- 1) Map showing general Project progress.
- 2) If applicable:
 - a) Summary of Conditional Notification and Report Types 6 and 7 (Part C below).
 - b) Summary of Certification Deviations. See Certification Deviation Attachment for further information.

- ii. Annual Report Topic 2 - Mitigation for Temporary Impacts Status

When to Submit - With the annual report during both the Active Discharge Period and Post-Discharge Monitoring Period.

Report Contents -

- 1) Planned date of initiation and map showing locations of mitigation for temporary impacts to waters of the state and all upland areas of temporary disturbance which could result in a discharge to waters of the state.
 - 2) If mitigation for temporary impacts has already commenced, provide a map and information concerning attainment of performance standards contained in the restoration plan.
- iii. Annual Report Topic 3 - Compensatory Mitigation for Permanent Impacts Status

When to Submit - With the annual report during both the Active Discharge Period and Post-Discharge Monitoring Period.

Report Contents - *If not applicable report N/A.

1) Part A. Permittee Responsible

- a) Planned date of initiation of compensatory mitigation site installation.
- b) If installation is in progress, a map of what has been completed to date.
- c) If the compensatory mitigation site has been installed, provide a final map and information concerning attainment of performance standards contained in the compensatory mitigation plan.

2) Part B. Mitigation Bank or In-Lieu Fee

- a) Status or proof of purchase of credit types and quantities.
- b) Include the name of bank/ILF Program and contact information.
- c) If ILF, location of project and type if known.

B. Part B – Project Status Notifications

1. Report Type 3 - Commencement of Construction

- a. **Report Purpose** - Notify Central Valley Water Board staff prior to the start of construction.
- b. **When to Submit** - Must be received at least seven (7) days prior to start of initial ground disturbance activities.
- c. **Report Contents** -
 - i. Date of commencement of construction.
 - ii. Anticipated date when discharges to waters of the state will occur.
 - iii. Project schedule milestones including a schedule for onsite compensatory mitigation, if applicable.
 - iv. Construction Storm Water General Permit WDID No.
 - v. Proof of purchase of compensatory mitigation for permanent impacts from the mitigation bank or in-lieu fee program.

2. Report Type 4 - Request for Notice of Completion of Discharges Letter

- a. **Report Purpose** - Notify Central Valley Water Board staff that post-construction monitoring is required and that active Project construction, including any mitigation and permittee responsible compensatory mitigation, is complete.
- b. **When to Submit** - Must be received by Central Valley Water Board staff within thirty (30) days following completion of all Project construction activities.
- c. **Report Contents** -
 - i. Status of storm water Notice of Termination(s), if applicable.
 - ii. Status of post-construction storm water BMP installation.
 - iii. Pre- and post-photo documentation of all Project activity sites where the discharge of dredge and/or fill/excavation was authorized.
 - iv. Summary of Certification Deviation discharge quantities compared to initial authorized impacts to waters of the state, if applicable.
 - v. An updated monitoring schedule for mitigation for temporary impacts to waters of the state and permittee responsible compensatory mitigation during the post-discharge monitoring period, if applicable.

3. Report Type 5 - Request for Notice of Project Complete Letter

- a. **Report Purpose** - Notify Central Valley Water Board staff that construction and/or any post-construction monitoring is complete, or is not required, and no further Project activity is planned.

- b. When to Submit** - Must be received by Central Valley Water Board staff within thirty (30) days following completion of all Project activities.
- c. Report Contents** -
 - i. Part A: Mitigation for Temporary Impacts
 - 1) A report establishing that the performance standards outlined in the restoration plan have been met for Project site upland areas of temporary disturbance which could result in a discharge to waters of the state.
 - 2) A report establishing that the performance standards outlined in the restoration plan have been met for restored areas of temporary impacts to waters of the state. Pre- and post-photo documentation of all restoration sites.
 - ii. Part B: Permittee Responsible Compensatory Mitigation
 - 1) A report establishing that the performance standards outlined in the compensatory mitigation plan have been met.
 - 2) Status on the implementation of the long-term maintenance and management plan and funding of endowment.
 - 3) Pre- and post-photo documentation of all compensatory mitigation sites.
 - 4) Final maps of all compensatory mitigation areas (including buffers).
 - iii. Part C: Post-Construction Storm Water BMPs
 - 1) Date of storm water Notice of Termination(s), if applicable.
 - 2) Report status and functionality of all post-construction BMPs.

C. Part C – Conditional Notifications and Reports

1. Report Type 6 - Accidental Discharge of Hazardous Material Report

- a. Report Purpose** - Notifies Central Valley Water Board staff that an accidental discharge of hazardous material has occurred.
- b. When to Submit** - Within five (5) working days following the date of an accidental discharge. Continue reporting as required by Central Valley Water Board staff.
- c. Report Contents** -
 - i. The report shall include the OES Incident/Assessment Form, a full description and map of the accidental discharge incident (i.e. location, time and date, source, discharge constituent and quantity, aerial extent, and photo documentation). If applicable, the OES Written Follow-Up Report may be substituted.
 - ii. If applicable, any required sampling data, a full description of the sampling methods including frequency/dates and times of sampling, equipment, locations of sampling sites.
 - iii. Locations and construction specifications of any barriers, including silt curtains or diverting structures, and any associated trenching or anchoring.

2. Report Type 7 - Violation of Compliance with Water Quality Standards Report

- a. Report Purpose** - Notifies Central Valley Water Board staff that a violation of compliance with water quality standards has occurred.
- b. When to Submit** - The Permittee shall report any event that causes a violation of water quality standards within three (3) working days of the noncompliance event notification to Central Valley Water Board staff.
- c. Report Contents** - The report shall include: the cause; the location shown on a map; and the period of the noncompliance including exact dates and times. If the noncompliance has not been corrected, include: the anticipated time it is expected to continue; the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and any monitoring results if required by Central Valley Water Board staff.

3. Report Type 8 - In-Water Work and Diversions Water Quality Monitoring Report

- a. Report Purpose** - Notifies Central Valley Water Board staff of the start and completion of in-water work. Reports the sampling results during in-water work and during the entire duration of temporary surface water diversions.

- b. When to Submit** - Seven (7) days prior to the start of in-water work. Within three (3) working days following the completion of in-water work. Surface water monitoring reports to be submitted two (2) weeks on initiation of in-water construction and during entire duration of temporary surface water diversions. Continue reporting in accordance with the approved water quality monitoring plan or as indicated in XIV.C.3.
- c. Report Contents** - As required by the approved water quality monitoring plan or as indicated in XIV.C.3.

4. Report Type 9 - Modifications to Project Report

- a. Report Purpose** - Notifies Central Valley Water Board staff if the Project, as described in the application materials, is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority.
- b. When to Submit** - If Project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority.
- c. Report Contents** - A description and location of any alterations to Project implementation. Identification of any Project modifications that will interfere with the Permittee's compliance with the Order.

5. Report Type 10 - Transfer of Property Ownership Report

- a. Report Purpose** - Notifies Central Valley Water Board staff of change in ownership of the Project or Permittee-responsible mitigation area.
- b. When to Submit** - At least 10 working days prior to the transfer of ownership.
- c. Report Contents** -
 - i. A statement that the Permittee has provided the purchaser with a copy of this Order and that the purchaser understands and accepts:
 - 1) the Order's requirements and the obligation to implement them or be subject to administrative and/or civil liability for failure to do so; and
 - 2) responsibility for compliance with any long-term BMP maintenance plan requirements in this Order. Best Management Practices (BMPs) is a term used to describe a type of water pollution or environmental control.
 - ii. A statement that the Permittee has informed the purchaser to submit a written request to the Central Valley Water Board to be named as the permittee in a revised order.

6. Report Type 11 - Transfer of Long-Term BMP Maintenance Report

- a. Report Purpose** - Notifies Central Valley Water Board staff of transfer of long-term BMP maintenance responsibility.
- b. When to Submit** - At least 10 working days prior to the transfer of BMP maintenance responsibility.
- c. Report Contents** - A copy of the legal document transferring maintenance responsibility of post-construction BMPs.

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SIGNATORY REQUIREMENTS

All documents submitted in compliance with this Order shall meet the following signatory requirements:

- A.** All applications, reports, or information submitted to the Central Valley Water Quality Control Board (Central Valley Water Board) must be signed and certified as follows:
 - 1.** For a corporation, by a responsible corporate officer of at least the level of vice-president.
 - 2.** For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
 - 3.** For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.

- B.** A duly authorized representative of a person designated in items 1.a through 1.c above may sign documents if:
 - 1.** The authorization is made in writing by a person described in items 1.a through 1.c above.
 - 2.** The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
 - 3.** The written authorization is submitted to the Central Valley Water Board Staff Contact prior to submitting any documents listed in item 1 above.

- C.** Any person signing a document under this section shall make the following certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

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CERTIFICATION DEVIATION PROCEDURES

I. Introduction

These procedures are put into place to preclude the need for Order amendments for minor changes in the Project routing or location. Minor changes or modifications in project activities are often required by the Permittee following start of construction. These deviations may potentially increase or decrease impacts to waters of the state. In such cases, a Certification Deviation, as defined in Section XIV.L of the Order, may be requested by the Permittee as set forth below:

II. Process Steps

- A. Who may apply:** The Permittee or the Permittee's duly authorized representative or agent (hereinafter, "Permittee") for this Order.
- B. How to apply:** By letter or email to the 401 staff designated as the contact for this Order.
- C. Certification Deviation Request:** The Permittee will request verification from the Central Valley Water Board staff that the project change qualifies as a Certification Deviation, as opposed to requiring an amendment to the Order. The request should:
1. Describe the Project change or modification:
 - a. Proposed activity description and purpose;
 - b. Why the proposed activity is considered minor in terms of impacts to waters of the state;
 - c. How the Project activity is currently addressed in the Order; and,
 - d. Why a Certification Deviation is necessary for the Project.
 2. Describe location (latitude/longitude coordinates), the date(s) it will occur, as well as associated impact information (i.e., temporary or permanent, federal or non-federal jurisdiction, water body name/type, estimated impact area, etc.) and minimization measures to be implemented.
 3. Provide all updated environmental survey information for the new impact area.
 4. Provide a map that includes the activity boundaries with photos of the site.
 5. Provide verification of any mitigation needed according to the Order conditions.
 6. Provide verification from the CEQA Lead Agency that the proposed changes or modifications do not trigger the need for a subsequent environmental document, an addendum to the environmental document, or a supplemental EIR. (Cal. Code Regs., tit. 14, §§ 15162-15164.)

D. Post-Discharge Certification Deviation Reporting:

1. Within 30 calendar days of completing the approved Certification Deviation activity, the Permittee will provide a post-discharge activity report that includes the following information:
 - a. Activity description and purpose;
 - b. Activity location, start date, and completion date;
 - c. Erosion control and pollution prevention measures applied;
 - d. The net change in impact area by water body type(s) in acres, linear feet and cubic yards;
 - e. Mitigation plan, if applicable; and,
 - f. Map of activity location and boundaries; post-construction photos.

E. Annual Summary Deviation Report:

1. Until a Notice of Completion of Discharges Letter or Notice of Project Complete Letter is issued, include in the Annual Project Report (see Construction Notification and Reporting attachment) a compilation of all Certification Deviation activities through the reporting period with the following information:
 - a. Site name(s);
 - b. Date(s) of Certification Deviation approval;
 - c. Location(s) of authorized activities;
 - d. Impact area(s) by water body type prior to activity in acres, linear feet and cubic yards, as originally authorized in the Order;
 - e. Actual impact area(s) by water body type in, acres, linear feet and cubic yards, due to Certification Deviation activity(ies);
 - f. The net change in impact area by water body type(s) in acres, linear feet and cubic yards; and
 - g. Mitigation to be provided (approved mitigation ratio and amount).