



Central Valley Regional Water Quality Control Board

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER

Effective Date:	13 July 2021	Reg. Meas. ID:	441938
Expiration Date:	12 July 2026	Place ID:	871623
		WDID No.:	5A34CR00819

Program Type: Fill/Excavation

Project Type: Non-Restoration Bank Stabilization

Project: American River Common Features Project (Project)

Applicant: United States Army Corps of Engineers

Applicant Contact: James J. Handura
United States Army Corps of Engineers
1325 J Street
Sacramento, CA 95814
Phone: (916)557-7490
Email: James.J.Handura@usace.army.mil

Applicant's Agent: Andrea Meier
United States Army Corps of Engineers
1325 J Street
Sacramento, CA 95814
Phone: (916)557-7490
Email: Andrea.J.Meier@usace.army.mil

Water Board Staff: Angela Nguyen-Tan
Environmental Scientist
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670
Phone: (916) 464-0335
Email: Angela.Nguyen-Tan@waterboards.ca.gov

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 (916) 464-3291 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 United States Army Corps of Engineers (hereinafter referred to as USACE or Permittee) for the Project. This Order is for the purpose described in application submitted by the Permittee. Pursuant to 33 C.F.R. 336.1, subdivision (a), "[a]lthough the USACE does not process and issue permits for its own activities, the USACE authorizes its own discharge of dredge or fill material by applying all applicable substantive legal requirements, including . . . seek[ing] state water quality certification for discharges of dredged or fill material into waters of the U.S." The application was received on 14 January 2021. The application was deemed complete on 16 February 2021.

II. Public Notice

The Central Valley Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3861. The Central Valley Water Board did not receive any comments.

III. Project Purpose

The purpose of the Project is to address associated flood risk in the City of Sacramento and surrounding areas by implementing preventative erosion, overtopping and under-seepage control measures along the area's levees.

IV. Project Description

The Project is located (1) approximately 12 miles of the north and south banks of the American River immediately upstream from the confluence with the Sacramento River; (2) the east bank of the Natomas East Main Drainage Canal (NEMDC), the Dry, Robla, and Arcade Creeks, and the Magpie Creek Diversion Channel (collectively referred to as the East Side Tributaries); (3) the east bank of the Sacramento River downstream from the American River to Freeport, where the levee ties into the Beach Lake Levee, the southern defense for Sacramento; and (4) the Sacramento Weir and Bypass, located just north of the City of West Sacramento. The Project consists of protecting and strengthening levees in the Project Area at specific Project Sites, including installing erosion protection and stability and seepage measures for the Sacramento River, American River, Magpie Creek and widening the Sacramento Weir and Bypass to provide capacity to divert a greater volume of floodwater into the Yolo Bypass when necessary to protect metropolitan Sacramento. Individual projects authorized by the Central Valley Water Board under this Order will include levee maintenance, repair and erosion control activities along the American River, Sacramento River, Magpie Creek, and Robla Creek. Project activities include seepage and slope protection, overtopping protection, erosion protection, and widening the Sacramento Weir and Bypass.

The following Special Status Species have the potential to occur within the Project area include: Giant garter snake, Valley elderberry longhorn beetle, Green sturgeon,

Delta smelt, Western yellow-billed cuckoo, Vernal pool fairy shrimp, Vernal pool tadpole shrimp, Swainson's hawk, Winter-run chinook, Spring-run chinook, and steelhead.

V. Project Location

County: Sacramento and Yolo

Nearest City: Sacramento

Section 1,3,4,10,12, Township 8 North, Range 5 East, MDB&M.

Section 4,5,6,7, Township 8 North, Range 6 East, MDB&M.

Section 25, Township 9 North, Range 4 East, MDB&M.

Sections 30-34 Township 9 North, Range 5 East, MDB&M.

Section 28, 32, 33, Township 9 North, Range 6 East, MDB&M.

Latitude: 38.56826° and Longitude: -121.406970°

Maps showing the Project locations 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.

Permitted actions enrolled through this Order will increase periodically inundated floodplain habitat in the American River and the Sacramento-San Joaquin Delta. Sediment in the American River and Sacramento-San Joaquin Delta is enriched with mercury due to historical mercury and/or gold mining and ongoing deposition from the American River and Sacramento-San Joaquin Delta. The Project boundary likely has deposits of mercury-containing sediments. Studies have shown that inundation and cycles of wetting and drying can cause methylmercury production. Therefore, the Project is expected to create additional methylmercury within the American River and Sacramento-San Joaquin Delta.

Methylmercury is a bioaccumulative neurotoxin that is harmful to humans and wildlife when ingested at elevated levels over a sustained period. The portion of the American River and Sacramento-San Joaquin Delta in the Project boundary is identified on the Clean Water Act Section 303(d) List as impaired by mercury because of elevated methylmercury concentrations in fish that, when consumed, pose a risk to wildlife and humans.

On 22 April 2010, the Central Valley Water Board adopted the Delta Mercury Control Program (DMCP), an amendment to the Sacramento River and San Joaquin River Basin Plan that implements a program to address mercury and methylmercury impairments in the Delta and Yolo Bypass. The DMCP includes fish-tissue objectives and methylmercury allocations for National Pollutant Discharge Elimination System (NPDES) wastewater facilities, municipal storm water, agricultural lands, wetlands, and open water in the Delta and Yolo Bypass.

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

The Permittee will perform the following activities under this Order:

American River: Individual project activities at this location include installation of approximately 31,000 linear feet of erosion protection, and 45,000 linear feet of launchable rock trench. For erosion protection along the American River, large stone riprap, ranging from 18 to 36 inches, will be placed on the waterside slope, and construction of a launchable rock trench, with a fine clean imported sand or silt fill over the top to allow for vegetation planting. Approximately 17 acres of fill would be placed within approximately 11 miles of the American River. The project will install a proposed launchable rock trench on the south bank of the river, filling approximately 0.4 acre of wetland habitat. The project will place approximately 2.75 million tons of rock that would be required to construct bank protection sites on the American River and Sacramento River.

Sacramento River: Individual project activities at this location include placement of 50,000 linear feet of cutoff wall and 50,300 linear feet of bank erosion protection. Approximately 15 acres of fill will be placed in approximately 10 miles of the Sacramento River.

Sacramento Bypass and Levee: Individual project activities at this location include widening the bypass and weir by 1,500 feet. Relocation of the Sacramento Bypass north levee, as part of the Sacramento Bypass widening, would involve placement of approximately 14 acres of clean soil into waters of the state. The proposed soil would be clean and would be sourced from either current Sacramento Bypass north levee soils, from a tested and approved borrow site, or from a commercial source. The widened Sacramento Bypass area of approximately 325 acres would become permanent waters of the state, thereby creating new floodplain habitat created within

the widened bypass, due to the potential for natural establishment of wetlands within this area.

East Side Tributaries: The East Side Tributaries include Dry Creek, Robla Creek, Arcade Creek, and Magpie Creek. The NEMDC conveys drainage water from the East Side Tributaries to the Sacramento River upstream of the confluence of the Sacramento and American Rivers.

Dry/Robla Creek: Individual project activities at this location include construction of 2,500 linear feet of floodwall to prevent overtopping. Cutoff walls will also be installed to prevent seepage.

Arcade Creek: Individual project activities at this location include installing cutoff walls, raising the floodwalls, and placing geotextile reinforced soil embankment levee in steep areas of the south levee.

Magpie Creek: Individual project activities at this location include placement of a floodwall, installation of 3,100 linear feet of raised and new levee construction, as well as, 79 acres of a detention basin. The implementation of levee raises at Magpie Creek would involve the discharge of fill material into waters of the state. The proposed soil would be clean and would be imported from either a tested and approved borrow site or from a commercial source. Approximately 0.25 acre of soil fill would be placed along the land side of the Magpie Creek levee in waters of the state. Approximately 1 acre of fill would be placed in vernal pool habitat. Dewatering will occur within the individual project areas. A turbidity curtain and/or other turbidity minimization measure would be installed prior to any in-water work conducted on the waterside of the levees. No wet concrete will be placed into stream channel or wetland habitat.

Total individual project fill/excavation quantities for all impacts will be submitted annually by the Permittee. Permanent impacts are categorized as those resulting in a physical loss in area and also those degrading ecological condition.

VIII. Description of Indirect Impacts to Waters of the State

The Central Valley Water Board recognizes the potential for indirect impacts to waters of the state associated with the Project. The Permittee will identify individual project activities resulting in indirect impacts to waters of the state and quantify indirect impacts as part of the reporting requirements of this Order.

Activities resulting in indirect impacts may include where a direct impact to a wetland reduces the functions of the remaining wetland, where impervious surfaces reduce water quality of receiving waters, or where a direct impact to a riparian zone reduces the water quality of receiving waters. American River Common Features (ARCF) individual project activities that may result in impacts to waters of the state, further described in Chapter 3 of the Final ARCF Environmental Impact Report (EIR), include indirect effects to fish habitat from the removal of vegetation from the levee slopes and indirect effects due to loss of habitat and temporal effects while habitat mitigation establishes.

IX. Avoidance and Minimization

The Permittee will describe individual project design steps taken to first avoid, and then minimize, impacts to waters of the state to the maximum extent practicable in the individual application, which must be completed for enrollment under this Order.

The Permittee shall implement the Impact Avoidance and Minimization Measures listed in the Section 3.5.6 of the of the ARCF EIS/EIR, incorporated herein by reference.

- Conduct earthwork during low flow periods (July 1 through November 30).
- To the extent possible, stage construction equipment and materials on the landside of the subject levee reaches in areas that have already been disturbed.
- Minimize ground and vegetation disturbance during project construction by establishing designated equipment staging areas, ingress and egress corridors, spoils disposal and soil stockpile areas, and equipment exclusion zones prior to the commencement of any grading operations.
- Stockpile soil on the landside of the levee reaches, and install sediment barriers (e.g., silt fences, fiber rolls, and straw bales) around the base of stockpiles to intercept runoff and sediment during storm events. If necessary, cover stockpiles with geotextile fabric to provide further protection against wind and water erosion.
- Install sediment barriers on graded or otherwise disturbed slopes as needed to prevent sediment from leaving the project site and entering nearby surface waters.
- Install plant materials to stabilize cut and fill slopes and other disturbed areas once construction is complete. Plant materials could include an erosion control seed mixture or shrub and tree container stock. Temporary structural BMPs, such as sediment barriers, erosion control blankets, mulch, and mulch tackifier, could be installed as needed to stabilize disturbed areas until vegetation becomes established.
- Conduct water quality tests specifically for increases in turbidity and sedimentation caused by construction activities.
- Water samples for determining background levels shall be collected in the adjacent water body for each erosion construction site. Testing to establish background levels shall be performed at least once a day when construction activity is in progress. Water samples for determining down current conditions shall be collected in the adjacent water body at a point 5 feet out from the shoreline and 300 feet down current of each erosion site. During periods when there are no in-water construction activities, random, weekly water monitoring will be performed. During periods of in-water construction, water monitoring will occur hourly.
- During working hours, the construction activity shall not cause the turbidity in the

adjacent water body down current from the construction sites to exceed the Basin Plan turbidity objectives. Specifically, where natural turbidity is between 0 and 5 NTUs, increases shall not exceed 1 NTU; where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20%; where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs; and where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent. In determining compliance with these limits, appropriate averaging periods could be applied provided that beneficial uses will be fully protected.

X. Compensatory Mitigation

The Permittee has agreed to provide compensatory mitigation for direct and indirect impacts as described in Section XIV.K for permanent impacts.

XI. California Environmental Quality Act (CEQA)

On 19 June 2016, the Central Valley Flood Protection Board, as lead agency, certified an environmental impact report/environmental impact statement (EIR/EIS) (State Clearinghouse (SCH) No. 2005072046) for the Project and filed a Notice of Determination (NOD) at the SCH on 15 June 2016. 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

Federal dischargers involved in Dredge and Fill Operations only are not subject to permit fees as required by Section 3833(b)(3)(A) and Section 2200(a)(3) of the California Code of Regulations.

XIV. Administrative Findings

1. 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.
2. If the Central Valley Water Board determines that there is a threatened or continuing violation of this Order, it may issue an order establishing a time schedule and prescribing a civil penalty which shall become due if compliance is

not achieved in accordance with that time schedule. (Water Code § 13308, subd. (a).) The amount of the civil penalty shall be based upon the amount reasonably necessary to achieve compliance and may not exceed \$10,000 for each day in which the violation occurs under Water Code section 13308, subdivision (b).

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. 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 individual 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.

XV. Conditions

The Central Valley Water Board will independently review the record of any individual project proposed for authorization under this Certification to analyze impacts to water quality and designated beneficial uses within the watersheds of the individual project. In accordance with this Certification, the Permittee may proceed with individual projects under the following terms and conditions:

A. 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:

centralvalleysacramento@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. Request for Authorization

- a. The Permittee must submit a request for individual project authorization under this Order by submitting an individual application or with the Monthly Report (Report Type #1) to the Central Valley Water Board at least 45 days before any individual project activity. Effective 13 October 2014, request for authorization and attachments, and submission of material for the development of the water quality certification must be submitted electronically.

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: centralvalleysacramento@waterboards.ca.gov.

In the subject line of the email, include the Central Valley Water Board Contact, individual project name, and WDID. Documents that are 50 MB or larger must be transferred to a disk and mailed to the Central Valley Water Board Contact.

- b. Upon receipt of a completed request for authorization, the Central Valley Water Board will transmit a Notice of Applicability (NOA) to the Permittee verifying enrollment in this Order within 15 days of issuing the Notice of Complete Application.

2. 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:** The Permittee shall submit an Annual Report each year on the 1st day of the month one year after the submittal of the Commencement of Construction Notification. Annual reports shall continue until the expiration date of the Order.

3. 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 include the corresponding Waste Discharge Identification Number (WDID#) issued under this Order. Additionally, if applicable, the Report shall also include the Permittee number issued for coverage 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.

4. Conditional Notifications and Reports:

The following notifications and reports are required as applicable.

a. Accidental Discharges of Hazardous Materials¹

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)

¹ "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**
- The Permittee shall give advance notice to Central Valley Water Board staff if individual 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 individual project modifications that will interfere with the Permittee 's compliance with 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 individual 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. The purchaser must also submit a written request to the Central Valley Water Board to be named as the Permittee in a revised order.
- 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.

B. 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 individual 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:

For individual projects involving planned work in water or stream diversions, a water quality monitoring plan shall be submitted to Central Valley Water Board staff for acceptance at least 30 days in advance of any discharge to the affected water body. Water quality monitoring shall be conducted in accordance with the approved plan.

- 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.
- b. Activities shall not cause dissolved oxygen to be reduced below 5.0 mg/L for waters designated with the WARM beneficial use, and 7.0 mg/L for waters designated with the COLD or SPWN beneficial uses, in surface water.
- c. 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.

For individual projects located in the American River (Folsom Dam to Sacramento River), except for periods of storm runoff, the turbidity shall be less than or equal to 10 NTUs. To the extent of any conflict with the general turbidity objective, the more stringent applies.

For Delta waters, the general objectives for turbidity apply subject to the following: except for periods of storm runoff, the turbidity of Delta waters shall not exceed 50 NTUs in the waters of the Central Delta and 150 NTUs in other Delta waters.

- d. Activities shall not cause temperature in surface waters to increase more than 5°F above natural receiving water temperature for waters with designated COLD or WARM beneficial uses.

Sampling during in-water work or during the entire duration of temporary water diversions shall be conducted in accordance with Table 1 sampling parameters.² The sampling requirements in Table 1 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.

² 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.

Table 1: Sample Type and Frequency Requirements

Parameter	Unit of Measurement	Type of Sample	Minimum Frequency
Dissolved Oxygen	mg/L and % saturation	Grab	Every 4 Hours
pH	Standard Units	Grab	Every 4 hours
Turbidity	NTU	Grab	Every 4 hours
Temperature	°F (or as °C)	Grab	Every 4 hours
Visible construction related pollutants ³	Observations	Visual Inspections	Continuous throughout the construction period

4. Post-Construction:

If the individual project includes ground disturbance, visually inspect the site during the rainy season (October 1-April 30) until a Notice of Completion is issued to ensure excessive erosion, stream instability, or other water quality pollution 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 individual 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.

C. 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.

³ Visible construction-related pollutants include oil, grease, foam, fuel, petroleum products, and construction-related, excavated, organic or earthen materials.

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.

D. General Certification Conditions

1. The Permittee shall obtain a separate Water Quality Certification for additional impacts not covered in this Order, including impacts not within the ARCF Project Area.
2. The Central Valley Water Board staff will review the application and evaluate whether it qualifies for enrollment under this Order. Within 30 days of application receipt, Central Valley Water Board staff shall determine if the application is complete. If the application is complete, within 45 days of application receipt, the Central Valley Water Board will issue a NOA, informing the Permittee that the proposed activity qualifies for authorization. The Central Valley Water Board reserves the authority to request additional information or exclude any segments from coverage if it cannot determine that the work on the proposed segments is consistent with the impacts identified in this Order or is not sufficiently protective of water quality standards or beneficial uses.

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.
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. 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.

4. 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.
5. **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 individual 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 Endangered 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 individual 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 individual 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 individual project site(s) during construction for review by site personnel and agencies. All personnel performing work on the individual project shall be familiar with the content of this Order and its posted location at the individual project site.
 6. Lake or Streambed Alteration Agreement: If issued, the Permittee shall submit a signed copy of the California Department of Fish and Wildlife's Lake or Streambed Alteration Agreement or other authorization letter to the Central Valley Water Board immediately upon receipt and prior to any discharge to waters of the state.
- G. Construction** Best management practices shall be followed to protect water quality from fill and/or excavation impacts as much as possible. If applicable, the following conditions apply to each individual project authorized by this Order:
1. **Dewatering**
 - a. If water is present, the Permittee shall notify Central Valley Water Board staff and the area must be dewatered prior to start of work.
 - b. If water is present, the Permittee shall develop and maintain on-site a Surface Water Diversion and/or Dewatering Plan(s). The Plan(s) must be developed prior to initiation of any water diversions. The Plan(s) shall include the proposed method and duration of diversion activities and include water quality monitoring conducted, as described in section XIV.C.3, during the entire duration of dewatering and diversion activities. The Plan(s) must be consistent with this Order and must be made available to the Central Valley Water Board staff upon request.
 - c. For any temporary dam or other artificial obstruction being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream, to maintain beneficial uses of waters of the state below the dam. Construction, dewatering, and removal of temporary cofferdams shall not violate section XIV.C.3.
 - d. The temporary dam or other artificial obstruction shall only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel which will cause little or no siltation. Stream flow shall be temporarily diverted using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses.
-

- e. This Order does not allow permanent water diversion of flow from the receiving water. This Order is invalid if any water is permanently diverted as a part of the individual project.
- f. The Permittee shall work with the Central Valley Water Board to obtain coverage under an NPDES permit for dewatering activities that result in discharges into surface water. The Permittee shall work with the Central Valley Water Board to obtain coverage under Waste Discharge Requirements (WDRs) for dewatering activities that result in discharges to land.

2. Directional Drilling – Not Applicable

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 an individual project-specific Spill Prevention, Containment and Cleanup Plan outlining the practices to prevent, minimize, and/or clean up potential spills during construction of the individual project. The Plan must detail the individual 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 individual 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 individual 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. No wet concrete will be placed into wetland, vernal pool or stream channel habitat.

7. Invasive Species and Soil Borne Pathogens

Prior to arrival at the individual project site and prior to leaving the individual 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 – Not Applicable

9. Roads – Not Applicable

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 individual project.
- c. The use of netting material (e.g., monofilament-based erosion blankets) that could trap aquatic dependent wildlife is prohibited within the individual project area.
- d. During Project construction, the Permittee shall implement reasonable and feasible practices to control erosion of mercury-containing soils and minimize discharges of mercury and methylmercury. The goal is to minimize erosion of the mercury-containing soils in order to protect beneficial uses in the Sacramento-San Joaquin Delta and the American

River and to reduce mercury and methylmercury loads moving downstream.

11. Stabilization/Erosion Control

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

12. 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 individual 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 as described in a final restoration plan.
2. The Permittee will submit a draft restoration plan consistent with the requirements of Section IV.A.2.d of the State Water Resources Control Board's State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for individual projects. The final restoration plan shall be submitted for written acceptance by Central Valley Water Board staff prior to the Commencement of Construction notification. The final restoration plan shall describe the restoration of all temporarily disturbed areas to pre-project conditions.
3. The Central Valley Water Board may extend the monitoring period beyond requirements of the final restoration plan upon a determination by Executive Officer that the performance standards have not been met or are not likely to be met within the monitoring period.
4. 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:

Compensatory Mitigation is for permanent physical loss and permanent ecological degradation of a water of the state.

1. Compensatory Mitigation Plan

- a. The Permittee shall submit a draft compensatory mitigation plan as part of a complete individual application for coverage. The Permittee shall provide a final compensatory mitigation plan, consistent with the requirements of the Procedures for written acceptance by Central Valley Water Board staff. Impacts to waters of the state are not authorized and shall not occur until a compensatory mitigation plan has been approved by Central Valley Water Board staff. Upon acceptance by Central Valley Water Board staff, the Permittee shall implement the approved plan.
- b. The final compensatory mitigation plan shall be consistent with all plan elements in the Procedures. The level of detail in the final plan shall be sufficient to accurately evaluate whether compensatory mitigation offsets the adverse impacts attributed to the Project considering the overall size and scope of impact.
- c. Compensatory mitigation shall be provided from an approved mitigation bank or in lieu fee program, or mitigate as otherwise required by the Central Valley Water Board for impacts to waters of the state. If no mitigation bank or in-lieu fee program options are available, mitigation may be provided through on-site or off-site permittee responsible mitigation, subject to Water Board approval. The Permittee shall provide evidence of all off-site compensatory mitigation to the Central Valley Water Board. Evidence of on-site compensatory mitigation shall be provided with the Notice of Completion. At a minimum, compensatory mitigation must achieve a ratio of 1:1 for permanent impacts

2. Irrevocable Letter of Credit – Not Applicable**3. Permittee -Responsible Compensatory Mitigation Responsibility**

- a. Permittee responsible compensatory mitigation installation shall be completed within 60 days of authorized impacts.
- b. The Permittee is responsible for the required compensatory mitigation in perpetuity. However, the Permittee may transfer the compensatory mitigation requirements associated with long-term management when the following conditions have been met:
 - i. Performance standards are met.
 - ii. A Transfer Agreement to a third party has been approved by Central Valley Water Board staff.
 - iii. An endowment fund has been provided by the Permittee to a third party for management in perpetuity of the mitigation site.

- iv. A conservation easement, deed restriction, or other appropriate restrictive covenant for the mitigation site has been recorded and approved by Central Valley Water Board staff.
- c. Transfer of Long-Term Permittee -Responsible Compensatory Mitigation and Management Responsibility
 - i. A transfer agreement shall be submitted from an authorized representative of the new party (transferee) for acceptance by Central Valley Water Board staff. This agreement shall demonstrate acceptance and understanding of the responsibility to comply with and fully satisfy the required compensatory mitigation and long-term management conditions. Failure to comply with the mitigation conditions and associated requirements may subject the transferee to enforcement by the Central Valley Water Board under Water Code section 13385, subdivision (a).
 - ii. Notification of transfer of responsibilities meeting the above condition must be provided to the Central Valley Water Board staff. A draft transfer agreement is due to Central Valley Water Board staff no less than thirty (30) days prior to the transfer of the mitigation responsibility. A final transfer agreement is due to Central Valley Water Board staff within 30 days of the completion of the transfer.

4. Purchase of Mitigation Credits by Permittee for Compensatory Mitigation

- a. A copy of the fully executed agreement for the purchase of mitigation credits shall be provided to the Central Valley Water Board. prior to the initiation of in water work.
- b. The Permittee shall retain responsibility for providing the compensatory mitigation and long-term management until Central Valley Water Board staff has received documentation of the credit purchase and the transfer agreement between the Permittee and the seller of credits.

XVI. Water Quality Certification

I hereby issue the Order for the American River Common Features Project, WDID# 5A34CR00819, certifying that as long as all of the conditions listed in this Order are met, any discharge from the referenced individual projects 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). and approves the mitigation monitoring and reporting program (MMRP) for the Project.

The Central Valley Water Board will file a Notice of Determination (NOD) at the SCH within five (5) working days of issuance of this Order. 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.).

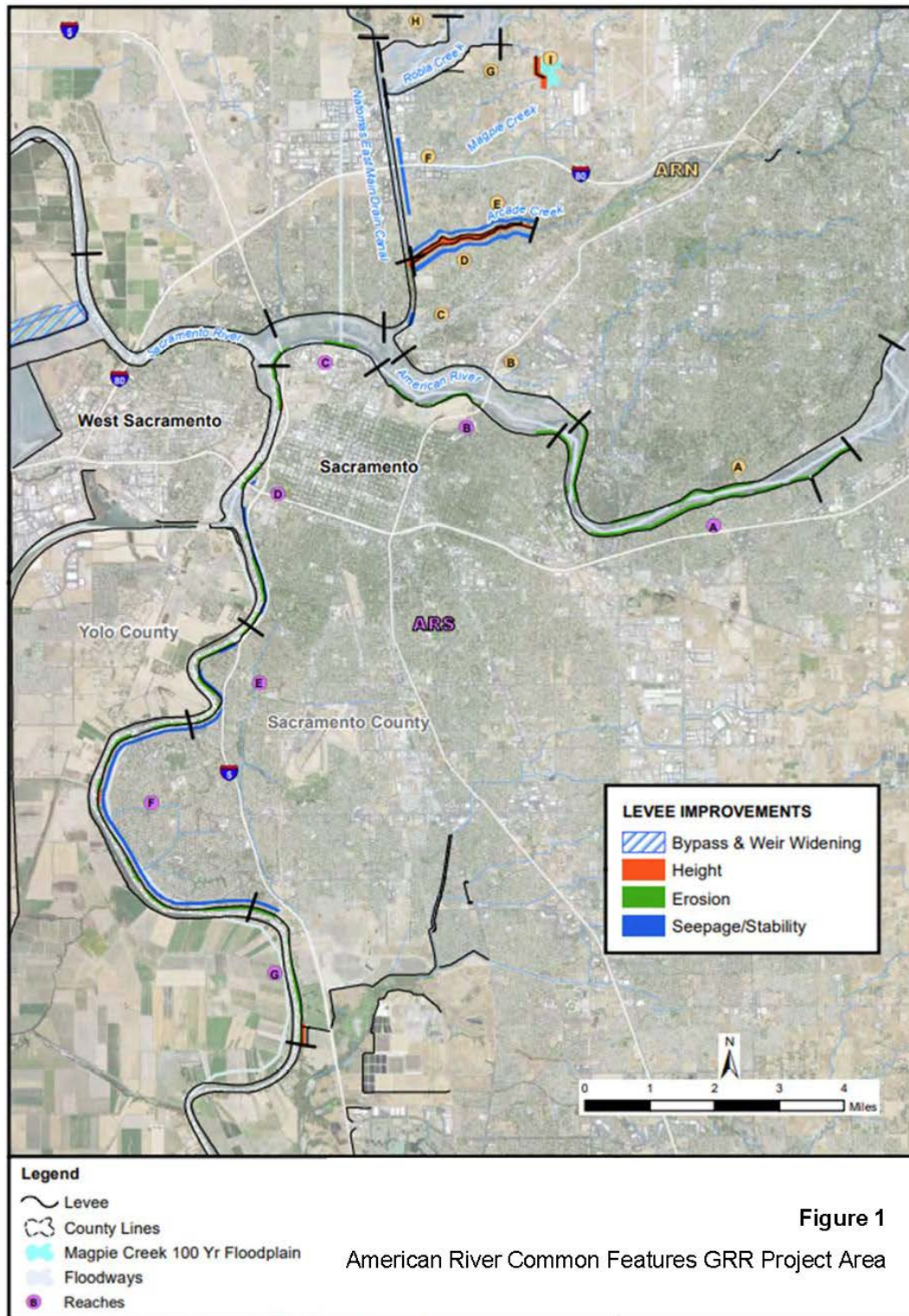
Except insofar as may be modified by any preceding conditions, all Order actions are contingent on: (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the conditions of this Order and the attachments to this Order; and, (b) compliance with all applicable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

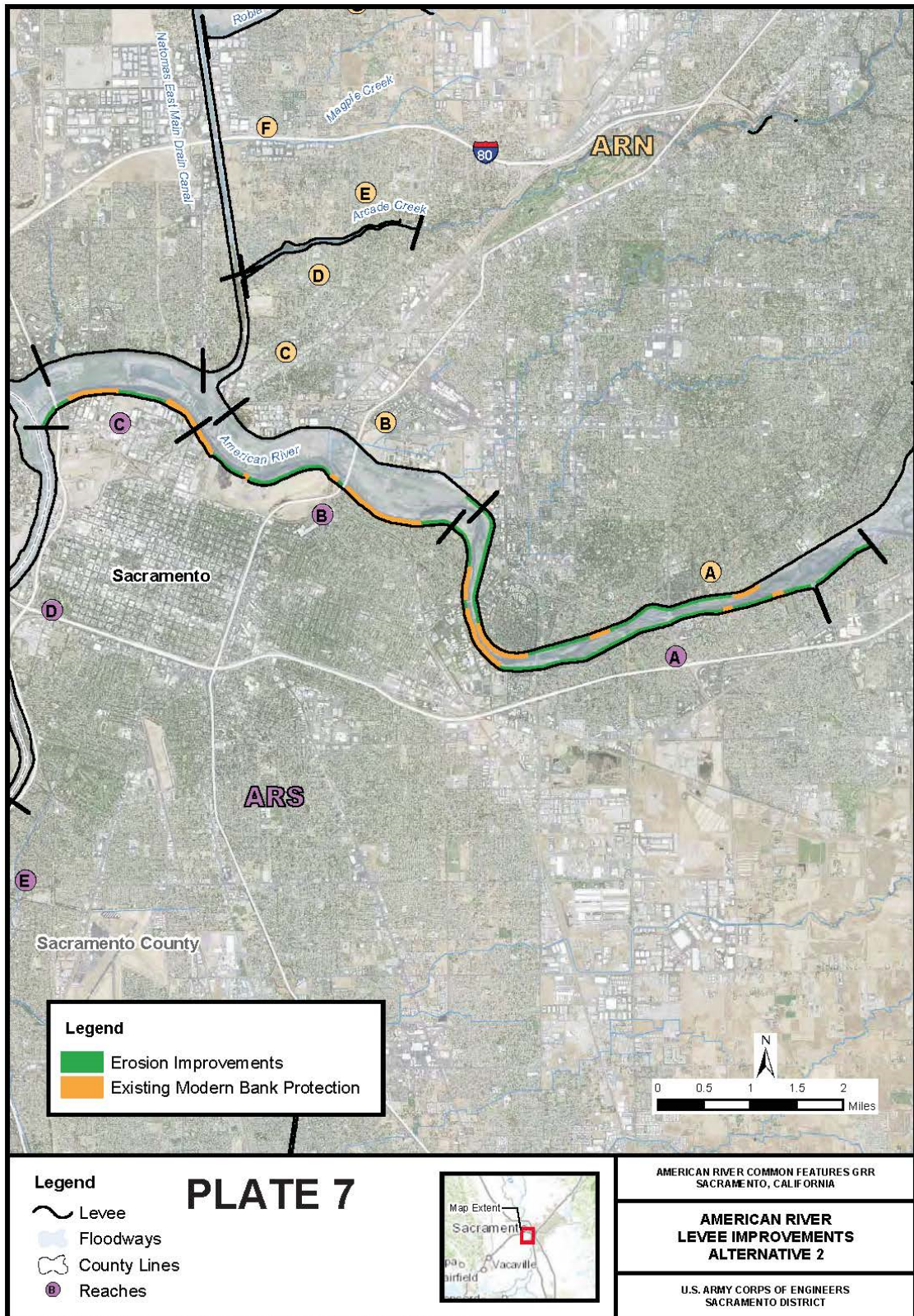
Original Signed By Adam Laputz for:

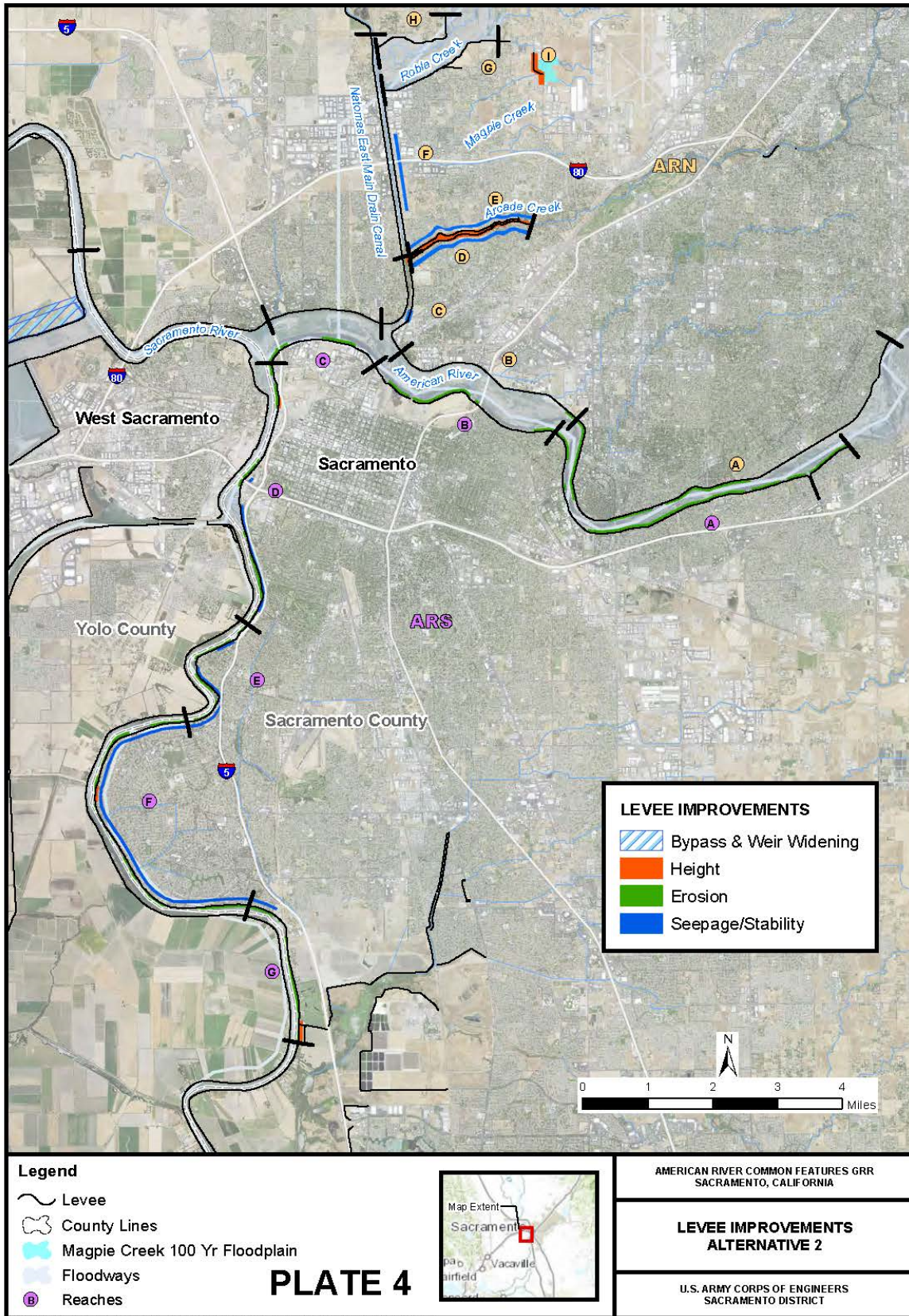
Patrick Pulupa, Executive Officer
Central Valley Regional Water Quality Control Board

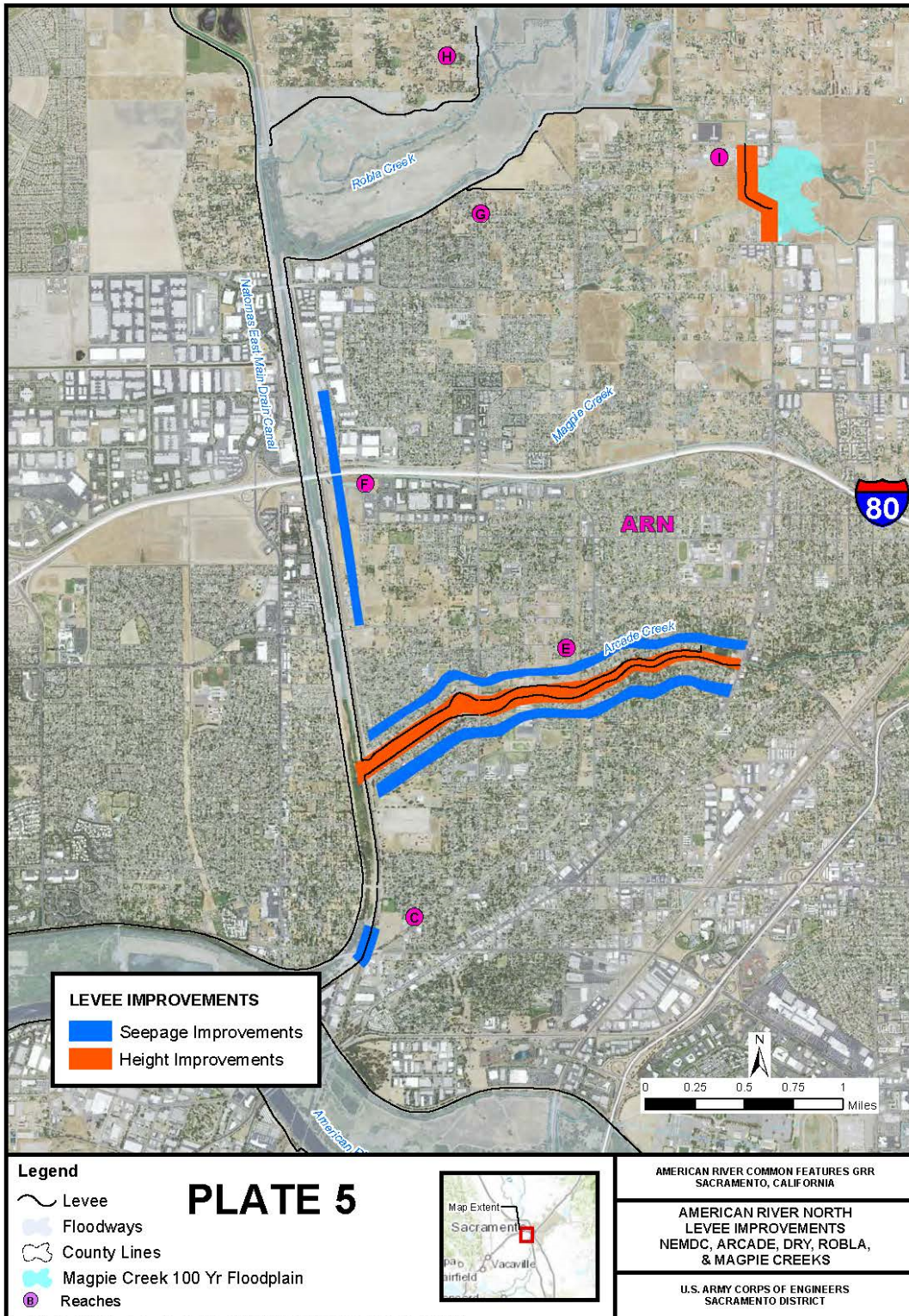
- Attachment A:** Project Map(s)
- Attachment B:** Receiving Waters, Impacts, and Mitigation Information
- Attachment C:** CEQA Findings of Facts
- Attachment D:** Report and Notification Requirements
- Attachment E:** Signatory Requirements
- Attachment F:** Compliance with Code of Federal Regulations, title 40, section 121.7, subdivision (d)

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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

Non-Federal Waters	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 ID
No	Sacramento River	Sacramento River	Stream channel	510.00	Sacramento-San Joaquin Delta	MUN, AGR, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlordane, DDT, Dieldrin, Mercury, Polychlorinated biphenyls, Unknown Toxicity	N/A
No	Sacramento Weir and Bypass	Sacramento River	Stream channel, wetland	510.00	Sacramento River	MUN, AGR, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlordane, DDT, Dieldrin, Mercury, Polychlorinated biphenyls, Unknown Toxicity	N/A
No	Dry Creek	Dry Creek	Stream channel	519.21	Sacramento River	MUN, AGR, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlordane, DDT, Dieldrin, Mercury, Polychlorinated biphenyls, Unknown Toxicity	N/A

Non-Federal Waters	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 ID
No	Magpie Creek	Magpie Creek	Stream channel	519.21	Sacramento River	MUN, AGR, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlordane, DDT, Dieldrin, Mercury, Polychlorinated biphenyls, Unknown Toxicity	N/A
No	Arcade Creek	Arcade Creek	Stream channel	519.21	Sacramento River	MUN, AGR, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlordane, DDT, Dieldrin, Mercury, Polychlorinated biphenyls, Unknown Toxicity	N/A
No	American River	American River	Stream channel	519.21	American River, Folsom Dam to Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Mercury, Polychlorinated biphenyls, Unknown Toxicity	N/A
No	Robla Creek	Robla Creek	Stream Channel	519.21	Sacramento River	MUN, AGR, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlordane, DDT, Dieldrin, Mercury, Polychlorinated biphenyls, Unknown Toxicity	N/A

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A. Environmental Review

On 9 June 2016, the Central Valley Flood Protection Board, as lead agency, certified a Final Environmental Impact Report (FEIR) (State Clearinghouse (SCH) No. 20205072046) for the Project and filed a Notice of Determination (NOD) at the SCH on 15 June 2016. 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 the Central Valley Flood Protection Board's certified environmental document comports with the requirements of CEQA and is valid. (Public Resources Code, section 21167.3). The Central Valley Water Board has reviewed and considered the environmental document and finds that the environmental document prepared by the Central Valley Flood Protection Board addresses the Project's water quality impacts. (California Code of Regulations, Title 14, section 15096, subd. (f).) The environmental document includes the mitigation monitoring and reporting program (MMRP) developed by the Central Valley Flood Protection Board for all mitigation measures that have been adopted for the Project to reduce potential significant impacts. (Public Resources Code, section 21081.6, subd. (a)(1); California Code of Regulations, Title 14, section 15091, subd. (d).)

B. Incorporation by Reference

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

The FEIR Environmental Impact Report (EIR), which includes analyses of broad impacts and serves as a first-tier document for the FEIR, is available at: Central Valley Flood Protection Board, 3310 El Camino Ave, Room 151, Sacramento, CA 95821.

All CEQA project impacts, including those discussed in subsection C below, are analyzed in detail in the Project FEIR which is incorporated herein by reference. The Project FEIR is available at: Central Valley Flood Protection Board, 3310 El Camino Ave, Room 151, Sacramento, CA 95821

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, is incorporated herein by reference.

C. Findings

The FEIR describes the potential significant environmental effects to water quality. Having considered the whole of the record, the Central Valley Water Board makes the following findings:

- (1) Findings regarding impacts that will be mitigated to a less than significant level. (Public Resources Code, section 21081, subd. (a)(1); California Code of Regulations, Title 14, section 15091, subd. (a)(1).)

Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the FEIR.

a.i. Potential Significant Impact:

Geological Resources

1. Excavation for borrow material or during construction could increase soil erosion or permanent loss of topsoil

Water Quality

1. Increased turbidity during bank protection construction, runoff of exposed soils, and cement, slurry, or fuel spills during construction. Rock revetment placement in open water would result in significant indirect effects as the sediment and turbidity plume drifts further downstream and later effect the water quality in those areas found further downstream of the project area. A potential for water quality impacts to occur if the weir is constructed in a way that debris or other construction materials could enter the Sacramento River.

Vegetation and Wildlife

1. The launchable rock trenches would result in the removal of a maximum of 65 acres of riparian habitats within the American River Parkway.
2. Bank protection measure would result in impacts to a maximum of 31,000 linear feet of SRA habitat.
3. The existing levee structure would be degraded by one half to create a working platform for slurry wall installation. As the levee is degraded, all vegetation located in the degraded area would be removed. The maximum degraded area (the upper one half of the levee) is approximately 110 acres and contains about 750 trees of various sizes and species.
4. On the landside of the levee, where levee raises are required, all trees would be removed from the levee slope and within 15 feet of the levee toe to construct the levee raise. A landside maintenance easement would be required along the levee toe within the 8 miles of levee raise. This easement will be left in place after construction as access. There are approximately 1,300 trees of various species and size within this landside easement that once removed would not be replaced on-site.
5. There would be a maximum of 200 trees removed from both the landside and waterside to construct the project. These trees compose

approximately 2 acres of oak woodland habitat on NEMDC, and approximately 10.5 acres of riparian on Arcade Creek.

Fisheries

1. Rock placement would most likely disturb the native resident fish by increasing individual noise, water turbulence, and turbidity, causing them to move away from the area of placement. In some pelagic native juvenile species utilizing the near shore habitat for cover, moving away from that cover could put them at a slight risk of predation.
2. Construction during the project may disturb soils and the nearshore environment, leading to increases in sediment in the nearshore aquatic habitat. This in turn may increase sedimentation (i.e., deposition of sediment on the substrate), suspended sediments, and turbidity.
3. By widening the Sacramento Weir and Bypass, the project would create additional floodplain habitat within the Sacramento Bypass, which could benefit native fish.

Valley Elderberry Longhorn Beetle

1. Within the surveyed study area, approximately 250 shrubs were located along the American River Parkway and 50 shrubs were located along the Sacramento River. Prior to project construction, a qualified biologist would conduct focused surveys of elderberry shrubs within 100 feet of the project area for construction in accordance with the USFWS guidelines.

Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp

1. There is approximately 0.25 acre of land within the construction footprint of the new levee and floodwall that could potentially include vernal pool habitat. This 0.25 acre could be adversely affected from ground disturbing activities, operation of construction vehicles, by construction of the new levee and maintenance road, or due to the alteration of the natural flows of the area due to construction of the new levee.
2. Prior to initiation of any construction activities, field surveys and a wetland delineation would occur to verify the occurrence of vernal pools in the construction footprint and to determine if any nearby vernal pools could be indirectly affected by construction.

Giant Garter Snake (GGS)

1. The East Side Tributaries (NEMDC, Magpie Creek, and Arcade Creek) have some potential GGS habitat, however, the creeks in this area lack year-round water and connectivity to rice fields, a major component of GGS habitat. The closest rice fields are about 5 miles away up the NEMDC and above a pump plant located on the NEMDC just above Dry/Robla Creek. Additionally, Arcade Creek and NEMDC both have segments that include large cover vegetation that would make them undesirable for GGS.

Swainson's Hawk, White-tailed Kite, Purple Martin, Burrowing Owl

1. Approximately 175 acres of riparian habitat used special status avian species for roosting and nesting could be affected by project construction.
2. Approximately 2.5 acres of non-native grassland intermixed with barren ground would be removed or disturbed by the construction activities at the levees. Much of this habitat is within the Sacramento urban area, where native avian species nest and forage along the American and Sacramento Rivers.

Winter-Run Chinook Salmon

1. Implementation of the bank erosion protection measures may result in adverse effects to juvenile and smolt winter-run Chinook salmon and their critical habitat. Construction activities that increase noise, turbidity, and suspended sediment may disrupt feeding or temporarily displace fish from preferred habitat. Physical damage or harassment to listed fish species would be low during the months of construction. Winter-run Chinook salmon are expected to show a long term positive response to project actions in the Sacramento River and American River.

Spring-Run Chinook Salmon

1. Adult spring-run Chinook salmon migrate up the Sacramento River from March through September although most individuals have entered tributary streams by mid-June and will not be affected by construction activities. Therefore, potential for construction-related ARCF project effects will be similar to impacts to winter-run Chinook salmon.

Central Valley Fall-Late Fall-Run Chinook Salmon

1. Fall-/Late Fall-Run Chinook salmon are expected to show a long term positive response to project actions in the Sacramento River and American River standard assessment model (SAM) analysis reaches over the lifetime of the project when both instream woody material (IWM) and planted benches are incorporated into the with-project conditions. Chinook salmon should exhibit a positive response by year 5 in the winter-spring

Central Valley Steelhead

1. Steelhead are expected to show a long term positive response to project actions in the Sacramento River and American River SAM analysis reaches over the lifetime of the project. Steelhead should exhibit a positive response by year 4 in the winter-spring when most juvenile steelhead will be migrating and rearing through the project area.

Green Sturgeon

1. If larvae or juveniles are present during construction, in-water activities could result in localized displacement and possible injury or mortality to individuals that do not readily move away from the channel or nearshore areas. Project actions associated with bank protection measures may increase sediment,

silt, and pollutants, which could adversely affect rearing habitat or reduce food production, such as aquatic invertebrates, for larval and juvenile green sturgeon.

Delta Smelt

1. Potential spawning habitat includes shallow channel edge waters in the Delta and Sacramento River. Construction-related effects include disruption of spawning activities, disturbance or mortality of eggs and newly hatched larvae, and alteration of spawning and incubation habitat. As a result, potential construction-related effects to delta smelt physical habitat would include disruption of spawning activities, disturbance or mortality of eggs and newly hatched larvae, alteration of spawning and incubation habitat, and loss of shallow water habitat for spawning.
2. Juvenile delta smelt may be subject to disturbance or displacement caused by construction activities that increase noise, turbidity, and suspended sediment. Delta smelt may not be readily able to move away from channel or nearshore areas that are directly affected by construction activities (i.e., placement of rock revetment). Larvae may be disrupted during summer months as they migrate downstream to rear in the Delta. Incidental take of delta smelt may occur from direct mortality or injury during a construction activity, or by the impairment of essential behavior patterns (i.e., feeding, escape from predators). In addition, physiological impairment could be caused by toxic substances (i.e., gasoline, lubricants, oil) entering the water. Construction related effects on delta smelt rearing and migration will be minimized by restricting in-water construction activities on the Sacramento River to a general estimated work window between August 1 and November 30. The work window will be adjusted on a site specific basis taking into account presence of juvenile and adult delta smelt as well as any other condition that could impact delta smelt rearing and migration.

a.ii. Mitigation Measures for Potentially Significant Impacts:

Geological Resources

1. Prior to construction, a Stormwater Pollution Protection Plan (SWPPP) would be prepared, and best management practices (BMPs) would be proposed to reduce potential erosion and runoff during rain events.
2. Minimize ground and vegetation disturbance during project construction by establishing designated equipment staging areas, ingress and egress corridors, spoils disposal and soil stockpile areas, and equipment exclusion zones prior to the commencement of any grading operations.
3. Stockpile soil on the landside of the levee reaches, and install sediment barriers (e.g., silt fences, fiber rolls, and straw bales) around the base of stockpiles to intercept runoff and sediment during storm events. If necessary, cover stockpiles with geotextile fabric to provide further protection against wind and water erosion.

4. Install sediment barriers on graded or otherwise disturbed slopes as needed to prevent sediment from leaving the project site and entering nearby surface waters.
5. Install plant materials to stabilize cut and fill slopes and other disturbed areas once construction is complete. Temporary structural BMPs, such as sediment barriers, erosion control blankets, mulch, and mulch tackifier, could be installed as needed to stabilize disturbed areas until vegetation becomes established.

Water Quality

1. Monitor turbidity in the adjacent water bodies, where applicable criteria apply, to determine whether turbidity is being affected by construction and to ensure that construction does not result in a rise in turbidity levels above ambient conditions, in accordance with the Central Valley RWQCB Basin Plan turbidity objectives
2. Prepare a SWPPP, Spill Prevention Control and Countermeasures Plan (SPCCP), and a bentonite slurry spill contingency plan (BSSCP):
 - a. Conduct earthwork during low flow periods (July 1 through November 30).
 - b. To the extent possible, stage construction equipment and materials on the landside of the subject levee reaches in areas that have already been disturbed.
 - c. Minimize ground and vegetation disturbance during project construction by establishing designated equipment staging areas, ingress and egress corridors, spoils disposal and soil stockpile areas, and equipment exclusion zones prior to the commencement of any grading operations.
 - d. Stockpile soil on the landside of the levee reaches, and install sediment barriers (e.g., silt fences, fiber rolls, and straw bales) around the base of stockpiles to intercept runoff and sediment during storm events
 - e. Install sediment barriers on graded or otherwise disturbed slopes as needed to prevent sediment from leaving the project site and entering nearby surface waters.
 - f. Water samples for determining background levels shall be collected in the adjacent water body for each erosion construction site.
 - g. During working hours, the construction activity shall not cause the turbidity in the adjacent water body down current from the construction sites to exceed the Basin Plan turbidity objectives.

Vegetation and Wildlife

1. During the design refinement phase, plans will be evaluated to reduce the impact on vegetation and wildlife to the extent practicable. Refinements that could be implemented to reduce the loss of riparian habitat include reduced footprint, constructing bank protection rather than launchable rock trench whenever

feasible, and designing planting berms in areas where significant riparian habitat exists adjacent to the levee toe.

2. To compensate for the removal of a maximum of 65 acres of riparian habitat, approximately 130 acres of replacement habitat would be created to account for the temporal loss of habitat while newly created habitat is growing.
3. Surveys would be conducted prior to construction to determine if any birds are nesting within 0.5 miles of the construction activities. If nests are located within the vicinity of construction for any given year, coordination with the appropriate resource agencies would occur to determine what action should be taken to reduce impacts. Trees would not be removed if an active nest is found; however, once the young have fledged, the tree can be removed for construction. If survey results determine that no nests are in the vicinity of construction scheduled for that year, construction may commence without further coordination on this issue.
4. Avoidance and minimization measures incorporated as part of the Sacramento River design include compliance with the USACE vegetation policy through a vegetation variance, installation of a planting berm where erosion protection is required, and narrowing of the levee footprint by construction of a retaining wall, when feasible.
5. The vegetation variance would allow waterside trees on the lower half of the slope to remain in place. This would allow approximately 930 trees along 10 miles of the Sacramento River to continue to provide habitat for fish and wildlife species. Along with retaining the trees, additional plantings of small vegetation would be done on the newly constructed berm. Species of plants would be coordinated with National Marine Fisheries Service (NMFS), the United States Fish and Wildlife Service (USFWS), and State and local partners.
6. Off-Site mitigation for the removal of 50 trees in the Arcade Creek area would be done in compliance with the Sacramento City tree ordinance. It is estimated that 2 acres would be required to accommodate the planting of approximately 450 trees.
7. Approximately 16 acres of riparian habitat would be needed to compensate for the removal of the vegetation along the Sacramento River and within the new weir footprint, due to the temporal loss of habitat while the new habitat is establishing. Plantings could be accomplished within the expanded bypass, other nearby available lands, or through the purchase of credits at an approved mitigation bank.

Fisheries

1. Mitigation measures for vegetation and wildlife, and water quality will also apply for fisheries.
2. In-water construction would be restricted to the general estimated work window of August 1 through November 30. For the purpose of this study however, during PED, the work window will be adjusted on a site-specific basis taking into

account periods of low fish abundance, and in-water construction outside the principal spawning and migration season. Typical construction season generally corresponds to the dry season, but construction may occur outside the limits of the dry season, only as allowed by applicable permit conditions.

3. Due to the deleterious effects of numerous chemicals on native resident fish used in construction, if a hazardous materials spill does occur, a detailed analysis will be performed immediately by a registered environmental assessor or professional engineer to identify the likely cause and extent of contamination. This analysis will conform to American Society for Testing and Materials standards, and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the USACE and its contractors will select and implement measures to control contamination, with a performance standard that surface water quality and groundwater quality must be returned to baseline conditions.
4. If mitigation or compensation sites are planned within the Sacramento Bypass for the overall ARCF project, information gained from the 2013 Knaggs Ranch Pilot Study would be reviewed for potential beneficial habitat for native fish species to be incorporated into the sites.

Valley Elderberry Longhorn Beetle (VELB)

1. Mitigation measures for VELB are based on the *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS 1999a). These measures will be implemented to minimize any potential effects on valley elderberry longhorn beetles or their habitat, including restoration and maintenance activities, long-term, protection, and compensation if shrubs cannot be avoided.
2. Elderberry compensation would be planted in the American River Parkway. The USACE has six existing sites which are offsetting previous USACE flood control projects along the lower American River and near Folsom Dam. The USACE will find areas within the lower American River parkway which will either expand existing compensation areas or provide for connectivity between conserved valley elderberry longhorn beetle habitat. Sites within the Parkway will be coordinated with County Parks and the Service during the design phase of the project. Sites will be designed and developed prior to any effects to valley elderberry longhorn beetle habitat. The USACE will create 69.91 acres of riparian habitat which supports valley elderberry longhorn beetle within the lower American River Parkway.
3. If possible, elderberry shrubs would be transplanted during their dormant season (approximately November, after they have lost their leaves, through the first two weeks in February). If transplantation occurs during the growing season, increased mitigation ratios will apply.
4. Any areas that receive transplanted elderberry shrubs and elderberry cuttings will be protected in perpetuity.

5. The USACE will work to develop off-site compensation areas prior to or concurrent with any take of valley elderberry longhorn beetle habitat.
6. Management of these lands will include all measures specified in USFWS's conservation guidelines (1999a) related to weed and litter control, fencing, and the placement of signs.
7. Monitoring will occur for ten consecutive years or for seven non-consecutive years over a 15-year period. Annual monitoring reports will be submitted to USFWS.

Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp

1. Mitigation Measures from the 2004 Biological Opinion from the Magpie Creek Flood Control Project will be implemented to avoid and minimize impacts to potential vernal pools in the vicinity of the Magpie Creek construction area:
2. Prior to any earth-moving activities at the proposed project site, the applicant shall purchase at least 0.5 vernal pool preservation credits within a Service-approved ecosystem preservation bank or fund account.

Giant Garter Snake (GGS)

1. Mitigation measures based on USFWS guidelines for restoration and standard avoidance measures included as appendices in USFWS (1997) will be implemented to minimize effects on giant garter snake habitat that occurs within 200 feet of any construction activity
2. Unless approved otherwise by USFWS, construction will be initiated only during the giant garter snakes' active period (May 1 to October 1, when they are able to move away from disturbance).
3. Construction personnel will participate in USFWS-approved worker environmental awareness program.
4. A giant garter snake survey would be conducted 24 hours prior to construction in potential habitat. Should there be any interruption in work for greater than two weeks, a biologist would survey the project area again no later than 24 hours prior to the restart of work.
5. Giant garter snakes encountered during construction activities will be allowed to move away from construction activities on their own.
6. Movement of heavy equipment to and from the construction site will be restricted to established roadways. Stockpiling of construction materials will be restricted to designated staging areas, which will be located more than 200 feet away from giant garter snake aquatic habitat.
7. Giant garter snake habitat within 200 feet of construction activities will be designated as an environmentally sensitive area and delineated with signs or fencing. This area will be avoided by all construction personnel.

8. Habitat temporarily affected for more than three or more seasons will be restored and twice as much habitat will be created.
9. The USACE has estimated that approximately 15 acres of aquatic habitat (drainage ditches and irrigation canals) and 30 acres of associated upland habitat would be permanently affected due to the widening of the Sacramento Weir and Bypass. Habitat permanently affected in the Sacramento Bypass will be compensated for through the purchase of 135 acres of credits at a USFWS-approved conservation bank. Due to the spatial and temporal loss of habitat, and the lack of permanent on-site replacement, the ecological value associated with doing all mitigation at an off-site location was reduced to an overall 70%habitat value, as stated in the USFWS Biological Opinion.
10. One year of monitoring will be conducted for the temporarily affected areas.
11. The USACE will purchase credits at a conservation bank prior to any permanent disturbance of giant garter snake habitat.

Swainson's Hawk, White-Tailed Kite, Purple Martin, Burrowing Owl

1. Before ground disturbance, all construction personnel would participate in a CDFW-approved worker environmental awareness program. A qualified biologist would inform all construction personnel about the life history of Swainson's hawk and the importance of nest sites and foraging habitat.
2. A breeding season survey for nesting birds would be conducted for all trees and shrubs that would be removed or disturbed which are located within 500 feet (0.5 mile for Swainson's hawk) of construction activities, including grading. Swainson's hawk surveys would be completed during at least two of the following survey periods: January 1 to March 20, March 20 to April 5, April 5 to April 20, and June 10 to July 30 with no fewer than three surveys completed in at least two survey periods, and with at least one of these surveys occurring immediately prior to project initiation (Swainson's Hawk Technical Advisory Committee 2000). Other migratory bird nest surveys could be conducted concurrent with Swainson's hawk surveys with at least one survey to be conducted no more than 48 hours from the initiation of project activities to confirm the absence of nesting. If the biologist determines that the area surveyed does not contain any active nests, construction activities, including removal or pruning of trees and shrubs, could commence without any further mitigation.
3. If active nests are found, the USACE would maintain a 0.25-mile buffer between construction activities and the active nest(s). In addition, a qualified biologist would be present on-site during construction activities to ensure the buffer distance is adequate and the birds are not showing any signs of stress. If signs of stress that could cause nest abandonment are noted, construction activities would cease until a qualified biologist determines that fledglings have left an active nest.
4. Tree and shrub removal, and other areas scheduled for vegetation clearing, grading, or other construction activities would not be conducted during the

nesting season (generally February 15 through August 31 depending on the species and environmental conditions for any given year) . These construction activities could affect them by removing or causing abandonment of active nests of migratory birds protected under the Migratory Bird Treaty Act and California Fish and Game Code.

5. To reduce the impact on migratory birds habitat the USACE will seek a vegetation variance on lower half of the waterside levee slope. Additionally, where bank protection work is performed the sites would be planted with vegetation and trees that over time will provide habitat for the hawks.
6. To compensate for the removal of 134 acres of riparian habitat supporting Western yellow-billed cuckoos, Swainson's hawks, and other migratory birds approximately 268 acres of replacement habitat will be created, as discussed in the vegetation and wildlife section of the FEIR. Prior to the implementation of construction, surveys will be conducted to determine the presence of burrows or signs of burrowing owl presence within the project area. The survey would be conducted in accordance with Appendix D of CDFW's Staff Report on Burrowing Owl Mitigation (CDFG 2012).
7. If potential burrows are present, all on-site construction personnel shall be instructed regarding the potential presence of burrowing owls, identification of these owls and their habitat, and the importance of minimizing impacts on burrowing owls and their habitat.
8. If burrowing owls are observed, coordination would occur with CDFW to determine the appropriate actions to take or any additional avoidance and minimization measures that may need to occur. These measures may include creating a protective buffer around occupied burrows during the duration of the breeding season and biological monitoring of active burrows to ensure that construction activities do not result in adverse effects on nesting burrowing owls.

Winter-run Chinook Salmon, Spring-Run Chinook Salmon, Central Valley Fall-Late Fall-Run Chinook Salmon, Central Valley Steelhead, Green Sturgeon, Delta Smelt

1. Erosion control measures will be implemented (BMPs), including Storm Water Pollution Prevention Program and Water Pollution Control Program, that minimize soil or sediment from entering the river. BMPs shall be followed, monitored for effectiveness, and maintained throughout construction operations to minimize effects to Federally listed fish and their designated critical habitat.
2. Screen any water pump intakes, as specified by NMFS and USFWS screening specifications. Water pumps will maintain an approach velocity of 0.2 feet per second or less when working in areas that may support delta smelt.
3. No grading or altering of the lands within the existing Sacramento Bypass will occur as part of the project.
4. The USACE shall participate in an existing IWG or work with other agencies to participate in a new BPWG to coordinate stakeholder input into future flood risk reduction actions associated with the ARCF GRR.

5. The USACE shall coordinate with NMFS during PED as future flood risk reduction actions are designed to ensure conservation measures are incorporated to the extent practicable and feasible and projects are designed to maximize ecological benefits.
 6. The USACE shall include as part of the Project, a Riparian Corridor Improvement Plan with the overall goal of maximizing the ecological function and value of the existing levee system within the Sacramento Metropolitan Area.
 7. The USACE shall develop a HMMP with an overall goal of ensuring the conservation measures achieve a high level of ecological function and value. The HMMP shall include:
 - a. Specific goals and objectives and a clear strategy for maintaining all of the project conservation elements for the life of the project.
 - b. Measures to be monitored by the USACE for 10 years following construction and shall update their O&M manual to ensure the HMMP is adopted by the local sponsor to ensure the goals and objectives of the conservation measures are met for the life of the project.
 - c. Include specific goals and objectives and a clear strategy for achieving full compensation for all project-related impacts to listed fish species.
 - d. The USACE shall continue to coordinate with NMFS during all phases of construction, implementation, and monitoring by hosting annual meetings and issuing annual reports throughout the construction period as described in the HMMP.
 - e. The USACE shall host an annual meeting and issue annual reports for five years following completion of project construction.
 8. The USACE shall ensure that, for salmon and steelhead, the maximum SAM WRI deficits for each seasonal water surface elevation as determined appropriate with input from the IWG or the BPWG are fully offset through the purchase of credits at a NMFS approved conservation bank (as described in this BA).
 9. The USACE shall minimize the removal of existing riparian vegetation and IWM to the maximum extent practicable, and where appropriate, removed IWM will be anchored back into place or if not feasible, new IWM will be anchored in place.
 10. The USACE shall ensure that the planting of native vegetation will occur as described in the HMMP. All plantings must be provided with the appropriate amount of water to ensure successful establishment.
 11. The USACE shall provide a copy of the Biological Opinion (BO), or similar documentation, to the prime contractor, the prime contractor is responsible for implementing all requirements and obligations on behalf of USACE included in the documents and to educate and inform all other contractors involved in the project as to the requirements of the BO.
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12. A NMFS-approved Worker Environmental Awareness Training Program for construction personnel shall be conducted by the NMFS-approved biologist for all construction workers prior to the commencement of construction activities. Written documentation of the training will be submitted to NMFS within 30 days of the completion of training.
13. The USACE shall consider installing IWM along future flood risk reduction projects associated with the ARCF GRR at 40 to 80 percent shoreline coverage at all seasonal water surface elevations in coordination with the IWG or the BPWG. The purpose is to maximize the refugia and rearing habitats for juvenile fish.
14. The USACE shall protect in place all riparian vegetation on the lower waterside slope of any levee unless removal is specifically approved by NMFS.
15. The USACE shall develop a Vegetation Variance for all elements of the ARCF GRR that are adjacent to habitat that is occupied by federally listed salmon, steelhead and green sturgeon, including the main channel of the Sacramento River (as proposed) and the Sacramento Bypass.
16. The USACE shall develop a Vegetation Variance for all elements of the ARCF GRR that are adjacent to habitat that is occupied by federally listed salmon, steelhead and green sturgeon, including the main channel of the Sacramento River (as proposed) and the Sacramento Bypass.
17. The USACE shall ensure the widening of the Sacramento Bypass is designed and constructed to minimize stranding of fish in the depressions wound within the bypass though grading or construction of drainage channels.
18. The USACE, in coordination with the local sponsor, shall ensure that the Habitat Mitigation and Monitoring Plan for the Sacramento Bypass includes baseline post-project monitoring of fish stranding. The monitoring plan shall be developed in coordination with NMFS.
19. The USACE shall update the O&M manual to incorporate without detrimental effects to flood operations 1) operations of the Sacramento Weir include a plan that allows for ramp down flows in a manner that minimize juvenile fish stranding in the Sacramento Bypass, (2) integration of Sacramento Weir operations with the Yolo Bypass.
20. During Preconstruction Engineering and Design, the USACE, in coordination with the local sponsor, shall coordinate with NMFS to provide an operation of the Sacramento Weir to allow without detrimental effects to flood management operations, for controlled ramp down rates of water into the Sacramento Bypass following peak flows.
21. Additional concerns about mitigation, not considered in a SAM analysis, will be included in the MMP (See Appendix I) along the Sacramento Bypass reach, including potential adult and juvenile passage issues, loss of shoreline riparian vs. gain in floodplain, and contradicting ESA species habitat requirements. These

issues will be considered, and appropriate actions will be taken where possible in coordination with other agencies.

22. USACE proposes to develop a green sturgeon habitat, mitigation, and monitoring plan (HMMP) (Appendix I) to address the long-term negative impacts to green sturgeon designated critical habitat with the specific elements that are described below:
23. The green sturgeon HMMP shall be developed in coordination with the Interagency Ecological Program (IEP) green sturgeon project work team and consulted on with NMFS prior to the construction of any work within the designated critical habitat of sDPS green sturgeon related to the ARCF GRR.
24. The USACE shall either refine the SAM or develop an alternative green sturgeon survival and growth response model based on using and updating the existing Hydrologic Engineering Center Ecosystem Function Model (HEC-EFM) that reflects green sturgeon's preference for benthic habitat.
25. The green sturgeon HMMP shall also be developed with measurable objectives for completely offsetting all adverse impacts to all life stages of sDPS green sturgeon (as modeled using refined approaches described above and considering design refinements that occur in the PED phase of project implementation).
26. The HMMP shall also, restore or compensate for the number of acres of soft bottom benthic substrate for sDPS green sturgeon permanently lost to project construction. This mitigation shall be coordinated with the Interagency Working Group (IWG) or a Bank Protection Working Group (BPWG) and must be carried out within the lower Sacramento River/North Delta in order to offset the adverse modification to designated critical habitat.
27. Mitigation actions shall be initiated prior to the construction activities affecting sDPS green sturgeon and their critical habitat.
28. The sDPS green sturgeon HMMP will include measurable performance standards at agreed upon intervals and will be monitored for a period of at least ten years following construction.
29. The following additional conservation measures would be implemented to reduce the adverse effects to listed Chinook, steelhead, delta smelt, and green sturgeon:
30. In-water construction activities (e.g., placement of rock revetment) will be limited to the work window of August 1 through November 30. If the USACE wants to work outside of this window they will consult with USFWS and NMFS.
31. The USACE will purchase delta smelt credits from a USFWS-approved conservation bank to off-set the loss of 14 acres of shallow water habitat, and 13 acres of spawning habitat. This mitigation is assumed to occur through the purchase of credits at a mitigation bank due to the lack of available real estate in the study area for on-site mitigation. Due to the spatial and temporal loss of habitat, the ecological value associated with doing all mitigation at an off site

location was reduced to an overall 70% habitat value. This reduction is offset by the increase of mitigation credits at ratios specified by USFWS and NMFS in the Biological Opinions. The USACE proposes to purchase a total of 72 credits to ensure that impacts to Delta smelt are fully mitigated.

32. For SRA habitat impacted by construction, the following measures would be implemented to compensate for the habitat loss:
- a. Compensation timing refers to the time between the initiation of construction at a particular site and the attainment of the habitat benefits to protected species from designated compensation sites. In general, compensation time is the time required for on-site plantings to provide significant amounts of shade or structural complexity from instream woody material recruitment. Significant long-term benefits have often been considered as appropriate to offset small short-term losses in habitat for listed species in the past, as long as the overall action contributes to recovery of the listed species. The authority to compensate prior to or concurrent with project construction is given under WRDA 1986 (33 United States Code [USC] §§ 2201–2330).
 - b. For identified designated critical habitat, where feasible all efforts will be made to compensate for impacts where they have occurred or in close proximity. Impacts to designated critical habitat, SRA and instream components combined, and the compensation value of replacement habitat will be based on the interagency approved Standard Assessment Model (SAM) used throughout the Sacramento River basin and Delta flood control system.
 - c. Compensation sites would be monitored, and vegetation would be replaced as necessary based on performance standards in the Mitigation Monitoring Plan (MMP) as detailed in Appendix I of the EIS/EIR.
 - d. Depending on the species of interest (e.g., delta smelt), the severity of the short-term habitat losses due to bank erosion repair actions may not be compensated by long-term gains, whereas longer lived species (e.g., steelhead, Chinook) have longer periods for compensation to be provided. The following compensation time periods (based loosely on life expectancy) should be considered as guidelines for compensation:
 - i. • Green sturgeon, 15 years;
 - ii. • Chinook salmon, 5 years;
 - iii. • Central Valley steelhead, 4 years; and
 - iv. • Delta smelt, 1 year.

E. Determination

The Central Valley Water Board has reviewed and considered the environmental document and supplemental information provided by the Central Valley Flood Protection Board and has reached its own conclusion to approve this Project. The Central Valley Water Board will file a NOD with the SCH within five (5) working days from the issuance of this Order. (California Code of Regulations, Title 14, section 15096.)

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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 (Monthly & Annual Reports):** These reports will be submitted monthly and annually until a Notice of Project Complete Letter is issued.
 - **Part B (Project Status Notifications):** Used to notify the Central Valley Water Board of the status of the individual project schedule that may affect individual project billing.
 - **Part C (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: centralvalleysacramento@waterboards.ca.gov and cc: [Angela Nguyen-Tan@waterboards.ca.gov](mailto:Angela.Nguyen-Tan@waterboards.ca.gov)
 - Include in the subject line of the email:
ATTN: Angela Nguyen-Tan; Project Name; and WDID No. 5A34CR00819

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:** 13 July 2021

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: American River Common Features Programmatic
Permittee : United States Army Corps of Engineers
WDID: 5A34CR00819
Reg. Meas. ID: 441938
Place ID: 871623
Order Effective Date: 13 July 2021
Order Expiration Date: 12 July 2026

VI. Report Type Submitted

A. Part A – Project Reporting

Report Type 1 Monthly Report
Report Type 2 Annual Report

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
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Signature	Date
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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
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*This Report and Notification Cover Sheet must be signed by the Permittee or a duly authorized representative and included with all written submittals.
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A. Part A – Project Reporting

1. Report Type 1 - Monthly Report

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

Describe individual 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 individual project activities and occurrences, including environmental monitoring, surveys, and inspections.
 - iii. Photo Summary**

Provide photos of individual 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

- 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 August. 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. Individual 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 individual 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 individual 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 individual 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 and Monitoring
 - 1) Date of storm water Notice of Termination(s), if applicable.
 - 2) Report status and functionality of all post-construction BMPs.
 - 3) Dates and report of visual post-construction inspection during the rainy season as indicated in XIV.C.4.

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 of notification to the Central Valley Water Board 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** – At least forty-eight (48) hours 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 XV.C.3.
- c. **Report Contents** - As required by the approved water quality monitoring plan or as indicated in XV.C.3.

4. Report Type 9 - Modifications to Project Report

- a. **Report Purpose** - Notifies Central Valley Water Board staff if the individual project, as described in the individual application, 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 individual 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 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 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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The purpose of this Attachment is to comply with Code of Federal Regulations, title 40, section 121.7, subdivision (d), which requires all certification conditions to provide an explanation of why the condition is necessary to assure that any discharge authorized under the certification will comply with water quality requirements, and a citation to federal, state, or tribal law that authorizes the condition. This Attachment uses the same organizational structure as Section XV of the Order, and the statements below correspond with the conditions set forth in Section XV. The other Order Sections are not “conditions” as used in Code of Federal Regulations, title 40, section 121.7.

I. General Justification for Section XV Conditions

Pursuant to Clean Water Act section 401 and California Code of Regulations, title 23, section 3859, subdivision (a) the Central Valley Water Board, when issuing water quality certifications, may set forth conditions to ensure compliance with applicable water quality standards and other appropriate requirements of state law. Under California Water Code section 13160, the State Water Resources Control Board is authorized to issue water quality certifications under the Clean Water Act and has delegated this authority to the executive officers of the regional water quality controls boards for projects within the executive officer’s region of jurisdiction. (California Code of Regulations, title 23, section 3838.)

The conditions within the Order are generally required pursuant to the Central Valley Water Board’s Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fifth Edition, May 2018 (Basin Plan), which was adopted and is periodically revised pursuant to Water Code section 13240. 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. For instance, the Basin Plan includes water quality objectives for chemical constituents, oil and grease, pH, sediment, suspended material, toxicity and turbidity, which ensure protection of beneficial uses.

The State Water Board’s Antidegradation Policy, “Statement of Policy with Respect to Maintaining High Quality Waters in California,” Resolution No. 68-16, requires that the quality of existing high-quality water be maintained unless any change will be consistent with the maximum benefit to the people of the state, will not unreasonably affect present or anticipated future beneficial uses of such water, and will not result in water quality less than that prescribed in water quality control plans or policies. The Antidegradation Policy further requires best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the state will be maintained. The Basin Plan incorporates this Policy. The state Antidegradation Policy incorporates the federal Antidegradation Policy (40 C.F.R. section 131.12 (a)(1)), which requires “[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.”

The State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Dredge or Fill Procedures), adopted pursuant to Water Code

sections 13140 and 13170, authorize approval of dredge or fill projects only if the demonstrations set forth in Section IV.B.1 of the Dredge or Fill Procedures have been satisfied.

California Code of Regulations, title 23, sections 3830 et seq. set forth state regulations pertaining to water quality certifications. In particular, section 3856 sets forth information that must be included in water quality certification requests, and section 3860 sets forth standard conditions that shall be included in all water quality certification actions.

Finally, Water Code sections 13267 and 13383 authorize the regional and state boards to establish monitoring and reporting requirements for persons discharging or proposing to discharge waste.

II. Specific Justification for Section XV Conditions

A. Reporting and Notification Requirements

1. Request for Authorization

Authorization under the Order is granted based on the individual application submitted. The Permittee is required to detail the scope of project impacts in a complete application pursuant to California Code of Regulations, title 23, section 3856, subdivision (h). Pursuant to Water Code section 13260, subdivision (c), each person discharging waste, or proposing to discharge waste shall file a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge. Pursuant to Water Code section 13264, subdivision (a), the Permittee is prohibited from initiating the discharge of new wastes, or making material changes to the character, volume, and timing of waste discharges authorized herein without filing a report required by Water Code section 13260 or its equivalent for certification actions under California Code of Regulations, title 23, section 3856.

2. Project Reporting

3. Project Status Notifications

The reporting and notification conditions under Sections A.2 and A.3 are required to provide the Central Valley Water Board necessary project information and oversight to ensure project discharges are complying with applicable Basin Plan requirements. These monitoring and reporting requirements are consistent with the Central Valley Water Board's authority to investigate the quality of any waters of the state and require necessary monitoring and reporting pursuant to Water Code sections 13267 and 13383. Water Code section 13267 authorizes the regional boards to require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste to provide technical or monitoring program reports required by the regional board. Water Code section 13383 authorizes the regional boards to establish monitoring, inspection, entry, reporting, and other recordkeeping requirements, as authorized by Water Code section 13160, for any person who discharges, or proposes to discharge, to navigable waters.

4. Conditional Notifications and Reports

a. Accidental Discharges of Hazardous Materials

Conditions under Section A.4.a related to notification and reporting requirements in the event of an accidental discharge of hazardous materials are required pursuant to section 13271 of the Water Code, which requires immediate notification of the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the state toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.16) of Chapter 7 of Division 1 of Title 2 of the Government Code. "Hazardous materials" is defined under Health and Safety Code section 25501. These reports related to accidental discharges ensure that corrective actions, if any, that are necessary to minimize the impact or clean up such discharges can be taken as soon as possible.

b. Violation of Compliance with Water Quality Standards

c. In-Water work and Diversions

Conditions under Section A.4.b and A.4.c related to monitoring and reporting on water quality standard compliance and in-water work and diversions are required to provide the Central Valley Water Board necessary project information and oversight to ensure project discharges are complying with applicable water quality objectives under the Basin Plan. These monitoring and reporting requirements are consistent with the Central Valley Water Board's authority to investigate the quality of any waters of the state and require necessary monitoring and reporting pursuant to Water Code sections 13267 and 13383. Water Code section 13267 authorizes the regional boards to require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste to provide technical or monitoring program reports required by the regional board. Water Code section 13383 authorizes the regional boards to establish monitoring, inspection, entry, reporting, and other recordkeeping requirements, as authorized by Water Code section 13160, for any person who discharges, or proposes to discharge, to navigable waters.

d. Modifications to Project

Authorization under this Order is granted based on the application and supporting information submitted. Conditions under Section A.4.d are necessary to ensure that if there are modifications to the project, that the Order requirements remain applicable. The Permittee is required to detail the scope of project impacts in a complete application pursuant to California Code of Regulations, title 23, section 3856, subdivision (h). Pursuant to Water Code section 13260, subdivision (c), each person discharging waste, or proposing to discharge waste shall file a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge. Pursuant to Water Code section 13264, subdivision (a), the Permittee is prohibited from initiating the discharge of new wastes, or making material changes to the character, volume, and timing of waste discharges authorized herein without filing a

report required by Water Code section 13260 or its equivalent for certification actions under California Code of Regulations, title 23, section 3856.

- e. Transfer of Property Ownership
- f. Transfer of Long-Term BMP Maintenance

Authorization under this Order is granted based on the application information submitted, including identification of the legally responsible party. Conditions under Sections A.4.e and A.4.f are necessary to confirm whether the new owner wishes to assume legal responsibility for compliance with this Order. If not, the original discharger remains responsible for compliance with this Order. Pursuant to Water Code section 13260, subdivision (c), each person discharging waste, or proposing to discharge waste shall file a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge. Pursuant to Water Code section 13264, subdivision (a), the Permittee is prohibited from initiating the discharge of new wastes, or making material changes to the character, volume, and timing of waste discharges authorized herein without filing a report required by Water Code section 13260 or its equivalent for certification actions under California Code of Regulations, title 23, section 3856.

B. Water Quality Monitoring

Conditions under Section B related to water quality monitoring are required to confirm that best management practices required under this Order are sufficient to protect beneficial uses and to comply with water quality objectives to protect those uses under the Basin Plan. Applicable water quality objectives and beneficial uses are identified in the Order. These monitoring requirements are consistent with the Central Valley Water Board's authority to investigate the quality of any waters of the state and require necessary monitoring and reporting pursuant to Water Code sections 13267 and 13383. Water Code section 13267 authorizes the regional boards to require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste to provide technical or monitoring program reports required by the regional board. Water Code section 13383 authorizes the regional boards to establish monitoring, inspection, entry, reporting, and other recordkeeping requirements, as authorized by Water Code section 13160, for any person who discharges, or proposes to discharge, to navigable waters.

C. Standard

1. This Order is subject to modification or revocation

This is a standard condition that "shall be included as conditions of all water quality certification actions" pursuant to California Code of Regulations, title 23, section 3860(a). This condition places the permittee on notice that the certification action may be modified or revoked following administrative or judicial review.

2. This Order is not intended and shall not be construed to apply to any activity involving a hydroelectric facility

This is a standard condition that “shall be included as conditions of all water quality certification actions” pursuant to California Code of Regulations, title 23, section 3860(b). This condition clarifies the scope of the certification’s application.

3. This Order is conditioned upon total payment of any fee

This is a standard condition that “shall be included as conditions of all water quality certification actions” pursuant to California Code of Regulations, title 23, section 3860(c). This fee requirement condition is also required pursuant to California Code of Regulations, section 3833(b).

D. General Certification Conditions

1. The Permittee shall obtain
2. The Central Valley Water Board

Conditions under D.1 and D.2 relate to eligibility for individual projects under this Order. Authorization under the Order is granted based on the individual application submitted. The Permittee is required to detail the scope of project impacts in a complete application pursuant to California Code of Regulations, title 23, section 3856, subdivision (h). Pursuant to Water Code section 13260, subdivision (c), each person discharging waste, or proposing to discharge waste shall file a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge. Pursuant to Water Code section 13264, subdivision (a), the Permittee is prohibited from initiating the discharge of new wastes, or making material changes to the character, volume, and timing of waste discharges authorized herein without filing a report required by Water Code section 13260 or its equivalent for certification actions under California Code of Regulations, title 23, section 3856. Finally, pursuant to California Code of Regulations, title 23, section 3836, the Board may request further information of project applicants in order to ensure compliance with appropriate requirements.

E. General Compliance

1. Failure to comply with any condition of this Order

The condition under Section E.1 places the Permittee on notice of any violations of Order requirements. Pursuant to Water Code section 13385, subdivision (a)(2), a person who violates any water quality certification issued pursuant to Water Code section 13160 shall be liable civilly.

2. Permitted actions must not cause a violation of any applicable water quality standards

Conditions under Section E.2 related to compliance with water quality objectives and designated beneficial uses are required pursuant to the Central Valley Water Board's Basin Plan. The Basin Plan's water quality standards 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. The Antidegradation Policy requires that the quality of existing high-quality water be maintained unless any change will be consistent with the maximum benefit to the people of the state, will not unreasonably affect present or anticipated future beneficial uses of such water, and will not result in water quality less than that prescribed in water quality control plans or policies. The Antidegradation Policy further requires best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the state will be maintained. Applicable beneficial uses and water quality objectives to protect those uses include the Chemical Constituents (Basin Plan, Section 3.1.3), Oil and Grease (Basin Plan, Section 3.1.10), pH (Basin Plan, Section 3.1.11), Sediment (Basin Plan, 3.1.15), Suspended Material (3.1.17), Toxicity (Basin Plan, 3.1.20), and Turbidity (Basin Plan, Section 3.1.21) water quality objectives.

3. The Permittee must, at all times, fully comply with engineering plans, specifications, and technical reports

Authorization under the Order is granted based on the application and supporting information submitted. The Permittee is required to detail the project description in a complete application pursuant to California Code of Regulations, title 23, section 3856, subdivision (h). Pursuant to Water Code section 13260, subdivision (c), each person discharging waste, or proposing to discharge waste shall file a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge. Pursuant to Water Code section 13264, subdivision (a), the Permittee is prohibited from initiating the discharge of new wastes, or making material changes to the character, volume, and timing of waste discharges authorized herein without filing a report required by Water Code section 13260 or its equivalent for certification actions under California Code of Regulations, title 23, section 3856. Finally, compliance with conditions of the Order ensures that the Project will comply with all water quality standards and other appropriate requirements as detailed herein. (California Code of Regulations, title 23, section 3859, subdivision (a).)

4. The Permittee shall adhere to all requirements in the mitigation monitoring and reporting program

This condition ensures mitigation measures required to lessen the significance of impacts to water quality identified pursuant to California Environmental Quality Act review are implemented and enforceable. Pursuant to California Code of Regulations, title 14, section 15097, subdivision (a), a public agency shall adopt a program for monitoring and reporting on mitigation measures imposed to mitigate or avoid significant environmental effects to ensure implementation.

5. Construction General Permit Requirement

Permittees are required to obtain coverage under 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. This is required pursuant to Clean Water Act sections 301 and 402 which prohibit certain discharges of storm water containing pollutants except in compliance with an NPDES permit. (33 U.S.C. section 1311, and 1342(p); 40 C.F.R. pts. 122, 123, and 124.)

F. Administrative

1. Signatory requirements for all document submittals

The condition for signatory requirements is required pursuant to Water Code section 13267, which requires any person discharging waste that could affect the quality of waters to provide to the Central Valley Water Board, under penalty of perjury, any technical or monitoring program reports as required by the Central Valley Water Board. The signatory requirements are consistent with 40 C.F.R. section 122.22.

2. This Order does not authorize any act which results in the taking of a threatened, endangered, or candidate species

Pursuant to the California Endangered Species Act (Fish & Wildlife Code, sections 2050 et seq.) and federal Endangered Species Act (16 U.S.C. sections 1531 et seq.), the Order does not authorize any act which results in the taking of a threatened, endangered, or candidate species. In the event a Permittee requires authorization from the state or federal authorities, California Code of Regulations, title 23, section 3856(e), requires that copies be provided to the Central Valley Water Board of “any final and signed federal, state, and local licenses, permits, and agreements (or copies of the draft documents, if not finalized) that will be required for any construction, operation, maintenance, or other actions associated with the activity. If no final or draft document is available, a list of all remaining agency regulatory approvals being sought shall be included.”

3. The Permittee shall grant Central Valley Water Board staff

The condition related to site access requirements is authorized pursuant to the Central Valley Water Board’s authority to investigate the quality of any waters of the state within its region under Water Code section 13267 and 13383. Water Code section 13267, subdivision (c) provides that “the regional board may inspect the facilities of any person to ascertain whether the purposes of this division are being met and waste discharge requirements are being complied with.” Water Code section 13383 authorizes the regional boards to establish monitoring, inspection, entry, reporting, and other

recordkeeping requirements, as authorized by Water Code section 13160, for any person who discharges, or proposes to discharge, to navigable waters.

4. A copy of this Order shall be provided to any consultants, contractors, and subcontractors

This Condition ensures any agent of the Permittee is aware of Order requirements. Such conditions within the Order are necessary to ensure that all activities will comply with applicable water quality standards and other appropriate requirements (33 U.S.C. section 1341; California Code of Regulations, title 23, section 3859, subdivision (a)) and cannot be adhered to if the Permittees' agents are unaware of applicable requirements. These conditions are necessary to ensure compliance with applicable water quality objectives and protection of beneficial uses found in the Basin Plan, adopted pursuant to Water Code section 13240, and detailed in the Order.

5. A copy of this Order must be available at the Project site(s) during construction

This Condition ensures any agent of the Permittee is aware of Order requirements. Such conditions within the Order are necessary to ensure that all activities will comply with applicable water quality standards and other appropriate requirements (33 U.S.C. section 1341; California Code of Regulations, title 23, section 3859, subdivision (a)) and cannot be adhered to if the Permittees' agents are unaware of applicable requirements. These conditions are necessary to ensure compliance with applicable water quality objectives and protection of beneficial uses found in the Basin Plan, adopted pursuant to Water Code section 13240, and detailed in the Order.

6. Lake or Streambed Alteration Agreement

This condition is required pursuant to California Code of Regulations, title 23, section 3856, subdivision (e), which requires that copies be provided to the Central Valley Water Board of "any final and signed federal, state, and local licenses, permits, and agreements (or copies of the draft documents, if not finalized) that will be required for any construction, operation, maintenance, or other actions associated with the activity. If no final or draft document is available, a list of all remaining agency regulatory approvals being sought shall be included."

G. Construction

1. Dewatering

Conditions related to dewatering and diversions ensure protection of beneficial uses during construction activities. Work in waters of the state and temporary diversions must not cause exceedances of water quality objectives; accordingly, these conditions require implementation of best practicable treatments and controls to prevent pollution and nuisance, and to maintain water quality consistent with the Basin Plan and Antidegradation Policy. Further and consistent with the Dredge or Fill Procedures, section IV.A.2.c, water quality monitoring plans are required for any in-water work.

Finally, dewatering activities may require a Clean Water Act section 402 permit or separate Waste Discharge Requirements under Water Code section 13263 for dewatering activities that result in discharges to land.

Conditions related to water rights permits are required pursuant to California Code of Regs, title 23, section 3856(e), which requires complete copies of any final and signed federal, state, or local licenses, permits, and agreements (or copies of drafts if not finalized) that will be required for any construction, operation, maintenance, or other actions associated with the activity.

Conditions related to monitoring and reporting are required to provide the Central Valley Water Board necessary project information and oversight to ensure project discharges are complying with applicable Basin Plan requirements. These monitoring and reporting requirements are consistent with the Central Valley Water Board's authority to investigate the quality of any waters of the state and require necessary monitoring and reporting pursuant to Water Code sections 13267 and 13383. Water Code section 13267 authorizes the regional boards to require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste to provide technical or monitoring program reports required by the regional board. Water Code section 13383 authorizes the regional boards to establish monitoring, inspection, entry, reporting, and other recordkeeping requirements, as authorized by Water Code section 13160, for any person who discharges, or proposes to discharge, to navigable waters.

2. Directional Drilling – Not Applicable
3. Dredging – Not Applicable

4. Fugitive Dust

This condition is required to assure that the discharge from the Project will comply with water quality objectives established for surface waters, including for chemical constituents and toxicity. (Basin Plan, Sections 3.1.3 & 3.1.20.) Chemicals used in dust abatement activities can result in a discharge of chemical additives and treated waters to surface waters of the state. Therefore, dust abatement activities shall be conducted so that sediment or dust abatement chemicals are not discharged into waters of the state and do not adversely affect beneficial uses. (Basin Plan, Section 2.1; Dredge or Fill Procedures, Section IV.B.1.)

5. Good Site Management “Housekeeping”

Conditions related to site management require best practices to prevent, minimize, and/or clean up potential construction spills, including from construction equipment. For instance, fuels and lubricants associated with the use of mechanized equipment have the potential to result in toxic discharges to waters of the state in violation of water quality standards, including the toxicity and floating material water quality objectives.

(Basin Plan, Sections 3.1.7 & 3.1.20.) This condition is also required pursuant to Water Code section 13264, which prohibits any discharge that is not specifically authorized in this Order. Among other requirements, Section IV.B.1 of the Dredge or Fill Procedures requires that Project impacts will not cause or contribute to a degradation of waters; or violate water quality standards.

6. Hazardous Materials

Conditions related to toxic and hazardous materials are necessary to assure that discharges comply with applicable water quality objectives under the Basin Plan, adopted under section 13240 of the Water Code, including the narrative toxicity and chemical constituents water quality objectives. (Basin Plan, Sections 3.1.3, 3.1.20.) Further, conditions related to concrete/cement are required pursuant to the Basin Plan's pH water quality objective. (Basin Plan, Section 3.1.11.)

7. Invasive Species and Soil Borne Pathogens

Conditions related to invasive species and soil borne pathogens are required to ensure that discharges will not violate any water quality objectives under the Basin Plan, adopted under Water Code section 13240 of the Water Code. Invasive species and soil borne pathogens adversely affect beneficial uses designated in the Basin Plan, such as rare, threatened, or endangered species; wildlife habitat; and preservation of biological habitats of special significance. (See Basin Plan, section 2.1.) Among other requirements, Section IV.B.1 of the Dredge or Fill Procedures requires that Project impacts will not contribute to a net loss of the overall abundance, diversity, and condition of aquatic resources; cause or contribute to a degradation of waters; or violate water quality standards.

8. Post-Construction Storm Water Management

Conditions related to post-construction stormwater management are required to comply with the Basin Plan and to assure that the discharge complies with applicable water quality objectives. Post-rain erosion and sedimentation problems can contribute to significant degradation of the waters of the state; therefore, it is necessary to take corrective action to eliminate such discharges in order to avoid or minimize such degradation. Implementation of control measures and best management practices described in the conditions will assure compliance with water quality objectives including for floating material, sediment, turbidity, temperature, suspended material, and settleable material. (Basin Plan, Sections 3.1.7, 3.1.15, 3.1.16, 3.1.17, 3.1.19, 3.1.21.) Among other requirements, Section IV.B.1 of the Dredge or Fill Procedures requires that Project impacts will not contribute to a net loss of the overall abundance, diversity, and condition of aquatic resources; cause or contribute to a degradation of waters; or violate water quality standards.

9. Roads

These conditions are required to assure that discharges will comply with water quality standards within the Basin Plan. Specifically, activities associated with road

maintenance have the potential to exceed water quality objectives for oil and grease, pH, sediment, settleable materials, temperature, and turbidity. (Basin Plan, Sections 3.1.10, 3.1.11, 3.1.15, 3.1.16, 3.1.19, 3.1.21.) Further, these conditions are required to assure that they do not result in adverse impacts related to hydromodification or create barriers to fish passage and spawning activities. Among other requirements, Section IV.B.1 of the Dredge or Fill Procedures requires that Project impacts will not contribute to a net loss of the overall abundance, diversity, and condition of aquatic resources; cause or contribute to a degradation of waters; or violate water quality standards.

10. Sediment Control

Conditions related to erosion and sediment control design requirements are required to sustain fluvial geomorphic equilibrium. Improperly designed and installed BMPs result in excess sediment, which impairs surface waters, adversely affect beneficial uses, and results in exceedance of water quality objectives in the Basin Plan, including for sediment and turbidity. (Basin Plan, Sections 3.1.15 & 3.1.21.) Among other requirements, Section IV.B.1 of the Dredge or Fill Procedures requires that Project impacts will not contribute to a net loss of the overall abundance, diversity, and condition of aquatic resources; cause or contribute to a degradation of waters; or violate water quality standards.

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11. Stabilization/Erosion Control

Conditions related to erosion and sediment control design requirements are required to sustain fluvial geomorphic equilibrium. Improperly designed and installed BMPs result in excess sediment, which impairs surface waters, adversely affect beneficial uses, and results in exceedance of water quality objectives in the Basin Plan, including for sediment. (Basin Plan, Section 3.1.15.) Among other requirements, Section IV.B.1 of the Dredge or Fill Procedures requires that Project impacts will not contribute to a net loss of the overall abundance, diversity, and condition of aquatic resources; cause or contribute to a degradation of waters; or violate water quality standards.

12. Storm Water

Post-rain erosion and sedimentation problems can contribute to significant degradation of the waters of the state; therefore, it is necessary to take corrective action to eliminate such discharges in order to avoid or minimize such degradation. Implementation of control measures and best management practices described in the condition will assure compliance with water quality objectives including chemical constituents, floating material, sediment, turbidity, temperature, suspended material, and settleable material within the Basin Plan. (Basin Plan, Sections 3.1.1, 3.1.7, 3.1.15, 3.1.16, 3.1.17, 3.1.19, 3.1.21.) Among other requirements, Section IV.B.1 of the Dredge or Fill Procedures requires that Project impacts will not cause or contribute to a degradation of waters or violate water quality standards.

H. Site Specific – Not Applicable

I. Total Maximum Daily Load (TMDL) - Not Applicable

J. Mitigation for Temporary Impacts

The conditions under section J require restoration of temporary impacts to waters of the state. Conditions in this section related to restoration and/or mitigation of temporary impacts are consistent with the Dredge or Fill Procedures, which requires “in all cases where temporary impacts are proposed, a draft restoration plan that outlines design, implementation, assessment, and maintenance for restoring areas of temporary impacts to pre-project conditions.” (Dredge or Fill Procedures section IV. A.2(d) & B.4.)

Technical reporting and monitoring requirements under this condition are consistent with the Central Valley Water Board’s authority to investigate the quality of any waters of the state and require necessary reporting and monitoring pursuant to Water Code sections 13267 and 13383.

K. Compensatory Mitigation for Permanent Impacts

The conditions under Section K regarding compensatory mitigation for permanent impacts ensure permanent physical loss and permanent ecological degradation of waters of the state are adequately mitigated. These conditions are necessary to ensure compliance with state and federal anti-degradation policies and are consistent with Section IV.B.1.a of the Dredge or Fill Procedures, which requires that the Water Boards will approve a project only after it has been determined that a sequence of actions has been taken to first avoid, then to minimize, and lastly compensate for adverse impacts that cannot be practicably avoided or minimized. (See also California Code of Regulations, section 3856, subdivision (h) [requiring submittal of proposed mitigation and description of steps taken to avoid, minimize, or compensate].) These compensatory mitigation conditions are also consistent with Executive Order W-59-93 commonly referred to as California’s “No Net Loss” Policy for wetlands. The objective of the No Net Loss Policy is to ensure no overall net loss of and a long-term net gain in the quantity, quality, and permanence of wetland acreage and values in California. Further, compensatory mitigation requirements must comply with subpart J of the Supplemental State Guidelines. Conditions related to financial assurances are also required to ensure that compensatory mitigation will be provided. (Dredge or Fill Procedures, section IV.B.5.f.)