



Central Valley Regional Water Quality Control Board

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER

Effective Date: 22 December 2023

Expiration Date: 22 December 2028

Program Type: Fill/Excavation

Project Type: Data Collection

Project: Shasta Dam Seismic Stability Evaluation Project (Project)

Applicant: Bureau of Reclamation

Applicant Contact: Donald Bader
Bureau of Reclamation
16349 Shasta Dam Boulevard
Shasta Lake, CA 96019
Phone: (530) 275-1554
Email: dbader@usbr.gov

Applicant's Agent: Laurie Larson
Bureau of Reclamation
16349 Shasta Dam Boulevard
Shasta Lake, CA 96019
Phone: (530) 247-8607
Email: LLarson@usbr.gov

Water Board Staff: Daniel Warner
Water Resource Control Engineer
364 Knollcrest Drive, Suite 205
Redding, CA 96002
Phone: (530) 224-4848
Email: Daniel.Warner@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 (530) 224-4845 and ask to speak with the Water Quality Certification Unit Supervisor.

Reg. Meas. ID:	455070
Place ID:	891292
WDID No.:	5A45CR00653
	NWP 6 and NWP 14

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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 Bureau of Reclamation (hereinafter Permittee) for the Project. This Order is for the purpose described in application and supplemental information submitted by the Permittee. The application was received on 17 November 2023. The application was deemed complete on 15 December 2023.

II. Public Notice

The Central Valley Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 from 22 November 2023 to 6 December 2023. The Central Valley Water Board did not receive any comments during the comment period.

III. Project Purpose

The Project purpose is to gather geologic and geotechnical data at the Lower Wing Dam (LWD) of Shasta Dam to determine if embankment zones will remain intact during seismic activity and predict its response during seismic events. This knowledge is integral to the Permittee's operations at Shasta Dam.

IV. Project Description

The proposed project includes instrumented density testing, sonic drilling, hollow stem auger drilling, test pitting, slotted pipe piezometer readings, and surface and downhole seismic surveys. Investigations will be located on the crest of the LWD and on the upstream slope of the LWD (within reservoir).

The Project will include three instrumented Becker Penetration Test (iBPT) soundings, one Sonic drill hole, ten hollow stem auger drill holes, one slotted pipe piezometer installed downstream of the LWD's concrete cutoff core wall, three downhole seismic tests, three p-wave and s-wave seismic refraction surveys, two test pits, and a gravel access road as described:

- iBPT soundings consist of instruments driven into the subsurface using a truck-mounted drill rig. The instruments are attached to drill rods, which are driven into the subsurface using a large, heavy "hammer" mounted on a drill rig. The instruments measure the amount of energy used to penetrate subsurface materials. Drill cuttings are not produced.
- Sonic drilling consists of a hollow sampling tube that is driven into the subsurface using high frequency vibration that advances the ring-shaped drill bit at the end of the sampling tube. Samples are collected as the drill bit and tube are advanced. Samples are extruded into plastic sleeves and are sent to the laboratory for geotechnical properties testing.
- Hollow stem auger drilling consists of hollow augers with a ring-type drill bit at the bottom of the augers. A central drill bit is lowered inside the augers and is

used to advance the augers. Once at the predetermined test depth, the center drill bit is removed and sample tubes and/or Standard Penetration Tests (SPT) are performed. Soil cores are generated and placed in boxes for transport and long-term storage.

- A 2-inch-diameter PVC slotted pipe will be installed to serve as a well in one of the LWD crest holes. The well will be used to monitor potential groundwater levels downstream of the LWD's concrete cutoff core wall. Well measurements will be used to determine if an embankment zone is saturated and if the water levels are related to changes in reservoir water levels.
- Downhole seismic tests will be performed in three drill holes located on the upstream face bench. A 3-inch diameter solid PVC pipe will be installed in each of the three holes. The annulus between the outside of the PVC and the drill hole sidewalls will be grouted with cement-bentonite grout. A seismic instrument will be used inside the PVC pipes to measure seismic velocities of the adjacent embankment zones. The instrument creates a small seismic source by "pinging" the inside of the PVC pipe. Receivers in the instrument then record seismic wave velocities.
- Seismic refraction surveys will be performed on the LWD crest and along the upstream bench. These surveys consist of producing a small seismic source and measuring seismic velocities with equipment placed on the ground surface. The seismic source is created by hitting a sledgehammer on a metal plate placed on the ground. Seismic waves reflect off subsurface materials and are recorded by a string of geophones placed in the ground. The geophones have a 2-inch-long spike that is pushed into the ground.
- Drill hole diameters will range from 10 to 12-inches diameter and extend to a depth ranging from 50 to 150 feet, depending on the zone of interest. All drill holes will be backfilled with a cement-bentonite grout mixture that is formulated to match the density of the surrounding in situ material after solidification.
- Two test pits will be excavated on the upstream face of the LWD within the access road after drilling activities are complete. The test pits will be excavated to a maximum depth of 20 feet below the ground surface, and will be square shaped, measuring 12 feet per side. Shoring will be used to prevent sidewalls from caving in. After the test pits are studied by geologists and laboratory samples taken, they will be backfilled with excavated materials and compacted.
- To access the LWD sampling locations, the Permittee will create an access point by removing a portion of the concrete parapet wall located at the top of the upstream slope of the LWD embankment. To allow equipment access to the wall, gravel will be placed on the turf between the paved road (Lake Blvd.) and the parapet wall. The gravel access path will measure approximately 15 feet wide and 250 feet in length. A 20.5-foot-wide section of the wall will be

removed by saw cutting horizontally along the base of the wall between two vertical construction joints. Concrete debris will be hauled off-site.

- After removing a section of the concrete parapet wall, the Permittee will import fill material to construct a ramp leading down to a bench that will be cut into the upstream slope of the LWD. The ramp will begin at the removed parapet wall (elevation 1080 feet) and continue to the proposed bench (elevation 1060 feet). The ramp will be constructed of imported fill (aggregate road base) and together with the bench, will be approximately 400 feet long and 16 feet wide.
- The bench will be horizontal/flat at an elevation of about 7 feet below the maximum reservoir elevation. The bench will be cut into the embankment, commencing at the base of the ramp by using an excavator to relocate riprap which will serve as the foundation for the downslope half of the bench. The excavator will cut into the upslope half of the bench and the removed embankment material will be placed on top of the relocated riprap. Thus, the downstream half of the bench will consist of relocated riprap and embankment material, and the upstream half of the bench will consist of in-place embankment. The Permittee anticipates removing approximately 820 cubic yards of material on the upslope half of the bench and placing 125 cubic yards of material on the downslope half of the bench, for a total disturbance area of 0.30 acres (all estimates are for below the Ordinary High Water Mark of 1069.8 MSL). No additional material from outside sources will be used to construct the bench.
- All work will be performed when the reservoir level is lower than the bench. It is preferable for the reservoir to be at a higher elevation to facilitate saturation of the embankment prior to drilling the crest holes to allow for penetration testing and sampling in saturated soil conditions. Due to the complexity of sampling techniques and reservoir operation, field work may be performed over three or more water years, starting in 2023.
- Any required staging will be on existing roadways or parking areas supporting engineered fill. The Permittee does not anticipate the need for traffic control or lane closures on either Lake Boulevard or Shasta Dam Access Rd.
- Once investigations are complete, drill holes will be backfilled with cement-bentonite grout and the upstream slope will be restored using an excavator to replace and recompact the excavated embankment material and relocated riprap. Gravel will be removed and stockpiled at the Permittee's Operation and Maintenance yard, located about a half mile away. The parapet wall will be casted and fully repaired.

V. Project Location

Address: Shasta Dam Boulevard

County: Shasta County

Assessor's Parcel Number: 065-510-001

Nearest City: Shasta Lake

Section 15, Township 33 North, Range 5 West, MDB&M.

Latitude: 40.7162° and Longitude: -122.4164°

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

VI. Project Impact and Receiving Waters Information

The Project is located within the jurisdiction of the Central Valley Water Board. Receiving waters and groundwater potentially impacted by this Project are protected in accordance with the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fifth Edition, February 2019 (Basin Plan). The plan for the region and other plans and policies may be accessed at the [State Water Resources Control Board's Plans and Policies Web page](http://www.waterboards.ca.gov/plans_policies/) (http://www.waterboards.ca.gov/plans_policies/). The Basin Plan includes water quality standards, which consist of existing and potential beneficial uses of waters of the state, water quality objectives to protect those uses, and the state and federal antidegradation policies.

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

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

VII. Description of Direct Impacts to Waters of the State

Total Project fill/excavation quantities for all impacts are summarized in Table 1.

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

Aquatic Resources Type	Acres	Cubic Yards	Linear Feet
Lake	0.30	945	365

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

VIII. Description of Indirect Impacts to Waters of the State – Not Applicable**IX. Avoidance and Minimization**

To minimize the potential effects of construction on water quality and resources, the Permittee shall implement all measures required as described in the Order and in the Permittee's application and supplemental materials.

X. Compensatory Mitigation

No compensatory mitigation is required as no permanent impacts will occur. To the extent feasible, the Permittee is required to restore and stabilize the area following disturbance.

XI. California Environmental Quality Act (CEQA)

The Central Valley Water Board has determined that the Project is exempt from review under CEQA pursuant to California Code of Regulations, Title 14, section 15061. Specifically, the issuance of this Order and the activities described herein meet the exemption criteria under California Code of Regulations, Title 14, section 15304, Minor Alterations to Land.

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. Conditions

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

A. Authorization

Impacts to waters of the state shall not exceed quantities shown in Table 1.

B. Reporting and Notification Requirements

The following section details the reporting and notification types and timing of submittals. Requirements for the content of these reporting and notification types are detailed in Attachment D, including specifications for photo and map

documentation during the Project. Written reports and notifications must be submitted using the Reporting and Notification Cover Sheet located in Attachment D, which must be signed by the Permittee or an authorized representative.

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

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

1. Project Reporting

- a. **Monthly Reporting:** The Permittee must submit a Monthly Report to the Central Valley Water Board on the **1st day of each month** beginning the month after the submittal of the Commencement of Construction Notification. Monthly reporting shall continue until the Central Valley Water Board issues a Notice of Project Complete Letter to the Permittee.
- b. **Annual Reporting:** The Permittee shall submit an Annual Report each year on the 1st day of the month, one year after the effective date of the Order. Annual reporting shall continue until the Central Valley Water Board issues a Notice of Project Complete Letter to the Permittee.

2. Project Status Notifications

- a. **Commencement of Construction:** The Permittee shall submit a Commencement of Construction Report at least seven (7) days prior to start of initial ground disturbance activities.
- b. **Request for Notice of Completion of Discharges Letter:** The Permittee shall submit a Request for Notice of Completion of Discharges Letter following completion of active Project construction activities, including any required restoration and permittee-responsible mitigation. This request shall be submitted to the Central Valley Water Board staff within thirty (30) days following completion of all Project construction activities. Upon acceptance of the request, Central Valley Water Board staff shall issue a Notice of Completion of Discharges Letter to the Permittee which will end the active discharge period.
- c. **Request for Notice of Project Complete Letter:** The Permittee shall submit a Request for Notice of Project Complete Letter when construction and/or any post-construction monitoring is complete, and no further Project activities will occur. Completion of post-construction monitoring shall be determined by Central Valley Water Board staff and shall be contingent on successful attainment of restoration and mitigation performance criteria. This request shall be submitted to Central Valley

Water Board staff within thirty (30) days following completion of all Project activities. Upon approval of the request, the Central Valley Water Board staff shall issue a Notice of Project Complete Letter to the Permittee which will end the post discharge monitoring period.

3. Conditional Notifications and Reports:

The following notifications and reports are required as appropriate.

a. Accidental Discharges of Hazardous Materials²:

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

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

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

b. Violation of Compliance with Water Quality Standards:

The Permittee shall notify the Central Valley Water Board of any event causing a violation of compliance with water quality standards. Notification may be delivered via written notice, email, or other verifiable means.

- i. This notification must be followed within three (3) working days by submission of a Violation of Compliance with Water Quality Standards Report.

c. In-Water Work and Diversions:

- i. The Permittee shall notify the Central Valley Water Board at least forty-eight (48) hours prior to initiating work in water or stream diversions. Notification may be delivered via written notice, email, or other verifiable means.
- ii. Within three (3) working days following completion of work in water or stream diversions, an In-Water Work/Diversions Water Quality Monitoring Report must be submitted to Central Valley Water Board staff.

d. Modifications to Project:

Project modifications may require an amendment of this Order. The Permittee shall give advance notice to Central Valley Water Board staff if Project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority by submitting a Modifications to Project Report. The Permittee shall inform Central Valley Water Board staff of any Project modifications that will interfere with the Permittee's compliance with this Order. Notification may be made in accordance with conditions in the certification deviation section of this Order.

e. Transfer of Property Ownership:

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

- i. The Permittee must notify the Central Valley Water Board of any change in ownership or interest in ownership of the Project area by submitting a Transfer of Property Ownership Report. The Permittee and purchaser must sign and date the notification and provide such notification to the Central Valley Water Board at least 10 days prior to the transfer of ownership. 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.

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

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

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

2. Accidental Discharges/Noncompliance:

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

3. In-Water Work or Diversions – Not Applicable**4. Post-Construction:**

Visually inspect the Project site during the rainy season for one storm season following completion of active Project construction activities 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 Project within three (3) working days. The Central Valley Water Board may require the submission of a Violation of Compliance with Water Quality

Standards Report. Additional permits may be required to carry out any necessary site remediation.

D. Standard

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

E. General Compliance

1. Failure to comply with any condition of this Order shall constitute a violation of the Porter-Cologne Water Quality Control Act and the Clean Water Act. The Permittee and/or discharger may then be subject to administrative and/or civil liability pursuant to Water Code section 13385.

2. Permitted actions must not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses for receiving waters as adopted in the Basin Plans by any applicable Regional Water Board or any applicable State Water Board (collectively Water Boards) water quality control plan or policy. The source of any such discharge must be eliminated as soon as practicable.
3. In response to a suspected violation of any condition of this Order, the Central Valley Water Board may require the holder of this Order to furnish, under penalty of perjury, any technical or monitoring reports the Water Boards deem appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The additional monitoring requirements ensure that permitted discharges and activities comport with any applicable effluent limitations, water quality standards, and/or other appropriate requirement of state law.
4. The Permittee must, at all times, fully comply with engineering plans, specifications, and technical reports submitted to support this Order; and all subsequent submittals required as part of this Order. The conditions within this Order and Attachments supersede conflicting provisions within Permittee submittals.
5. This Order and all of its conditions contained herein continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the Project. For purposes of Clean Water Act, section 401(d), this condition constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements of state law.

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 Project or compensatory mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records are kept.
 - b. Have access to and copy any records that are kept and are relevant to the Project or the requirements of this Order.
 - c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order.
 - d. Sample or monitor for the purposes of assuring Order compliance.
4. A copy of this Order shall be provided to any consultants, contractors, and subcontractors working on the Project. Copies of this Order shall remain at the Project site for the duration of this Order. The Permittee shall be responsible for work conducted by its consultants, contractors, and any subcontractors.
5. A copy of this Order must be available at the Project site(s) during construction for review by site personnel and agencies. All personnel performing work on the Project shall be familiar with the content of this Order and its posted location at the Project site.

G. Construction

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

6. Hazardous Materials

- a. The discharge of petroleum products, any construction materials, hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete or the washing thereof, asphalt, paint, coating material, drilling fluids, or other substances potentially hazardous to fish and wildlife resulting from or disturbed by project-related activities is prohibited and shall be prevented from contaminating the soil and/or entering waters of the state. In the event of a prohibited discharge, the Permittee shall comply with notification requirements in sections XIV.B.3.a and XIV.B.3.b.

7. Invasive Species and Soil Borne Pathogens

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

8. Post-Construction Storm Water Management

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

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

9. Roads

- a. The number of access routes, number and size of staging areas, and the total area of the activity must be limited to the minimum necessary to achieve the project goal. Routes and work area boundaries must be clearly demarcated.
- b. Bridges, culverts, dip crossings, or other structures must be installed so that water and in-stream sediment flow is not impeded. Appropriate design criteria, practices and materials must be used in areas where access roads intersect waters of the state.
- c. Temporary materials placed in any water of the state must be removed as soon as construction is completed at that location, and all temporary roads must be removed or re-contoured and restored according to approved re-vegetation and restoration plans.
- d. Any structure, including but not limited to, culverts, pipes, piers, and coffer dams, placed within a stream where fish (as defined in California Fish and Game Code section 45) exist or may exist, must be designed, constructed, and maintained such that it does not constitute a barrier to upstream or downstream movement of aquatic life, or cause an avoidance reaction by fish due to impedance of their upstream or downstream movement. This includes, but is not limited to, maintaining the supply of water and maintaining flows at an appropriate depth, temperature, and velocity to facilitate upstream and downstream fish migration. If any structure results in a long-term reduction in fish movement, the discharger shall be responsible for restoration of conditions as necessary (as determined by the Water Board) to secure passage of fish across the structure.
- e. A method of containment must be used below any temporary bridge, trestle, boardwalk, and/or other stream crossing structure to prevent any debris or spills from falling into the waters of the state. Containment must be maintained and kept clean for the life of the temporary stream crossing structure.

10. Sediment Control

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

11. Special Status Species

- a. No federally threatened or federally endangered species were listed. No California Department of Fish and Wildlife species of special concern were listed.

12. Stabilization/Erosion Control

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

13. Storm Water

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

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

1. The Permittee shall restore all areas of temporary impacts, including Project site upland areas, which could result in a discharge to waters of the state to pre-construction contours and conditions upon completion of construction activities.

K. Compensatory Mitigation for Permanent Impacts – Not Applicable**L. Ecological Restoration and Enhancement – Not Applicable****M. Certification Deviation**

1. Minor modifications of Project locations or predicted impacts may be necessary as a result of unforeseen field conditions, necessary engineering re-design, construction concerns, or similar reasons. Some of these prospective Project modifications may have impacts on water quality. Some modifications of Project locations or predicted impacts may qualify as Certification Deviations as set forth in Attachment F. For purposes of this Certification, a “Certification Deviation” is a Project locational or impact modification that does not require an immediate amendment of the Order, because the Central Valley Water Board has determined that any potential water quality impacts that may result from the change are sufficiently addressed by the Order conditions and the CEQA Findings. After the termination of construction, this Order will be formally amended to reflect all authorized Certification Deviations and any resulting adjustments to the amount of water resource impacts and required compensatory mitigation amounts.
2. A Project modification shall not be granted a Certification Deviation if it warrants or necessitates changes that are not addressed by the Order conditions such that the Project no longer qualifies for a categorical exemption. In this case a supplemental environmental review and different Order will be required.

XV. Water Quality Certification

I hereby issue the Order for the Shasta Dam Seismic Stability Evaluation Project, WDID No. 5A45CR00653, certifying that as long as all of the conditions listed in this Order are met, any discharge from the referenced Project will comply with the applicable provisions of Clean Water Act sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards).

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

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

Original Signed by Clint Snyder, AEO
(for) Patrick Pulupa, Executive Officer
Central Valley Regional Water Quality Control Board

12/22/2023
Date

- Attachment A:** Project Maps
- Attachment B:** Receiving Waters, Impacts, and Mitigation Information
- Attachment C:** CEQA Findings of Facts
- Attachment D:** Report and Notification Requirements
- Attachment E:** Signatory Requirements
- Attachment F:** Certification Deviation Procedures
- Attachment G:** Compliance with Code of Federal Regulations

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Attachment A – Project Maps

Figure 1: Project Location Map

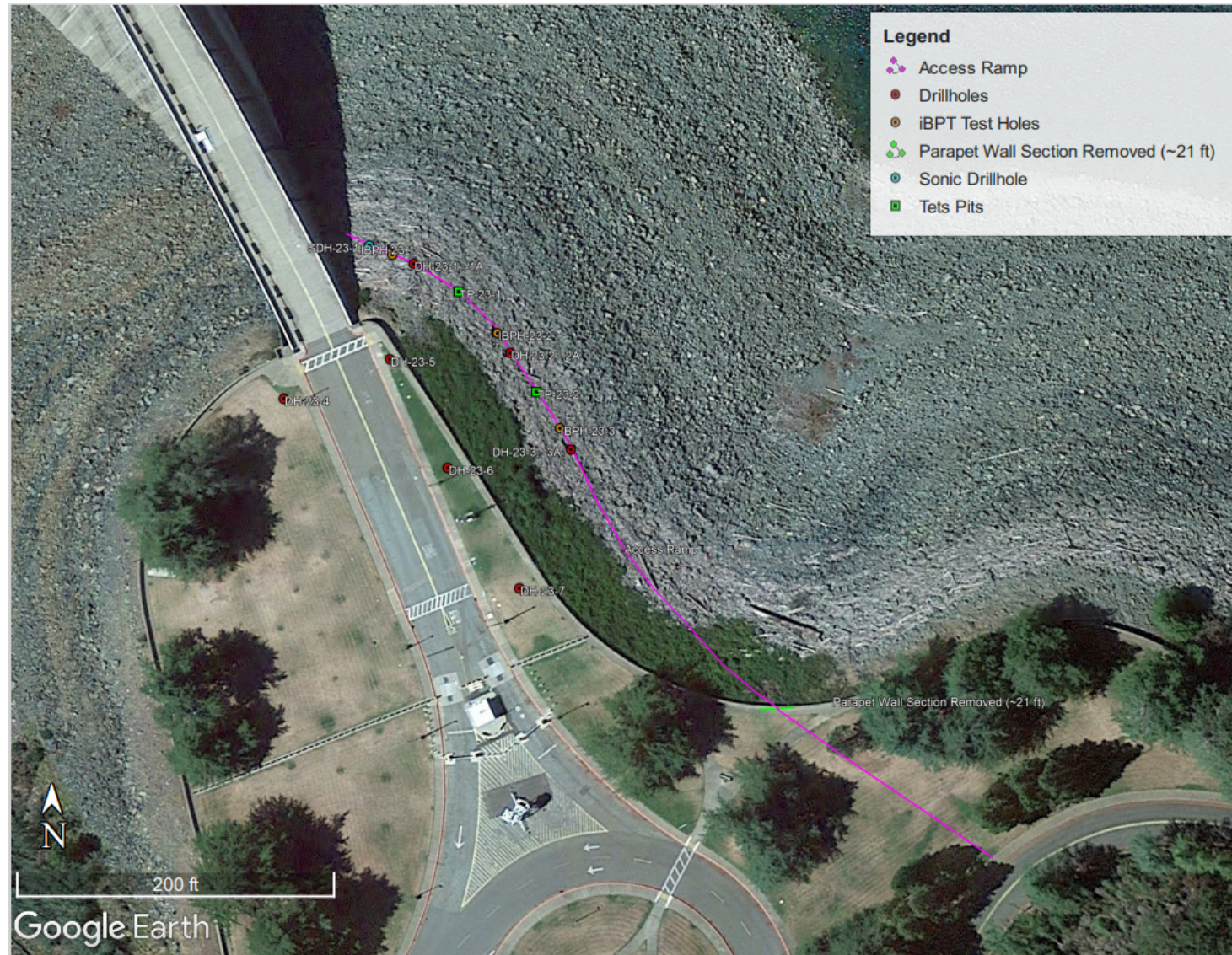


Figure 2. Project Impact Location Map



Plan View

Figure 3. Borehole Location Map



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Attachment B – 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 (CRAM) ID
No	Boreholes	Shasta Lake	Lake	506.10	Shasta Lake	MUN, AGR, POW, REC-1, REC-2, WARM, COLD, SPWN, WILD	Mercury	Not Applicable
No	Test Pits	Shasta Lake	Lake	506.10	Shasta Lake	MUN, AGR, POW, REC-1, REC-2, WARM, COLD, SPWN, WILD	Mercury	Not Applicable
No	Access Road	Shasta Lake	Lake	506.10	Shasta Lake	MUN, AGR, POW, REC-1, REC-2, WARM, COLD, SPWN, WILD	Mercury	Not Applicable

Individual Direct Impact Locations

The following tables show individual impacts.

Table 2: Individual Temporary Fill/Excavation Impact Information

Impact Site ID	Latitude	Longitude	Indirect Impact Requiring Mitigation?	Acres	Cubic Yards	Linear Feet
Boreholes	40.7162	-122.4164	No	0.001	12.5	
Test Pits	40.7162	-122.4164	No	0.002	148.2	
Access Road	40.7162	-122.4164	No	0.30	785	365

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Attachment C – CEQA Findings of Fact

The Central Valley Water Board has determined that the Project is exempt from review under CEQA pursuant to California Code of Regulations, title 14, section 15061.

Specifically, the issuance of this Order and the activities described herein meet the exemption criteria under California Code of Regulations, title 14, section 15304, Minor Alterations to Land because the project involves the minor alteration of the condition of land and/or vegetation which do not involve removal of healthy, mature scenic trees except for forestry and agricultural purposes.

Additionally, the Central Valley Water Board concludes that no California Code of Regulations, title 14, section exceptions to the CEQA exemption apply to the activities approved by this Order.

The Central Valley Water Board will file a Notice of Exemption with the State Clearinghouse within five (5) working days from the issuance of this Order. (California Code of Regulations., title 14, section 15062.)

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Attachment D – 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 and 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 Project schedule that may affect 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: centralvalleyredding@waterboards.ca.gov and cc: Daniel.Warner@waterboards.ca.gov.
 - Include in the subject line of the email:
ATTN: Daniel Warner; Project Name; and WDID No. 5A45CR00653.

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.

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:

22 December 2023

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: Shasta Dam Seismic Stability Evaluation project
Permittee: Bureau of Reclamation
WDID: 5A45CR00653
Reg. Meas. ID: 455070
Place ID: 891292
Order Effective Date: 22 December 2023
Order Expiration Date: 22 December 2028

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
------------------	-------------

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.
--

A. Part A – Project Reporting

1. Report Type 1 - Monthly Report

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

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

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

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

2. Report Type 2 - Annual Report

- 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 January. Annual reports shall continue until a Notice of Project Complete Letter is issued to the Permittee.
- c. **Report Contents** - The contents of the annual report shall include the topics indicated below for each project period. Report contents are outlined in Annual Report Topics below.

During the Active Discharge Period

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

During the Post-Discharge Monitoring Period

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

- i. Annual Report Topic 1 - Construction Summary

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

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

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

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

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

Report Contents -

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

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

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

1) Part A. Permittee Responsible

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

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

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

B. Part B – Project Status Notifications

1. Report Type 3 - Commencement of Construction

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

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

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

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

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

b. When to Submit - Must be received by Central Valley Water Board staff within thirty (30) days following completion of all Project activities.

c. Report Contents -

i. Part A: Mitigation for Temporary Impacts

- 1) A report establishing that the performance standards outlined in the restoration plan have been met for Project site upland areas of temporary disturbance which could result in a discharge to waters of the state.
- 2) A report establishing that the performance standards outlined in the restoration plan have been met for restored areas of temporary impacts to waters of the state. Pre- and post-photo documentation of all restoration sites.

ii. Part B: Permittee Responsible Compensatory Mitigation

- 1) A report establishing that the performance standards outlined in the compensatory mitigation plan have been met.
- 2) Status on the implementation of the long-term maintenance and management plan and funding of endowment.
- 3) Pre- and post-photo documentation of all compensatory mitigation sites.
- 4) Final maps of all compensatory mitigation areas (including buffers).

iii. Part C: Post-Construction Storm Water BMPs

- 1) Date of storm water Notice of Termination(s), if applicable.
- 2) Report status and functionality of all post-construction BMPs.
- 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 XIV.C.3.
- c. **Report Contents** - As required by the approved water quality monitoring plan or as indicated in XIV.C.3.

4. Report Type 9 - Modifications to Project Report

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

5. Report Type 10 - Transfer of Property Ownership Report

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

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

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

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Attachment E – 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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Attachment F – Certification Deviation Procedures

I. Introduction

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

II. Process Steps

A. Who may apply:

The Permittee or the Permittee's duly authorized representative or agent (hereinafter, "Permittee") for this Order.

B. How to apply:

By letter or email to the Water Quality Certification staff designated as the contact for this Order.

C. Certification Deviation Request:

The Permittee will request verification from the Central Valley Water Board staff that the project change qualifies as a Certification Deviation, as opposed to requiring an amendment to the Order. The request should:

1. Describe the Project change or modification:
 - a. Proposed activity description and purpose;
 - b. Why the proposed activity is considered minor in terms of impacts to waters of the state;
 - c. How the Project activity is currently addressed in the Order; and,
 - d. Why a Certification Deviation is necessary for the Project.
2. Describe location (latitude/longitude coordinates), the date(s) it will occur, as well as associated impact information (i.e., temporary or permanent, federal or non-federal jurisdiction, water body name/type, estimated impact area, etc.) and minimization measures to be implemented.
3. Provide all updated environmental survey information for the new impact area.
4. Provide a map that includes the activity boundaries with photos of the site.
5. Provide verification of any mitigation needed according to the Order conditions.
6. Provide any other information required by Central Valley Water Board staff to determine whether the Project change or modification necessitates additional

environmental review. (California Code of Regulations, Title 14, sections 15061, 15162-15164.)

D. Post-Discharge Certification Deviation Reporting:

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

E. Annual Summary Deviation Report:

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

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**Attachment G – Compliance with Code of Federal Regulations,
Title 40, Section 121.7, Subdivision (d)**

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 XIV of the Order, and the statements below correspond with the conditions set forth in Section XIV. The other Order Sections are not “conditions” as used in Code of Federal Regulations, title 40, section 121.7.

I. General Justification for Section XIV 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, February 2019 (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 XIV Conditions

A. Authorization

Authorization under the Order is granted based on the 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.

B. Reporting and Notification Requirements

1. Project Reporting

2. Project Status Notifications

The reporting and notification conditions under Sections B.1 and B.2 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.

3. Conditional Notifications and Reports

a. Accidental Discharges of Hazardous Materials

Conditions under Section B.3.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 B.3.b and B.3.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 B.3.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 B.3.e and B.3.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.

C. Water Quality Monitoring

Conditions under Section C 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.

D. 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).

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. In response to a suspected violation of any condition of this Order, the Central Valley Water Board may require

Conditions under Section E.3 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. Technical supports submitted pursuant to Water Code section 13267 are required to be submitted under penalty of perjury. 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. 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).)

5. This Order and all of its conditions herein continue to have full force and effect

This condition ensures continued compliance with applicable water quality standards and other appropriate requirements of state law. Notwithstanding any determinations by the U.S. Army Corps or other federal agency pursuant to 40 C.F.R. section 121.9, the Permittee must comply with the entirety of this certification because, pursuant to State Water Board Water Quality Order No. 2003-0017-DWQ, this Order also serves as Waste Discharge Requirements pursuant to the Porter-Cologne Water Quality Control Act.

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.

G. Construction

- 1. Dewatering – Not Applicable**
- 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.

11. Special Status Species

See F.2 above.

12. 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.

13. 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 – Not Applicable

L. Ecological Restoration and Enhancement – Not Applicable

M. Certification Deviation

- 1. Minor modifications of Project locations or predicted impacts**
- 2. A Project modification shall not be granted a Certification Deviation if it warrants or necessitates**

Authorization under the Order is granted based on the application and supporting information submitted. Among other requirements, 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. Project deviations may require additional or different Order conditions as authorized by law to ensure compliance 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 may result in impacts to water quality that require additional environmental review (California Code of Regulations, title 14, sections 15062-15063).