Central Valley Regional Water Quality Control Board

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER

Effective Date:	19 March 2025
Expiration Date:	18 March 2030
Program Type:	Fill/Excavation

Reg. Meas. ID:	458833
Place ID:	897004
WDID No.:	5A34CR00903
USACE No.:	SPK-2024-00609 NWP 14

Project Type: Railroads

Project: San Joaquin Regional Rail Commission Ceres Station Project (Project)

Applicant: San Joaquin Regional Rail Commission

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Table of Contents

I. Order

This Clean Water Act (CWA) section 401 Water Quality Certification action and Order (Order) is issued at the request of San Joaquin Regional Rail Commission (hereinafter Permittee) for the Project. This Order is for the purpose described in application submitted by the Permittee. The application was received on 15 October 2024. The application was deemed complete on 11 March 2025. Prior to receiving a complete application, Central Valley Water Board staff issued a notice of incomplete application and the Permittee responded to the request for application information on the following date(s):

Date of Notice of Incomplete Application: **14 November 2024**
Date all requested information was received: **11 March 2025**

II. Public Notice

The Regional Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 from 18 October 2024 to 8 November 2024. The Central Valley Water Board did not receive any comments during the comment period.

III. Project Purpose

The purpose and objectives of the Project are to:

- Provide a second track to improve safety for trains in passing situations and support the new station.
- Improve connectivity and increase ridership.
- Support increased train speed.
- Support increased transportation options for residents throughout the corridor.
- Support reduced Vehicle Miles Traveled (VMT) and associated regional traffic improvements.
- Support improved air quality and reduced greenhouse gas (GHG) emissions.

This Project is part of a proposed extension of Altamont Corridor Express (ACE) service from a new station in North Lathrop down to Ceres and Merced in a phased implementation approach. The project is needed to enhance commuter and intercity rail service and to promote greater transit connectivity between the San Joaquin Valley and the San Francisco Bay Area (Bay Area).

IV. Project Description

Phase I improvements cover the segment from North Lathrop to Ceres and Phase II improvements cover the segment from Ceres to Merced. The SR 99 mainline or the southbound on-/off-ramps adjacent to the new rail station will not be modified as part of the Project.

Proposed track improvements within the Union Pacific Railroad (UPRR) right-of-way begin just south of the Tuolumne River Bridge in Ceres and continue to just south of

Taylor Road in Stanislaus County. Segments of existing track will also be removed and replaced. Adding the second mainline track will involve improvements along the UPRR right-of-way.

Three Turlock Irrigation District canal crossings will be modified. New drainage ditch systems will be constructed parallel to the existing and new tracks to collect and convey surface runoff. New and modified cross culvert systems will be constructed under the existing and new tracks.

The new rail station in the City of Ceres is proposed within UPRR right-of-way with a connection for station passengers crossing Caltrans right-of-way between the station platform and local City streets at the North Street southbound off-ramp crossing under SR 99. At this location, Caltrans right-of-way is parallel and adjoins UPRR right-of-way.

An existing storm drain system and basin on the south side of the southbound off-ramp will be modified so that runoff collected along the southbound off-ramp is rerouted around the depressed pathways and stairs to a modified basin area on the west side of SR 99 similar to the existing condition. All runoff collected from the station platform, pedestrian underpass, and depressed pathways will be collected in a storm drainage system at the low point in the pedestrian underpass and then conveyed back across the UPRR right-of-way and discharged along Railroad Avenue.

At the southern limits of the project, the segment of the second mainline track on the west side of the existing mainline track from just north of the East Keyes Road grade separated roadway crossing of UPRR right-of-way to just south of the Taylor Road at-grade crossing will become the primary mainline track and the parallel existing mainline track will be used as a temporary layover facility to park trains until a future permanent layover facility is constructed further to the south. To support the temporary layover facility for maintaining and storing parked trains, temporary prefabricated buildings will be installed at the northern end of Taylor Court within UPRR right-of-way, and adjacent temporary parking facilities will be provided on the west side of Taylor Court within County right-of-way.

The proposed new station location and UPRR right-of-way will serve as the project staging area during construction of the station and track work. There are existing utilities running parallel along, or crossing, the UPRR right-of-way that will be relocated to support installation of the project improvements.

V. Project Location

Address: West Side of El Camino Avenue 0.25 miles South of 2nd Street, Ceres

County: Sacramento

Nearest City: Ceres

Sections 4, 9, 10, 14, 15, 23, 24, 25, 30, 31, and 32, Township 4 South, Range 9 and 10 East, MDB&M.

Start: Latitude: 37.626055° and Longitude: -120.993074°

End: Latitude: 37.533229° and Longitude: -120.891072°

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/). The Basin Plan includes water quality standards, which consist of existing and potential beneficial uses of waters of the state, water quality objectives to protect those uses, and the state and federal antidegradation policies.

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

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

VII. Description of Direct Impacts to Waters of the State

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

Table 1 Total Project Fill/Excavation Quantity for Temporary Impacts[1]

Aquatic Resources Type	Acres	Cubic Yards	Linear Feet
Stream Channel	0.01	15	24

[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.

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

Aquatic Resources Type	Acres	Cubic Yards	Linear Feet
Stream Channel	0.22	418	1,565

VIII. 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. According to the Permittee, the following measures will be in place during construction activities to avoid, reduce, and minimize impacts to waters of the state:

- Staging areas, access routes, and construction areas shall be located outside of aquatic resource areas to the maximum extent practicable.
- Best Management Practices (BMPs) consistent with the Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Manuals shall be implemented to minimize effects to aquatic habitats resulting from erosion siltation, etc. during construction.
- Following completion of construction, all graded slopes, temporary impact and/or otherwise disturbed areas shall be restored to preconstruction contours (if necessary).

IX. Compensatory Mitigation

The Permittee has agreed to provide compensatory mitigation for direct impacts, described in section VII for permanent impacts.

X. California Environmental Quality Act (CEQA)

On 3 December 2021, the San Joaquin Regional Rail Commission, as CEQA lead agency, certified an Environmental Impact Report (EIR) (State Clearinghouse (SCH) No. 2018012014) for the Project and filed a Notice of Determination (NOD) at the SCH on 3 December 2021. Pursuant to CEQA, the Central Valley Water Board has made Findings of Facts (Findings) which support the issuance of this Order and are included in Attachment C.

XI. 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.

XII. Fees

A. An application fee and impact fees totaling $6,120.00 were received on 28 October 2024. The fee amount was determined as required by California Code of

Regulations, title 23, sections 3833(b)(3) and 2200(a)(3) and was calculated as Category A - Fill & Excavation Discharges (fee code 84) with the dredge and fill fee calculator.

B. Annual Fees: This Certification is subject to annual billing based on the fee schedule in effect at the time of billing. Annual billing will continue until the Project, including monitoring, is complete and the Water Board receives an acceptable request for a Notice of Project Complete Letter (see Attachment D). Invoices are usually sent out at the end of each calendar year. [2]

To stop annual billing, the Permittee must request a Notice of Project Complete Letter from the Water Board. Water Board staff will verify if the conditions of the Certification are met and may conduct a site visit to confirm compliance.

For more information on fees, visit the State Water Board's Water Quality Fees website (https://www.waterboards.ca.gov/resources/fees/water_quality/), under Water Quality Certification (WQC) Program Fees.

XIII. Conditions

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

A. Authorization

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

B. Reporting and Notification Requirements

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

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

In the subject line of the email, include the Central Valley Water Board Contact,

[2] Annual invoices are issued for projects active for any amount of time in the current fiscal year (1 July – 30 June).

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 April beginning 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 and corresponding Waste Discharge Identification Number (WDID No.) issued under the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ; NPDES No. CAS000002).

   b. **Request for Notice of Completion of Discharges Letter:** The Permittee shall submit a Request for Notice of Completion of Discharges Letter following completion of active Project construction activities, including any required restoration and permittee-responsible mitigation. This request shall be submitted to the Central Valley Water Board staff within thirty (30) days following completion of all Project construction activities. Upon acceptance of the request, Central Valley Water Board staff shall issue a Notice of Completion of Discharges Letter to the Permittee which will end the active discharge period.

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

3. Conditional Notifications and Reports:

The following notifications and reports are required as appropriate.

a. Accidental Discharges of Hazardous Materials[3]:

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).

ii. Following notification to OES, the Permittee shall notify Central Valley Water Board, as soon as practicable (ideally within 24 hours). Notification may be delivered via written notice, email, or other verifiable means.

iii. Within five (5) working days of notification to the Central Valley Water Board, the Permittee must submit an Accidental Discharge of Hazardous Material Report.

b. Violation of Compliance with Water Quality Standards:

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

i. This notification must be followed within three (3) working days by

[3] "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.)

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

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

a. Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.

b. Activities shall not cause turbidity increases in surface water to exceed:

i. where natural turbidity is less than 1 Nephelometric Turbidity Units (NTUs), controllable factors shall not cause downstream turbidity to exceed 2 NTU;

ii. where natural turbidity is between 1 and 5 NTUs, increases shall not

exceed 1 NTU;

iii. where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent;

iv. where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs;

v. where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

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

Sampling during in-water work or during the entire duration of temporary water diversions shall be conducted in accordance with Table 3 sampling parameters.[4] The sampling requirements in Table 3 shall be conducted upstream out of the influence of the Project, and approximately 300 feet downstream of the work area.

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

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

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

Table 3: Sample Type and Frequency Requirements

Parameter	Unit of Measurement	Type of Sample	Minimum Frequency
Turbidity	NTU	Grab	Every 4 hours
Visible construction related pollutants[5]	Observations	Visual Inspections	Continuous throughout the construction period

4. Post-Construction:

Visually inspect the Project site during the rainy season for one year 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

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

specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3. This Order is conditioned upon total payment of any fee required under title 23 of the California Code of Regulations and owed by the Permittee.

4. In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under state and federal law. For purposes of Clean Water Act, section 401(d), the applicability of any state law authorizing remedies, penalties, processes, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Order.

E. General Compliance

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

2. Permitted actions must not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses for receiving waters as adopted in the Basin Plans by any applicable Regional Water Board or any applicable State Water Board (collectively Water Boards) water quality control plan or policy. The source of any such discharge must be eliminated as soon as practicable.

3. In response to a suspected violation of any condition of this Order, the Central Valley Water Board may require the holder of this Order to furnish, under penalty of perjury, any technical or monitoring reports the Water Boards deem appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The additional monitoring requirements ensure that permitted discharges and activities comport with any applicable effluent limitations, water quality standards, and/or other appropriate requirement of state law.

4. The Permittee must, at all times, fully comply with engineering plans, specifications, and technical reports submitted to support this Order; and all subsequent submittals required as part of this Order. The conditions within this Order and Attachments supersede conflicting provisions within Permittee submittals.

5. This Order and all of its conditions contained herein continue to have full force and effect regardless of the expiration or revocation of any federal license or

permit issued for the Project. For purposes of Clean Water Act, section 401(d), this condition constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements of state law.

6. The Permittee shall adhere to all requirements in the mitigation monitoring and reporting program (MMRP) (include title and date of MMRP) which is incorporated herein by reference and any additional measures as outlined in Attachment C, CEQA Findings of Fact.

7. **Construction General Permit Requirement:** The Permittee shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ; NPDES No. CAS000002), as amended, for discharges to surface waters comprised of storm water associated with construction activity, including, but not limited to, demolition, clearing, grading, excavation, and other land disturbance activities of one or more acres, or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres.

F. Administrative

1. Signatory requirements for all document submittals required by this Order are presented in Attachment E of this Order.

2. This Order does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & Wildlife Code, sections 2050-2097) or the federal Endangered Species Act (16 U.S.C. sections 1531-1544). If a “take” will result from any act authorized under this Order held by the Permittee, the Permittee must comply with the California Endangered Species Act and federal 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 XIII.B.3.a and XIII.B.3.b.

b. No wet concrete will be placed into aquatic resources habitat.

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. 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

The following Special Status Species have the potential to occur near or within the Project area: Alkali Milk Vetch, California Alkali Grass, Colusa Grass, Coulter’s Goldfields, Delta Button-Celery, Dwarf Downinga, Forked Hare-Leaf, Hairy Orcutt Grass, Heartscale, Lesser Saltscale, Prostrate Vernal Pool Navarretia, Sanford’s Arrowhead, San Joaquin Spearscale, San Joaquin Valley Orcutt Grass, Spiny-Sepaled Button-Celery, Succulent Owl’s Clover, Vernal Pool Smallscale, Watershield, Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Monarch Butterfly, Vernal Pool Tadpole Shrimp, Valley Elderberry Longhorn Beetle, Crotch Bumble Bee, California Tiger

Salamander, Western Spadefoot Toad, California Red-legged Frog, Western Pond Turtle, Coast Horned Lizard, Northern California Legless Lizard, Giant Garter Snake, Golden Eagle, Short-eared Owl, Grasshopper Sparrow, Swainson's Hawk, Northern Harrier, White-Tailed Kite, Mountain Plover, Western Yellow-billed Cuckoo, Burrowing Owl, Loggerhead Shrike, Least Bell's Vireo, Song Sparrow, Tricolored Blackbird, Yellow-headed Blackbird, Pallid Bat, Townsend's Big-eared Bat, Hoary Bat, Western Mastiff Bat, Western Red Bat, San Joaquin Kit Fox, American Badger, River Lamprey, Steelhead, Central Valley Chinook Salmon, and Hardhead.

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 in accordance with the Restoration plan dated 15 October 2024 and incorporated herein by reference.

2. The Central Valley Water Board may extend the monitoring period beyond requirements of the restoration plan upon a determination by Executive Officer that the performance standards have not been met or are not likely to be met within the monitoring period.

3. If restoration of temporary impacts to waters of the state is not completed within 90 days of the impacts, compensatory mitigation may be required to offset temporal loss of waters of the state.

K. Compensatory Mitigation for Permanent Impacts:

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

1. Final Compensatory Mitigation Plan

The Permittee shall provide compensatory mitigation for impacts to waters of the state in accordance with the email correspondence (Compensatory Mitigation Plan) dated 11 March 2025 and incorporated herein by reference. Any deviations from, or revisions to, the Compensatory Mitigation Plan must be pre-approved by Central Valley Water Board staff. The monitoring period shall continue until the Central Valley Water Board staff determines that performance standards have been met. This may require the monitoring period to be extended.

2. Purchase of Mitigation Credits by Permittee for Compensatory Mitigation

a. A copy of the fully executed agreement for the purchase of mitigation credits shall be provided to the Central Valley Water Board prior to the initiation of in water work.

b. The Permittee shall retain responsibility for providing the compensatory mitigation and long-term management until Central Valley Water Board staff has received documentation of the credit purchase and the transfer agreement between the Permittee and the seller of credits.

3. Total Required Compensatory Mitigation

a. The Permittee is required to provide compensatory mitigation for the authorized impact to 0.22 acre of stream channel by purchasing 0.22 Aquatic Resource Credits in the Merced/Tuolumne Rivers Aquatic Resource Watershed Service Area. Required credits shall be purchased from the National Fish and Wildlife Foundation (NFWF)’s Sacramento District California In-Lieu Fee Program.

b. Total required Project compensatory mitigation information for permanent physical loss of area is summarized in Table 4. [Establishment (Est.), Re-establishment (Re-est.), Rehabilitation (Reh.), Enhancement (Enh.), Preservation (Pres.), Unknown].

Table 4: Total Required Project Compensatory Mitigation Quantity for Permanent Physical Loss of Area

Aquatic Resource Type	Mitigation Type	Units	Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Stream Channel	In-Lieu Fee Credits	Acres						0.22

L. Certification Deviation

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

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

XIV. Water Quality Certification

I hereby issue the Order for the San Joaquin Regional Rail Commission Ceres Station Project, WDID # 5A34CR00903, certifying that as long as all of the conditions listed in this Order are met, any discharge from the referenced Project will comply with the applicable provisions of Clean Water Act sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards).

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

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

Original Signed by Anne Walters:
For Patrick Pulupa, Executive Officer
Central Valley Regional Water Quality Control Board

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: Regional Location

Figure 2: Review Area Vicinity on Topographic Base

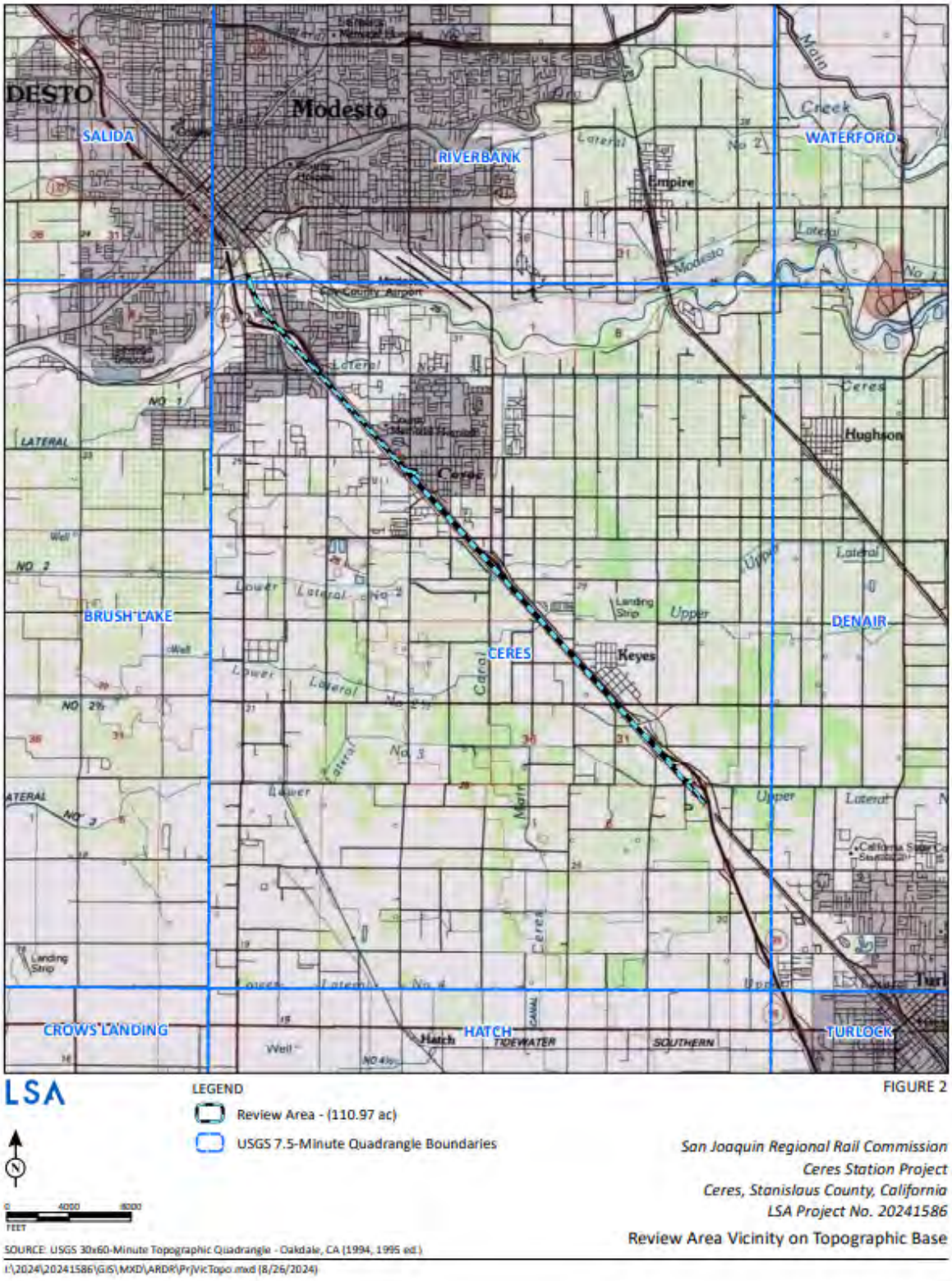

Figure 3: Review Area Vicinity on Aerial Base

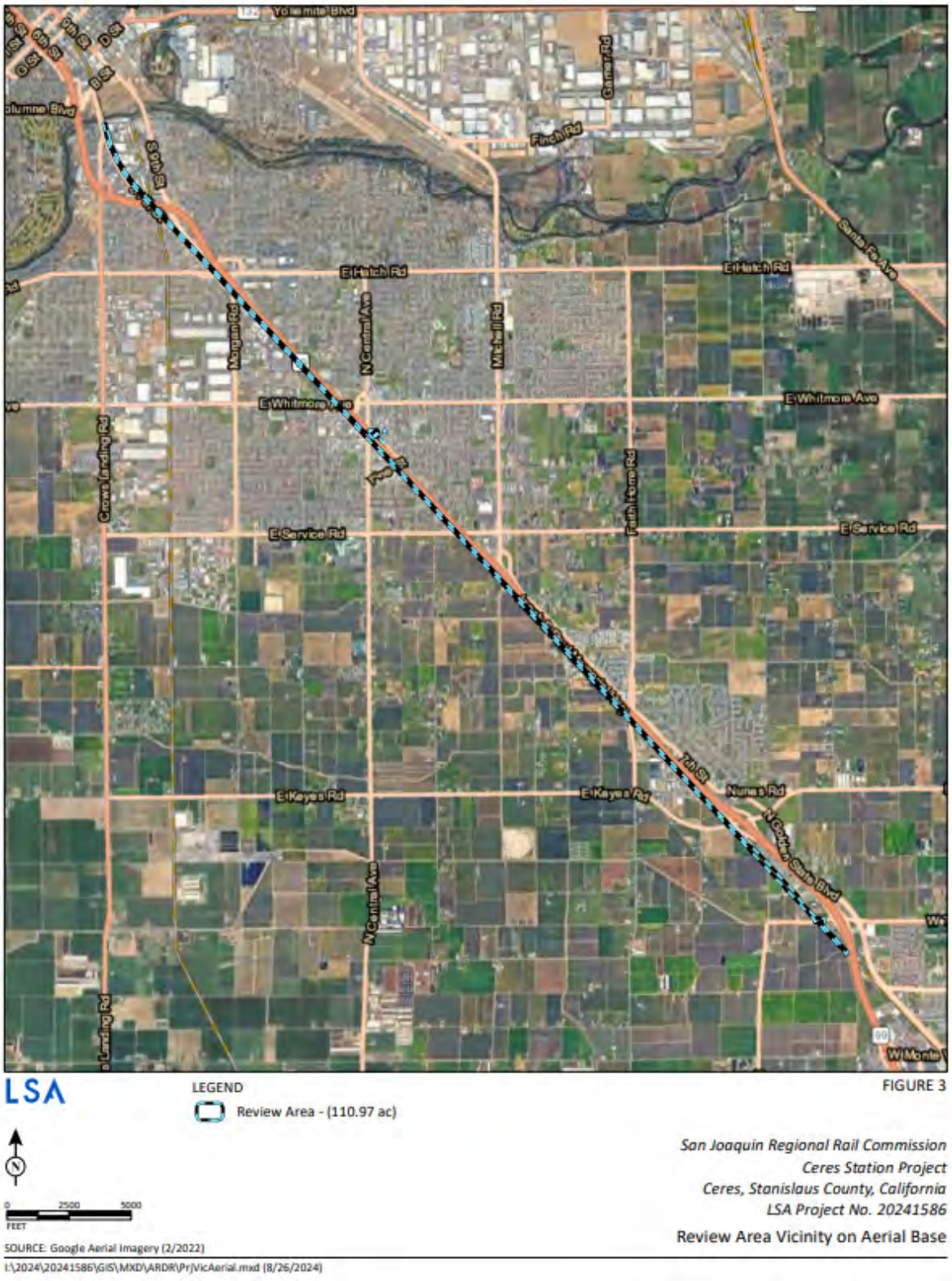

Figure 4: Aquatic Resources, 1 of 7

Figure 5: Aquatic Resources, 2 of 7

Figure 6: Aquatic Resources, 3 of 7

Figure 7: Aquatic Resources, 4 of 7

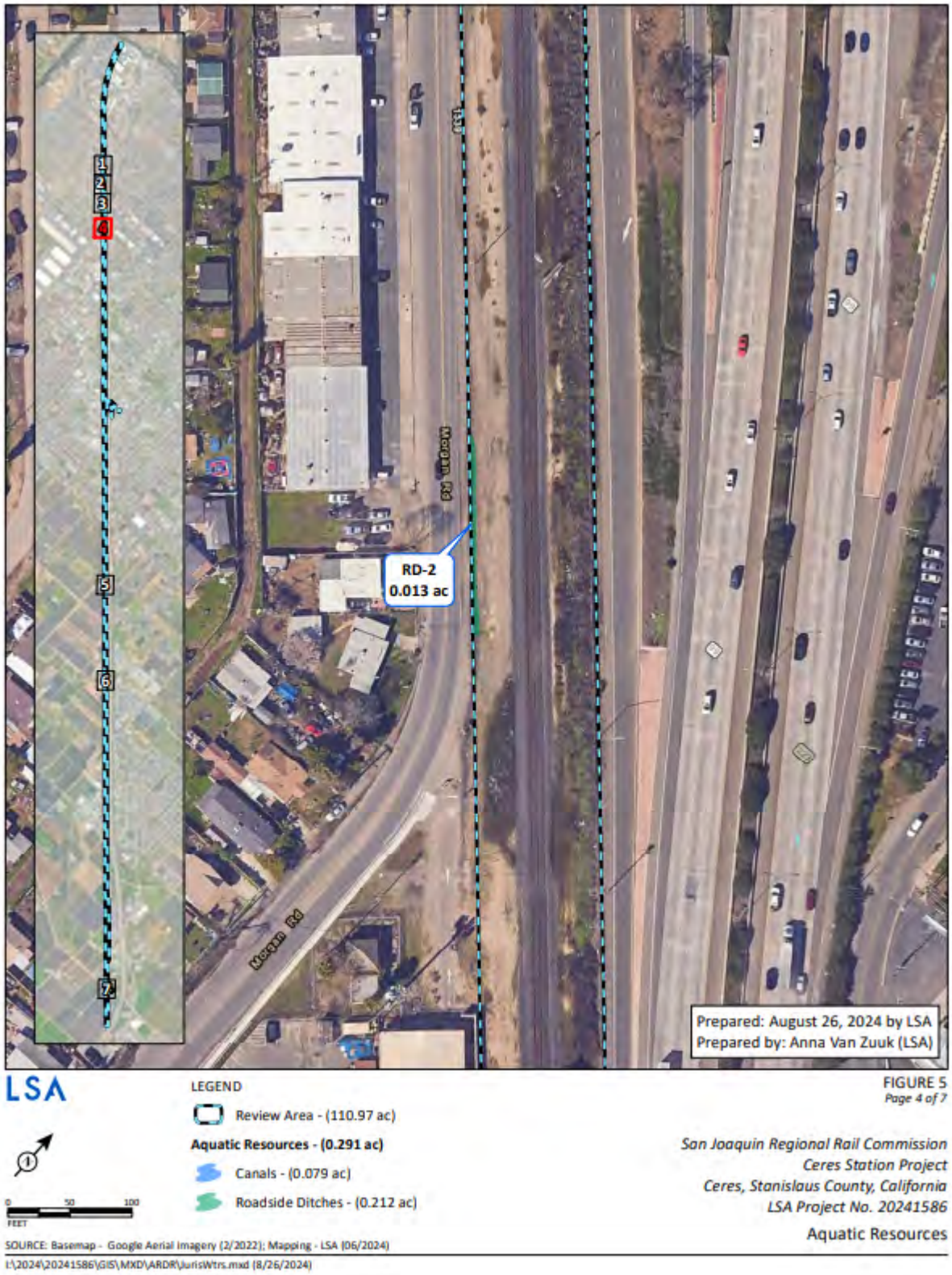

Figure 8: Aquatic Resources, 5 of 7

Figure 9: Aquatic Resources, 6 of 7

Figure 10: Aquatic Resources, 7 of 7

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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

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
Roadside Ditch Impacts	Unnamed Roadside Ditch to Upper Lateral No. 2½ and Lateral No. 3	Stream Channel	535/541	San Joaquin River (from mouth of Merced River to Vernalis)	MUN, AGR, PROC, REC-1, REC-2, WARM, MIGR, SPWN, WILD		
Permanent Canal Impacts	Upper Lateral No. 2½ and Lateral No. 3	Stream Channel	535/541	San Joaquin River (from mouth of Merced River to Vernalis)	MUN, AGR, PROC, REC-1, REC-2, WARM, MIGR, SPWN, WILD		
Temporary Canal Impacts	Lateral No. 3	Stream Channel	535/541	San Joaquin River (from mouth of Merced River to Vernalis)	MUN, AGR, PROC, REC-1, REC-2, WARM, MIGR, SPWN, WILD		

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
Temporary Canal Impacts	37.577523	-120.941403	No	0.009	15	24

Table 3: Individual Permanent Fill/Excavation Impact Information

Impact Site ID	Latitude	Longitude	Indirect Impact Requiring Mitigation?	Acres	Cubic Yards	Linear Feet
Roadside Ditch Impacts	37.577523	-120.941403	No	0.212		
Permanent Canal Impacts	37.577523	-120.941403	No	0.006		

Compensatory Mitigation Information

The following table(s) show individual compensatory mitigation information and locations.

In-Lieu Fee Compensatory Mitigation Information

Table 4: In-Lieu Fee Program

In-Lieu Fee Program Name:	NFWF Sacramento District In-Lieu Fee Program
Website:	Sacramento District California In-Lieu Fee Program | NFWF (https://www.nfwf.org/mitigating-impacts/sacramento-district-california-lieu-fee-program?activeTab=tab-3)
In-Lieu Fee Program Contact Name:	Heather Broda
Phone:	415-242-3105
Email:	Heather.Broda@nfwf.org
In-Lieu Fee Program Location - County:	Multiple- Merced and Tuolumne Rivers Service Area

Table 5: Mitigation Type Information

Aquatic Resource Credit Type	Acres	Linear Feet	Number of Credits Purchased
Stream Channel	0.22	418	TBD

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Attachment C – CEQA Findings of Fact

A. Environmental Review

On 3 December 2021, the San Joaquin Regional Rail Commission as lead agency, certified a Environmental Impact Report (EIR) (State Clearinghouse (SCH) No. 2018012014) for the Project and filed a Notice of Determination (NOD) at the SCH on 3 December 2021. The Central Valley Water Board is a responsible agency under CEQA (Public Resources Code, section 21069) and in making its determinations and findings, must presume that San Joaquin Regional Rail Commission's certified environmental document comports with the requirements of CEQA and is valid. (Public Resources Code, section 21167.3.) The Central Valley Water Board has reviewed and considered the environmental document and finds that the environmental document prepared by San Joaquin Regional Rail Commission addresses the Project's water resource impacts. (California Code of Regulations, title 14, section 15096, subd. (f).) The environmental document includes the mitigation monitoring and reporting program (MMRP) developed by San Joaquin Regional Rail Commission for all mitigation measures that have been adopted for the Project to reduce potential significant impacts. (Public Resources Code, section 21081.6, subd. (a)(1); California Code of Regulations, title 14, section 15091, subd. (d).)

B. Incorporation by Reference

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

All CEQA project impacts, including those discussed in subsection C below, are analyzed in detail in the Project FEIR which is incorporated herein by reference. The Project FEIR is available at: ACE Ceres-Merced Extension Final EIR (https://ceqanet.opr.ca.gov/2018012014/8).

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

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

C. Findings

The FEIR describes the potential significant environmental effects to water resources. Having considered the whole of the record, including comments received during the public review process, the Central Valley Water Board makes the following findings:

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

Changes or alterations have been required in, or incorporated into, the

Project which avoid or substantially lessen the significant environmental effect as identified in the FEIR.

a.i. Potential Significant Impact:

- Construction of the Proposed Project could remove or degrade special-status plants and their habitat.

a.ii. Facts in Support of Finding:

- Construction for the majority of Proposed Project will occur within the existing UPRR right-of-way (ROW) and will disturb ruderal areas with limited potential to support special-status plant species. Although unlikely, special-status plant species could be present within the existing UPRR ROW during construction. Outside of the existing UPRR ROW, special-status plant species have the potential to occur in natural land cover with suitable habitat characteristics (e.g., clay soils, riparian vegetation, and sandy soils). If and where special-status plant species are present, ground disturbance activities may result in the direct mortality of individuals through the removal of vegetation, crushing, trampling, introduction of nonnative or invasive plants, and degradation or loss of habitat. Other temporary construction impacts on special-status plant species include air pollution from dust and construction and removal of vegetation that would likely regenerate within 1 year. Additionally, there is potential for runoff of sediment and contaminants (e.g., oil, grease, concrete) into upland areas and waterbodies adjacent to construction activities, which will decrease habitat quality and potentially affect special-status plant species.
- Mitigation Measures BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, and HYD-1.2 would apply to the Ceres to Merced Extension Alignment for construction impacts on special-status plant species

  Mitigation Measure BIO-1.1: Conduct preconstruction surveys for special-status plant species

  - The San Joaquin Regional Rail Commission (SJRRC) will retain a qualified botanist to conduct preconstruction surveys for special-status plant species in suitable habitat. During appropriate species-specific identification periods prior to the initiation of construction, the qualified botanist will survey suitable habitat in the environmental footprint for the species below in accordance with California Department of Fish and Wildlife (CDFW) protocols (California Department of Fish and Wildlife 2018b). The results of the surveys, which will require multiple visits due to varying blooming periods and differences in the construction initiation, will be documented in brief reports or technical memoranda. If the survey demonstrates absence of special-status plant species in the environmental footprint, no

further actions will be required.

Special-Status Plant Species to Be Surveyed:

- Sanford's arrowhead
- Delta button-celery
- Watershield

Mitigation Measure BIO-1.2: Prepare a salvage, relocation, or propagation and 15 monitoring plan for special-status plant species

- If the protocol-level botanical survey reveals the presence of special-status plant species in the study area, the SJRRC or its contractor(s) will notify the U.S. Fish and Wildlife Service (USFWS) and/or CDFW. A qualified botanist or restoration ecologist will prepare a salvage, relocation, or propagation and monitoring plan in coordination with USFWS and/or CDFW prior to construction to address affected special-status plant species. The plan will include provisions that address the techniques, location, and procedures required for the successful establishment of the plant populations. The plan will include provisions for performance that address survivability requirements, maintenance, monitoring, implementation, and the annual reporting requirements. The following performance standards will apply.
- Monitoring and success criteria applicable to special-status plant salvage, relocation, or propagation will require the following.
  - At least two surveys by a qualified botanist or ecologist per monitoring year.
  - At least 80 percent of the planted area must support vegetation composition and density consistent with reference population conditions.
  - At least 80 percent of the planted area must support target species amounts similar to reference feature conditions.
  - A minimum of 5 consecutive years of monitoring to ensure success criteria are met.
  - Remedial actions to restore intended ecological function of planted areas that fail to meet the success criteria for 3 consecutive years.

Mitigation Measure BIO-1.3: Document affected special-status plant species

- All directly affected areas of special-status plants will be documented by a qualified botanist or ecologist retained by SJRRC or its contractor(s) prior to impacts. Documentation will include density and percent cover; key habitat characteristics, including soil type, associated species, hydrology, and topography; and photographs of preconstruction conditions.

Mitigation Measure BIO-1.4: Prevent introduction or spread of invasive plant species

- SJRRC's contractor(s) will implement the following actions to avoid and minimize the spread or introduction of invasive plant species.
    - Clean construction equipment and vehicles in a designated wash area prior to entering and exiting the construction site.
    - Educate construction supervisors and managers about invasive plant identification and the importance of controlling and preventing the spread of invasive plant infestations.
    - Treat small, isolated infestations with eradication methods that have been approved by or developed in conjunction with CDFW and USFWS to prevent or destroy viable plant parts or seeds.
    - Minimize surface disturbance to the greatest extent feasible to complete the work.
    - Use native, noninvasive species or nonpersistent hybrids in erosion-control plantings to 15 stabilize site conditions and prevent invasive plant species from colonizing.
    - Use weed-free imported erosion-control materials (or rice straw) in upland areas.
    - One year after construction, conduct a monitoring visit to each active or previously active (within 1 year) environmental footprint to ensure that no new occurrences of invasive plant species not previously present have become established.

Mitigation Measure HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters

- The construction contractor(s) will obtain applicable resource agency permits and approvals and comply with permit requirements to prevent impacts on water quality and demonstrate that water quality standards and/or waste

discharge requirements (WDRs) are not violated. Prior to the start of construction activities that could disturb potentially contaminated soil or sediment adjacent to or within surface waters, sampling and analysis of the potentially contaminated soil or sediment will be performed, to ensure that the soil or sediment is appropriately handled, reused, or disposed of based on the sampling and analysis results. The sampling and analysis results will be presented to the State Water Board for review so that appropriate water quality monitoring parameters can be designated in permit requirements. CDFW, U.S. Army Corps of Engineers (USACE), and/or the Central Valley Water Board may require the following permit requirements and avoidance measures.

- Installation of temporary physical barriers (e.g., coffer dams, silt curtains) in water around construction activities to prevent potential localized impacts on water quality (e.g., increase in turbidity) from spreading within the surface water.
- Installation of temporary physical barriers (e.g., elevated platforms, netting, floating platforms) over surface waters and beneath elevated construction activities to prevent construction materials from being released into the surface water below.
- The design and installation of temporary physical barriers as part of permit requirements and avoidance measures will ensure that stream flow (including storm flows) would not be impeded to the degree that adverse flooding impacts could occur.
- Performing water quality monitoring including sampling and analysis for constituents required by resource agency permits, which may include total suspended solids, pH, temperature, conductivity, pollutants of concern identified in soil or sediment during preconstruction sampling and analysis, and pollutants with TMDLs established for the surface water if construction activities could result in the release of these pollutants.
- Poured concrete structures would be isolated from water and allowed to dry/cure for a minimum of 30 days. Concrete poured within the high flow line would be suspended if the 15-day weather forecast indicated any chance of rain greater than 20 percent. During the 30-day period, poured concrete would be kept moist, and runoff

from the concrete would be contained to preclude entrance into the streambed or channel.

- Commercial sealants or curing accelerant may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If sealant is used, water would be contained such that it will not come in contact with the concrete until the sealant is dry.

- The results of water quality monitoring will be compared to performance standards established by the State Water Board in the CWA Section 401 certification. If water quality monitoring indicates that performance standards are not being achieved, additional avoidance measures (e.g., installation of additional silt curtains) will be implemented until water quality monitoring indicates that performance standards are being achieved.

b.i. Potential Significant Impact:

- Construction of the Proposed Project could injure or kill special-status wildlife species and remove or degrade their habitat.

b.ii. Facts in Support of Finding:

- Construction for the majority of the Proposed Project would occur in the existing UPRR ROW and would disturb developed/landscaped and ruderal areas with limited potential to support special-status wildlife species. Although unlikely, special-status wildlife species could be present within the existing UPRR ROW and previously disturbed areas during construction. Outside of the existing UPRR ROW, special-status wildlife species have the potential to occur in natural land cover with suitable habitat characteristics (e.g., riparian, annual grasslands, woodlands).
- Construction of the Proposed Project could have direct and/or indirect effects on special-status wildlife species. Direct effects can be temporary (return to baseline 10 within 1 year of disturbance) or permanent in duration and could be caused by the following actions.
  - Injury or mortality of wildlife from construction equipment vehicle strike, crushing, and/or entombment.
  - Loss or disturbance of habitat from vegetation clearing (including removal of trees, shrubs and ground cover vegetation), grading, excavating/trenching, tie and ballast installation, bridge work, and concrete work activities during construction.
  - Temporary stockpiling, soil movement, construction materials, or other construction waste.

  - Excavation and placement of fill.
  - Soil compaction, dust, air pollution, and water runoff from the construction site.
  - Increased vehicle traffic and human presence.
  - Short-term construction-related noise (from equipment and human presence) and visual disturbance.
  - Degradation of water quality in aquatic habitat features from construction runoff containing petroleum or concrete products.
- Indirect effects on wildlife could be caused by the following actions.
  - Increased light and noise levels.
  - Alteration of hydrology or aquatic thermal regime.
  - Damage through toxicity associated with exposure to herbicides and other chemicals.
  - Introduction of invasive (nonnative) species.
  - Decreased reproductive success as a result of loss of foraging and nesting habitat.
  - Reduced habitat suitability and prey abundance as a result of habitat alteration or degradation
- Golden eagle, short-eared owl, bank swallow, least Bell's vireo, western yellow-billed cuckoo, and mountain plover are species that could forage within suitable habitat along the entire Proposed Project; however, these species are not known to nest in the area. Construction of the Proposed Project would not affect individuals and nests of golden eagle, short-eared owl, bank swallow, least Bell's vireo, western yellow-billed cuckoo, and mountain plover. Thus, impacts to these species would be less than significant.
- The majority of the Ceres to Merced Extension Alignment would be constructed in developed land cover, with small pockets of areas that support natural land cover primarily associated with aquatic riverine and cropland (e.g., orchards, row crops) cover. The Ceres to Merced Extension Alignment would span riparian, woodland, and wetland land covers and be constructed adjacent to grassland and vernal pool cover types. In these natural land cover areas, the Ceres to Merced Extension Alignment has the potential to affect special-status wildlife.
- Crotch bumble bee, Western monarch butterfly, California tiger salamander, western spadefoot toad, and western pond turtle could be affected through ground-disturbing activities in and near aquatic riverine and ponds and in adjacent upland California annual grassland land covers. Construction activities in and near aquatic riverine and

freshwater marsh habitat could also affect giant garter snake, Swainson's hawk, northern harrier, white-tailed kite, mountain plover, burrowing owl, loggerhead shrike, song sparrow (Modesto population), tricolored blackbird, as well as other migratory birds. Wildlife that utilize croplands could also be affected by construction through vegetation removal and ground disturbance.

- Disturbance within riparian land cover types and the removal of riparian vegetation could affect western red bat, hoary bat, pallid bat, yellow-headed blackbird, tricolored blackbird, song sparrow (Modesto population), white-tailed kite, Swainson's hawk, coast horned lizard, and western pond turtle. Construction may result in the removal of elderberry shrubs with stems 1 inch in diameter or more and could affect valley elderberry longhorn beetle. Construction activities in riparian corridor and other land covers types (e.g., grassland, developed/landscape) that remove nectar-resources and milkweed could affect Western monarch butterfly through mortality and injury of individual adults, eggs, and larvae, as well as loss of breeding and nectar resources. Disturbance within woodland cover type could also affect nesting migratory birds and roosting bats. Similarly, coast horned lizard and silvery legless lizard could be affected in areas of woodland land cover with sandy soil or thick leaf litter. Disturbance in or near freshwater marsh land cover could affect tricolored blackbird and yellow-headed blackbird. Construction near existing structures, trees, and orchards could also affect migratory and special-status nesting bird and roosting bat species.
- The Ceres to Merced Extension Alignment would not be constructed in vernal pool and California annual grassland land cover; therefore, no direct impacts are anticipated to wildlife that could occupy those habitats. However, these landcovers are located immediately adjacent to and/or within 250 feet of the construction area and could be indirectly impacted. Construction of the Ceres to Merced Extension Alignment could indirectly impact vernal pool branchiopod, crotch bumble bee, Western monarch butterfly, California tiger salamander, western spadefoot toad, and coast horned lizard through alteration of hydrology, exposure to toxic chemicals and petroleum, habitat degradation, and habitat fragmentation. Ground disturbance adjacent to California annual grassland could affect burrowing owl and grasshopper sparrow through visual disturbance and construction noise and vibration. Construction of the Ceres to Merced Extension Alignment would indirectly disturb California annual grassland, which could also affect San Joaquin kit fox and American badger foraging opportunities and movement. Construction of the Ceres to Merced Extension Alignment would affect special-status wildlife species and their habitat and would result in a potentially significant impact.

- Mitigation Measures BIO-2.1 through BIO-2.16 would apply to the Proposed Project for construction impacts on special-status wildlife species and their habitat.

  Mitigation Measure BIO-2.1: Conduct a worker environmental training program for construction personnel

  - Before any equipment staging, grading, or vegetation removal in areas supporting or potentially supporting sensitive biological resources (e.g., aquatic, cropland, developed/landscape, grassland, riparian, ruderal and wetlands habitat; habitat for special-status wildlife species; active bird nests, active bat roosts), SJRRC's contractor(s) will prepare and implement a worker environmental awareness training program. The training program will be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid effects on sensitive biological resources and penalties for not complying with applicable state and federal laws and permit requirements. The training program will be delivered by a biologist and will include information on the life history and habitat requirements of special-status species potentially occurring in or adjacent to the environmental footprint, the importance of protecting habitat, and the terms and conditions of resource protection measures from applicable permits for the project. The training program will also cover general restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on sensitive biological resources during construction.

  Mitigation Measure BIO-2.2: Avoid vernal pool-endemic species

  - If any construction work remains to be completed after the start of the rainy season (15 October to 1 June), SJRRC or its contractor(s) will install exclusion fencing and erosion control measures prior to any ground disturbance within feet of wetlands and vernal pools under the guidance of a qualified biologist. The fencing will be installed around the perimeter of grassland landcover containing vernal pools and other seasonal wetlands. The contractor, under the supervision of a qualified biologist, will erect and maintain the exclusion fencing for the duration of the construction activity. Fencing will be removed as soon as construction activities are completed.

  Mitigation Measure BIO-2.3: Avoid valley elderberry longhorn beetle

  - Before ground disturbance within 100 feet of upland and riparian habitat with potential to support valley elderberry longhorn beetle (unless disturbance is unavoidable), a qualified biologist

will identify any shrubs in and along improvement areas with potential to support valley elderberry longhorn beetle. SJRRC or its contractor(s) will comply with the following avoidance and minimization measures from the 2017 USFWS' Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle:

- Areas with elderberry shrubs will be avoided during construction activities. Areas with elderberry shrubs will be fenced, flagged, or both. Fencing and/or flagging will be placed as close to the construction limits as feasible.
- Activities that may damage or kill an elderberry shrub (e.g., trenching, paving, pile driving), may need an avoidance area of at least 20 feet from the drip line.
- A qualified biologist will provide training for all contractors and any on-site personnel on the status of the valley elderberry longhorn beetle, its host plant and habitat, the need to avoid damaging elderberry shrubs, and the possible penalties for noncompliance.
- A qualified biologist will monitor the work area at Project-appropriate intervals to verify that all avoidance and minimization measures are implemented.
- To the extent feasible, all activities that could occur within 65 feet of an elderberry shrub would be conducted outside the flight season of the valley elderberry longhorn beetle (March-July).
- Trimming of elderberry shrubs would occur between November and February and would avoid the removal of any branches or stems that are 1 inch or more in diameter.
- Herbicides would not be used within the drip line of elderberry shrubs. All chemicals would be applied using a backpack sprayer or similar direct application method.
- Mechanical vegetation removal within the drip line of elderberry shrubs would be limited to the season when adults are not active (August-February) and would avoid damaging elderberry shrubs.

o SJRRC's contractor(s) will be responsible for ensuring that the contractor maintains the buffer area fences around elderberry shrubs throughout construction. SJRRC's contractor(s) will ensure that the environmental footprint is watered down as necessary to prevent fugitive dust from becoming airborne and accumulating on elderberry shrubs in environmental footprints

and adjacent to construction areas activities (including unpaved access routes).

- Where avoidance of elderberry shrubs is not feasible, SJRRC will provide compensatory mitigation for impacts on valley elderberry longhorn beetle habitat, including through transplantation and replacement of elderberry shrubs and maintenance of replacement shrubs, consistent with the 2017 USFWS' Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle as follows:
- Suitable riparian habitat would be replaced at a minimum of 3:1 (acres of mitigation to acres of impact).
- Suitable non-riparian habitat would be replaced at a minimum of 1:1 (acres of mitigation to acres of impact).
- Individual elderberry shrubs in riparian areas would be replaced through a purchase of two credits at a USFWS-approved bank for each shrub that would be trimmed or removed regardless of the presence of exit holes.
- Individual elderberry shrubs in non-riparian areas would be replaced through a purchase of one credit at a USFWS-approved bank for each shrub that would be trimmed if exit holes have been found in any shrub in or within 165 feet of the work area.
- If an elderberry shrub is to be completely removed by the activity, the entire shrub would be 12 transplanted to a USFWS-approved location in addition to the specified credit purchase.
- For transplanted elderberry plants, a survival rate of at least 60 percent of the elderberry plants and 60 percent of the associated native plants must be maintained throughout the 10-15 year monitoring period. If survival rates drop below 60 percent during the monitoring period, failed plantings would be replaced and maintained until the 60 percent survival rate is achieved.

Mitigation Measure BIO-2.4: Avoid California tiger salamander and western spadefoot toad

- SJRRC will retain a USFWS and/or CDFW-approved biologist (as appropriate) to identify and flag (pin flags or 4-foot lath) all suitable aquatic habitat for California tiger salamander and western spadefoot toad outside of but adjacent to environmental footprints and ground-disturbance areas prior to staging, vegetation clearing, grading, or other construction activities.
- Prior to any ground-disturbing activity, SJRRC's construction

contractor(s), under the direction of a qualified biologist will install wildlife exclusion fence along the boundary of the work area containing California tiger salamander and Western spadefoot toad habitat or would implement similar measures as otherwise required pursuant to regulatory authorizations issued under the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA). The wildlife exclusion fence must be trenched into the soil at least 4 inches in depth, with the soil compacted against both sides of the fence for its entire length to prevent tiger salamanders from passing under the fence, and must have must have intermittent exit points. During the dry season (1 June – 15 October), the qualified biologist will inspect the wildlife exclusion fence at least twice weekly on nonconsecutive days and on a daily basis between October 15 and June 1 or following any rain event. The wildlife exclusion fence will be installed with turn-arounds at access points to direct California tiger salamander or Western spadefoot toad away from gaps in the fencing.

- During the dry season (1 June – 15 October), and prior to any ground-disturbing activity, a qualified biologist will conduct a preconstruction survey of suitable upland habitat within the construction work area and extending out 100 feet from the boundary of the work area, where accessible, to determine if California tiger salamander and western spadefoot toad are present. When ground-disturbing activities take place during the rainy season (15 October – 1 June), in addition to upland surveys, the qualified biologist would survey work areas that are adjacent to potential breeding habitat for the presence of California tiger salamander and western spadefoot toad.
- With approval from USFWS and/or CDFW, an approved biologist will relocate individual salamanders or toads if found within the construction footprint. Individuals will be moved immediately to a relocation site that is a minimum of 330 feet from the construction boundary. The relocation site will be determined in coordination with USFWS and/or CDFW prior to the commencement of construction activities.
- If feasible, construction activities near drainages and wetland complexes identified as potential movement corridors will take place between 1 July and 1 October, when the California tiger salamander and western spadefoot toad are least likely to be present in the construction areas.
- To discourage California tiger salamander and western spadefoot toad from entering the construction areas via ditches, the ditches will be equipped with lightweight, one-way flow

gates. These will be designed so that water can easily pass from the construction site to the ditches, but small vertebrates such as salamanders, toads, or frogs cannot move upstream from ditches to the construction areas.

- To the extent feasible, construction activities would not be conducted within 250 feet of areas identified as occupied California tiger salamander breeding habitat during the rainy season (15 October – 1 June). However, construction activities may begin within such areas after 15 April if the breeding habitat is no longer inundated.
- If California tiger salamander are discovered within the construction area and full impact avoidance of California tiger salamander habitat is not possible, SJRRC will provide compensatory mitigation for occupied habitat at a ratio of 3:1, unless higher ratios are required through regulatory authorizations issued under FESA or CESA. Compensatory mitigation will be provided using an agreed upon method during permit consultation.

Mitigation Measure BIO-2.5: Avoid western pond turtle and giant garter snake 26 SJRRC's contractors(s) will implement the following measures to avoid impacts on western pond turtle and giant garter snake during construction.

- Giant garter snake
    - To reduce the likelihood of snakes entering construction areas within or adjacent to freshwater wetlands, slow-moving riverine aquatic habitat, marshes, ditches, and canals in the environmental footprint, SJRRC or its contractor(s) will install exclusion fencing along the freshwater marsh, aquatic riverine features, and open water areas outside of the environmental footprint (areas within 200 feet of suitable habitat). The exclusion fencing will be installed and maintained by SJRRC and its construction contractor(s) for the duration of construction within or adjacent to these features. The fencing will consist of 3- to 4-foot-tall erosion fencing buried at least 6 to 8 inches below-ground. To ensure that construction equipment and personnel do not affect aquatic habitat for giant garter snake outside the construction corridor, orange barrier fencing or other high-visibility flagging (such as t-post and rope) will be erected in addition to the exclusion fencing to clearly define the aquatic habitat to be avoided.
    - Prior to construction each morning, construction

personnel will inspect exclusion and orange barrier fencing to ensure they are in good condition. Observations of snakes within the environmental footprint and access routes will be immediately reported to the biologist, and all activities will cease until appropriate corrective measures have been completed, the snake leaves the construction site under its own volition, or the biologist determines that the snake will not be harmed.

- A qualified biologist will conduct a preconstruction survey in suitable habitat no more than 24 hours before groundbreaking construction. The survey will take place within each construction footprint, as well as 200 feet outside of each footprint. If construction stops for a period of two weeks or more, a new preconstruction survey will be completed no more than 24 hours prior to preinitiation of work.
- Vegetation clearing within 200 feet of the banks of potential giant garter snake aquatic habitat will be limited to the minimum area necessary. Giant garter snake habitat outside but adjacent to the construction area will be flagged and designated as an environmentally sensitive area, to be avoided by all construction personnel.
- The movement of heavy equipment within 200 feet of the banks of potential giant garter snake aquatic habitat will be confined to designated access and haul routes to minimize habitat disturbance.
- Prior to moving vehicles or equipment, all construction personnel will check under the vehicle/equipment for any sensitive wildlife, including giant garter snake. If an animal is observed, the vehicle/equipment will not be moved until the individual has vacated the area of its own accord.
- Time construction activities in giant garter snake habitat to occur within the active season for giant garter snake (approximately 1 May to 1 October) when the species is more likely to be moving around and can more easily avoid being disturbed. For any work that needs to occur outside of the active season in giant garter snake habitat, ground-disturbing activities must first be initiated during the active season (prior to 15 September). This way no habitat within the construction areas will be available for giant garter snake to sue as refugia during the inactive

season and will deter individuals from moving into active construction zones.

- Any dewatered habitat will remain dry for at least 15 consecutive days after 15 April and prior to excavating or filling the dewater habitat.
- A qualified biologist will be present onsite to monitor for giant garter snake during initial groundbreaking construction activities in giant garter snake habitat. If giant garter snake is detected during preconstruction surveys, the biologist may remain on-site during construction; in such an event SJRRC will coordinate with wildlife agencies on establishing a monitoring schedule.
- To prevent inadvertent entrapment of giant garter snake, or other wildlife during construction, all excavated, steep-walled holes or trenches measuring more than 6 inches deep either will be covered at the close of each working day using plywood or similar material. If holes/trenches cannot be fully covered, at least one escape ramp will be constructed of earth fill or wooden planks. All holes or trenches will be checked daily for trapped wildlife. Before holes or trenches are filled, they will be thoroughly inspected for trapped wildlife.
- All construction pipes, culverts, or similar structures on the construction site for one or more overnight periods will be capped or sealed with tape (or similar material) or stored at least 3 feet above ground. They will be inspected thoroughly for special-status wildlife before capping, burying or otherwise using the structures. If an individual is discovered during this inspection, the structure will not be disturbed until the individual leaves on its own accord.
- To avoid entangling giant garter snake, erosion control methods will not utilize plastic, monofilament or other woven fiber netting.
- If a live giant garter snake is encountered during preconstruction or construction activities, work will stop in the vicinity of the individual and the qualified biologist will monitor the snake an allow it to move away unharmed, and of its own accord without being disturbed.

o Western pond turtle

- Prior to the start of construction within western pond

turtle habitat (i.e., any undeveloped areas within 400 feet of riverine aquatic habitat, ponds, vernal pools, or seasonal wetlands) during the nesting or overwintering season, SJRRC will retain a qualified biologist (one who is familiar with different species of turtles) to conduct preconstruction surveys 1 week before and within 24 hours of beginning work. The surveys will be time to coincide with the time of day when turtles are most likely to be active (i.e., during the cooler part of the day between 8:00 a.m. and 12:00 p.m. during spring and summer). Prior to conducting the surveys, the biologist will locate the microhabitats for turtle basking (logs, rocks, brush thickets) and determine a location to observe turtles. Each survey will include a 30-minute wait time after arriving onsite to allow startled turtles to return to open basking areas. The survey will consist of a minimum 15-minute observation time per area where turtles could be observed. If western pond turtle is observed during either survey, a biological monitor will be present during construction activities in the aquatic habitat where the turtle was observed and will capture and relocate, if possible, any entrapped turtles.

- The biological monitor will also be mindful of suitable nesting and overwintering areas in proximity to suitable aquatic habitat and periodically inspect these areas for nests and turtles. If preconstruction surveys identify active nests, the biologist will establish 50-foot 30 no-disturbance buffer zones around each nest using temporary orange construction fencing with a 4-inch-tall gap below the fence. The fencing will be permeable to young turtles and allow them to move away from the nest following hatching. The buffer zones and fencing will remain in place until the biologist has confirmed that the young have left the nest.
- If western pond turtles are found in the construction footprint, construction will cease until the turtle has left the work area. If approved by CDFW, the biological monitor will remove and relocate the turtle to suitable habitat outside the construction footprint. Relocation sites will be subject to CDFW approval.

Mitigation Measure BIO-2.6: Avoid coast horned lizard and Northern California legless lizard

o SJRRC's contractors(s) will implement the following measures to avoid impacts on coast horned lizard and silvery legless lizard

during construction activities.

- A qualified biologist will conduct preconstruction surveys (within 24 hours prior to starting project activities) and construction monitoring of work in suitable habitat (i.e., grassland and scrub with sandy, friable soils) to protect coast horned lizard and Northern California legless lizard. Prior to construction or restoration activities in California annual grassland and riparian habitat with sandy soils or dense leaf litter, the biologist will conduct a preconstruction survey for coast horned and Northern California legless lizard. This survey will include the following steps.
  - Systematic subsurface searching (coast horned lizard and Northern California legless lizard are fossorial [burrowing]). Subsurface searching will include hank raking litter or duff to a depth of two inches and inspecting the ground surface in work areas for litter and loose soil burrowing species.
  - Staking the limits of the survey areas and fencing them with small-mesh construction fencing, buried to a minimum depth of 6 to 10 inches below-ground, to reduce the likelihood of lizards reentering the active construction area.
  - Capture and release of found coast horned lizards and Northern California legless lizards into nearby similar habitat areas designated by the biologist.
  - Removal of the lizard exclusion fence following completion of construction
- During construction in coast horned lizard and Northern California legless lizard habitat, a qualified biologist will be present and have the authority to temporarily stop construction activities if they find coast horned lizards or Northern California legless lizards in the environmental footprint. Work will not resume until the biologist has successfully relocated the animals and determined that they would not be harmed by construction.

Mitigation Measure BIO-2.7: Avoid nesting birds

- SJRRC or its contractor(s) will conduct construction activities near nesting areas outside of the bird nesting season (1 February to 31 August) to the extent feasible. If construction in the nesting season is unavoidable, SJRRC or its contractor(s) will retain a qualified biologist with demonstrated nest-searching experience to conduct preconstruction surveys for nesting birds (including raptors, but excluding Swainson’s hawk and

burrowing owl) within 300 feet and including the environmental footprints. Adjacent lands outside the environmental footprints will be scanned with binoculars from the limit of ground disturbance, the Union Pacific Railroad (UPRR) right-of-way (ROW), and publicly accessible areas. Preconstruction surveys will occur no more than 3 days prior to the onset of ground-disturbing activities (including clearing, grubbing, and staging) at each improvement area. If active nests are found in the environmental footprints, the biologist will establish a no-disturbance buffer around the nest and mark the buffer perimeter with high-visibility fencing, flagging, or pin flags. The size of the buffer will be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 250 feet for raptors and 50 feet for other birds. The buffer will remain in place until the nest is no longer active, as determined by the biologist. Buffers for any nests found outside but within 300 feet of environmental footprints will be established based on the biologist's best professional judgment whether the work would result in nest abandonment. If a lapse in construction activities of 15 days or longer at a previously surveyed environmental footprint occurs, another preconstruction survey will be conducted.

- To the extent possible, SJRRC or its contractor(s) will initiate structure demolition/modification outside of the nesting season to avoid impacts on active nests affixed to structures before they become active during the nesting season (1 February to 31 August). If structure demolition activities cannot occur outside of the nesting season, SJRRC or its contractor(s) will remove inactive nests from the structure to be demolished and install nest exclusion measures (e.g., fine mesh netting, panels, or metal projectors) outside of the nesting season. All exclusionary devices will be monitored and maintained throughout the breeding season to ensure that they are successful in preventing the birds from accessing the cavities or nest sites. No more than 3 days prior to structure demolition activities, a qualified biologist will conduct a preconstruction survey of all potential nesting habitat on the structures to be demolished/modified and the surrounding areas for the presence of active nests. If active nests are found on the structures or in the affected area, then demolition/modification activities will not proceed until the biologist verifies that all nests on the structures are inactive.
- After all surveys and/or nest deterrence activities are completed at the environmental footprint, the biologist will complete a

memorandum detailing the survey effort and results and submit the memorandum to SJRRC within 7 days of survey completion.

Mitigation Measure BIO-2.8: Avoid Swainson's hawk

- To protect Swainson's hawk nesting habitat inside the Ceres General Plan coverage area, SJRRC or its contractor(s) will implement Ceres General Plan Agricultural and Natural Resources Policy 4.D.5, Swainson's Hawk Protection (City of Ceres 2018) (see Appendix G of this environmental impact report (EIR), Section G.5.2.1). Policy 4.D.5 is consistent with the survey methodology of the Swainson's Hawk Technical Advisory Committee 2000.
- To protect Swainson's hawk nesting habitat outside of the Ceres General Plan coverage area (e.g., Stanislaus County, City of Turlock, City of Atwater etc.), SJRRC or its contractor(s) will conduct focus surveys for Swainson's hawk and Swainson's hawk nests. Survey methods will follow those prescribed in Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (2000 Swainson's Hawk Survey Protocol) (Swainson's Hawk Technical Advisory Committee 2000), and generally be conducted between February and July, prior to construction activities occurring from 1 March to 31 August. Survey methods and results will be reported to CDFW. Surveys will be conducted by a qualified biologist within 0.5 mile and inclusive of the construction areas. The survey buffer may be smaller in areas where topography (e.g., hills) obstructs the line of sight from the construction area. Survey buffer areas lacking suitable nest trees or with an obstructed line of sight will not be surveyed. Biologists will focus on suitable nest trees within and immediately adjacent to the construction areas that have the highest likelihood for disturbance. The number of surveys needed to determine the status of nesting will be dependent on the conditions during the surveys and observed Swainson's hawk behavior.
- If active nests are found, SJRRC or its contractor(s) will maintain a 0.5-mile buffer between construction activities and the active nest(s) until it has been determined that young have fledged. The buffer may be reduced in consultation with CDFW if the biologist demonstrates via daily observations (minimum of 2 hours before and during construction activity) that adults tending the nest (on eggs or feeding nestlings) are not disturbed by construction noise. If the biologist observes signs of adult agitation or stress from construction (e.g., alarm-calling, flying away from nest when construction starts), construction activities will cease until the qualified biologist, in consultation with

CDFW, determines that young have fledged.

Mitigation Measure BIO-2.9: Compensate for Swainson's hawk foraging and nesting habitat loss

- Inside the Ceres General Plan coverage area (City of Ceres 2018), SJRRC will provide compensatory mitigation for Swainson's hawk foraging habitat loss within 10 miles of an active nest tree (i.e., replacement of existing grassland or agricultural field with new structures and ballast) through or in an amount consistent with the Ceres General Plan Agricultural and Natural Resources Policy 4.D.6., Swainson's Hawk Habitat Mitigation (City of Ceres 2018) (see Appendix G of this EIR, Section G.5.2.1).
- To compensate for impacts on Swainson's hawk foraging habitat outside of the Ceres General Plan coverage area (e.g., Stanislaus County, City of Turlock, City of Atwater), SJRRC or its contractor(s) will preserve offsite habitat management lands as described in California Department of Fish and Game's (now CDFW) Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (California Department of Fish and Game 1994) at a 1:1 to 0.25:1 ratio (acreage preserved: acreage affected), depending on the distance between the construction areas and the nearest active nest. The location of the closest nest to where construction will occur will be identified during Swainson's hawk surveys conducted under Mitigation Measure BIO-2.8. If acceptable to CDFW, SJRRC may alternatively or additionally purchase mitigation credits for Swainson's hawk foraging habitat from a CDFW- approved mitigation or conservation bank that offers service coverage for the impact location. If no active nests are found during the surveys, a search of the California Natural Diversity Database (CNDDB) will be conducted, and CDFW will be contacted to determine the nearest active nest in relation to each construction site.
- SJRRC or its contractor(s) will avoid impacts to Swainson's hawk nest trees (i.e., a tree used within the last 5 years as defined by California Department of Fish and Game 1994) at all times of the year, wherever feasible. If avoidance of a Swainson's hawk nest tree is unavoidable or infeasible, for impacts on Swainson's hawk nesting habitat outside of the Ceres General Plan coverage area (e.g., Stanislaus County, Merced County, City of Turlock, City of Atwater, City of Merced), SJRRC or its contractor(s) will compensate for the removal of nest trees. Unless alternative compensatory mitigation strategies are agreed upon by SJRRC and CDFW,

compensation for impacts to Swainson's hawk will consist of the following: 1) removal of the nest tree only when the tree is not occupied by a Swainson's hawk (e.g., outside of the Swainson's hawk nesting season, when Swainson's hawks are not nesting in the tree, and/or when Swainson's hawk chicks have fledged the nest tree etc.); 2) replacement of the nest tree with an appropriate native tree species; 3) replacement of the nest tree at a ratio of 3:1; and 4) protection of the tree in perpetuity.

Mitigation Measure BIO-2.10: Avoid burrowing owl

- Prior to any construction activity planned during the fall and winter non-nesting season (1 September through 31 January) or at any time during the construction process, SJRRC will retain a qualified wildlife biologist to conduct non-breeding season surveys for burrowing owls. Survey methodology will follow the guidance provided by CDFW's Staff Report on Burrowing Owl Mitigation, Appendix D (California Department of Fish and Game 2012). Surveys will be conducted at each area of suitable habitat that will be disturbed. The survey area will cover all suitable burrowing owl habitat subject to disturbance pursuant to CDFW's Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012). If any burrowing owls are found within the disturbance area, SJRRC or its contractor(s) will notify CDFW and will proceed under CDFW direction.
- If construction is planned to occur during the nesting season (1 February through 31 August), SJRRC will retain a qualified wildlife biologist to conduct breeding season burrowing owl surveys prior to construction. The survey will be conducted to determine if there is a breeding pair within approximately 500 feet of the construction footprint, unless the biologist determines that a smaller survey buffer around the construction footprint is warranted based on preexisting background disturbance and conditions. Survey visits will be timed in accordance with CDFW's Staff Report on Burrowing Owl Mitigation, Appendix D, Breeding and Non-Breeding Season Surveys and Reports (California Department of Fish and Game 2012). This will provide the project team advance notice of nesting owls and allow ample time to discuss appropriate avoidance measures with CDFW.
- In addition, take avoidance surveys will be conducted no less than 14 days prior to ground-disturbing activities and a final survey will be conducted within 24 hours prior to ground disturbance in all areas of the environmental footprint supporting burrowing owl habitat. If the biologist identifies the presence of a burrowing owl nest in an area scheduled to be disturbed by

construction, a 660-foot (~200 meter) no-activity buffer will be established and maintained around the nest while it is active. Surveys and buffer establishment will be performed by qualified wildlife biologists, will be coordinated with CDFW, and will be subject to CDFW review and oversight.

Mitigation Measure BIO-2.11: Compensate for burrowing owl habitat loss

- SJRRC will provide compensatory mitigation for the loss of occupied owl habitat before construction impacts occur. Occupancy of owl habitat will be determined during implementation of Mitigation Measure BIO-2.10, in the environmental footprints that will be permanently affected. Burrows within areas that will undergo temporary impacts will be avoided. Compensatory mitigation may occur in the form of mitigation credit purchase from a CDFW-approved bank with burrowing owl habitat credits and/or preservation of suitable habitat. Mitigation credit purchase or habitat preservation will occur at a 3:1 ratio (compensation area: habitat loss area).
- Habitat preservation will require the development and implementation of a management plan to ensure the preserved area is managed as suitable burrowing owl habitat in perpetuity. The details and specifications of a management plan will be developed in consultation with CDFW, prior to impact on burrowing owl habitat, and will at minimum include the following success criteria.
    - Perform routine mowing or grazing to maintain vegetation height consistent with burrowing owl habitat requirements.
    - Conduct biological monitoring surveys to confirm suitable owl habitat conditions and document ground squirrel and burrowing owl presence for a minimum of 5 years.
    - Restrict deeds to maintain and manage the preserve for burrowing owl in perpetuity, with the ability to grant the preserve to a conservation entity.
    - Preserve maintenance and funding reserves.

Mitigation Measure BIO-2.12: Avoid song sparrow (Modesto population), tricolored blackbird, and yellow-headed blackbird

- To the extent possible, SJRRC or its contractor(s) will conduct construction within 300 feet of freshwater marsh or streambank habitat during the bird non-breeding season (1 September through 31 January). The construction window will avoid

disturbance-related effects on tricolored blackbirds and yellow-headed blackbirds potentially breeding in or near streambanks and freshwater marsh.

- If construction activities in or within 300 feet of freshwater marsh or streambank habitat occur during the bird breeding season (1 February through 31 August), SJRRC will retain a qualified biologist to conduct surveys for the presence of tricolored blackbird and yellow-headed blackbird nesting colony or nests. If an active nest colony or nest is observed by the qualified biologist, then a no-disturbance buffer of 250 feet will be established until the end of the breeding season or until the nesting colony or nest is determined inactive by the qualified biologist. Nest buffers may be reduced if site-specific conditions reduce the possibility of disturbance, as determined by the qualified biologist in coordination with CDFW.

Mitigation Measure BIO-2.13: Avoid roosting bats

- Where feasible, construction activities that have potential to affect bats with potential to occur within the construction site (i.e., pallid bat, Townsend's big-eared bat, western mastiff bat, hoary 4 bat, other common species of bats) will be conducted outside of the maternity season of bats (1 April to 15 September) and prior to the beginning of the hibernation period (1 November). Measures to avoid and minimize impacts on sensitive bats species will be determined in coordination with CDFW and may include the following.
- Trees
- To avoid and minimize impacts on maternity roosts and hibernating bat species, trees will be removed or trimmed between 1 September and 30 October. Tree removal conducted between 15 September and 30 October corresponds to a time period when bats have not yet entered torpor or would be caring for nonvolant young.
- If tree removal and trimming cannot be conducted between 15 September and 30 October, a qualified biologist (i.e., a biologist with experience with tree-roosting habitats and life histories of local bats) will examine trees for suitable bat roosting habitat (e.g., large tree cavities, loose or peeling bark, basal hollows, large snags, palm trees with intact thatch) 7 to 14 days before tree removal or trimming. Trees will also be evaluated to determine if they provide suitable habitat for foliage-roosting bats. Riparian woodland, orchards, and stands of mature broadleaf trees should be considered potential habitat for solitary foliage-roosting bat species.

- If the biologist determines that trees to be removed or trimmed provide suitable bat roosting habitat, the biologist will monitor tree removal/trimming.
- The biologist will make recommendations to implement measures to avoid and minimize disturbance or mortality of bats, such as conducting trimming and removal in the late afternoon or evening when it is closer to the time that bats would normally arouse, removing the tree in pieces rather than felling an entire tree, and gently shaking each tree with construction equipment and waiting several minutes before felling trees or removing limbs to allow bats time to arouse and leave the tree. The biologist will search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW. The biologist will prepare a biological monitoring report, which will be provided to the SJRRC and CDFW.
- Passive monitoring using full spectrum bat detectors may be needed if identification of bat species is required. Survey methods will be discussed with CDFW prior to the start of surveys.
- If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until 15 September or a qualified biologist has determined the roost is no longer active.
- Human-Made Structure and Natural Structures
- At least 30 days prior to structure removal or disturbance, a qualified biologist will conduct an initial daytime survey to assess the structure for potential bat roosting habitat and look for bat sign (e.g., guano, urine staining). The biologist will examine the entire structure (i.e., inside and outside for human-made structure and all cracks, seams, and fissures for natural structures) for potential roosting habitat as well as routes of entry to the structure.
- If no habitat or limited habitat for roosting bats is present and no signs of bat use are present, a preconstruction survey of the entire structure by a qualified biologist will be conducted within 24 hours of demolition.
- If signs of bat use are found or if all areas of the structure cannot be examined and the structure provides moderate or high potential habitat, the biologist will prepare a memo with recommended measures to exclude bats from using the structure as a roost site. The memo will include recommendations for excluding bats from using the structure to

roost, such as sealing off entry points or using lights and other means to deter bats. The memo will include specifications on when and how exclusion measures should be implemented and will be provided to the SJRRC and CDFW.

Mitigation Measure BIO-2.14: Avoid San Joaquin kit fox and American badger

- Within 1 year but no less than 3 months prior to initiating construction for the Ceres to Merced Extension Alignment, SJRRC will retain qualified biologists to identify potential San Joaquin kit fox dens in the construction footprints and surrounding 200 feet in accordance with the Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance (2011 USFWS Standard Recommendations) (U.S. Fish and Wildlife Service 2011). USFWS and CDFW will be consulted in the final survey design and methods given the large environmental footprints. This survey will also identify potential American badger dens. The biologists will prepare a report summarizing the survey observations and results, including maps depicting the locations of potential kit fox dens and badger dens and, if possible, occupancy. The report will be submitted to SJRRC, USFWS, and CDFW.
- Different San Joaquin kit fox den types are defined per the 2011 USFWS Guidance.
    - Known Den—Any existing natural den or built structure that is used or has been used at any time in the past by a San Joaquin kit fox. Evidence of use may include historical records, past or current radiotelemetry or spotlighting data, kit fox sign such as tracks, scat, and/or prey remains, or other reasonable proof that a given den is being or has been used by a kit fox. USFWS discourages use of the terms “active” and “inactive” when referring to any kit fox den because a great percentage of occupied dens show no evidence of use, and because kit foxes change dens often, with the result that the status of a given den may change frequently and abruptly.
    - Potential Den—Any subterranean hole within the species’ range that has entrances of appropriate dimensions for which available evidence is insufficient to conclude that it is being used or has been used by a kit fox. Potential dens will include the following: (1) any suitable subterranean hole; or (2) any den or burrow of another species (e.g., coyote, badger, red fox, or ground squirrel)

that otherwise has appropriate characteristics for kit fox use.

- Natal or Pupping Den—Any den used by kit foxes to whelp and/or rear their pups. Natal/pupping dens may be larger with more numerous entrances than dens occupied exclusively by adults. These dens typically have more kit fox tracks, scat, and prey remains in the vicinity of the den, and may have a broader apron of matted dirt and/or vegetation at one or more entrances. A natal den, defined as a den in which kit fox pups are actually whelped but not necessarily reared, is a more restrictive version of the pupping den. In practice, however, it is difficult to distinguish between the two; therefore, for purposes of 3 this definition either term applies.

o Prior to construction, SJRRC will retain qualified biologists to implement preconstruction surveys of previously identified potential kit fox dens to determine if they are known dens or natal or pupping kit fox dens or American badger dens per the 2011 USFWS Standard 7 Recommendations, no less than 14 days and no more than 30 days before the initiation of construction at each environmental footprint). Construction activities will not occur within 100 feet of a potential den during the natal period (1 February to 30 September). If a known den or natal or pupping den is present and is located 100 feet outside of the permanent construction footprint, then a 200-foot no-disturbance exclusion zone during the natal period (100-foot buffer during the non-natal period) will be established around the den with orange construction fence at the edge of the disturbance limits nearest the den. If a known den or natal or pupping den is present within the construction footprint or within 200 feet of the construction footprint during the natal period (100-foot buffer during the non-natal period), the foxes or badger(s) will be excluded outside of the natal period (from 1 November to 31 January). A summary report will be prepared by the biologists and submitted to SJRRC, CDFW, and USFWS following completion of all fox and badger avoidance and exclusion activities.

Mitigation Measure BIO-2.15: Compensate for San Joaquin kit fox and American badger habitat loss

o SJRRC will provide compensatory mitigation for the loss of occupied San Joaquin kit fox and American badger habitat before construction impacts occur. The occupancy of suitable habitat will be determined during implementation of Mitigation Measure BIO-2.14. Compensatory mitigation may occur in the

form of mitigation credit purchase from a USFWS- and CDFW-approved bank with San Joaquin kit fox habitat credits or preservation and enhancement of suitable habitat. Mitigation credit purchase or habitat preservation and enhancement will occur at a 3:1 ratio (compensation area: habitat loss area).

- Habitat preservation and enhancement will require the development and implementation of a management plan with the following success criteria to ensure the preserved area is managed as suitable San Joaquin kit fox and American badger habitat in perpetuity.
  - Conduct routine eradication of invasive species to maintain the intended vegetation diversity, density, and height consistent with San Joaquin kit fox and American badger habitat requirements for a minimum of 5 years.
  - Conduct biological monitoring surveys to confirm suitable San Joaquin kit fox and American badger habitat conditions and document ground squirrel presence.
  - Restrict deeds to maintain and manage the preserve for San Joaquin kit fox and American badger in perpetuity, with the ability to grant the preserve to a Habitat Conservancy, public agency, or other local habitat management entity.
  - Preserve maintenance and funding reserves.

Mitigation Measure BIO-2.16: Avoid Direct Impacts on Monarch Butterfly Host Plants & Provide Compensatory Mitigation for Impacts on Monarch Butterfly Habitat

- Prior to construction, a qualified biologist will survey for Western monarch butterfly egg and larvae host plant – native and non-native milkweed species —within suitable habitat. If host plants are found, the qualified biologist will conduct surveys for adult butterflies during the peak of the flight period to determine presence/absence. Where adult butterflies are present, construction personnel would avoid host plants outside permanent impact areas, by establishing a no-work buffer around host plants. The size and configuration of the no-work buffer would be based on best professional judgement of a qualified biologist and, at minimum, provide 20 feet of clearance around the resources and maintain a disturbance-free airspace. No herbicides/insecticides will be applied within the no-work buffer.
- To the extent feasible, SJRRC's contractor(s) will implement pollinator conservation measures in the Xerces Society Best

Management Practice for Pollinators in Rangelands (Xerces Society 14 2018), conservation measures in the Nationwide Candidate Conservation Agreement for Monarch Butterfly on Energy and Transportation Lands (Cardno 2020), or other applicable sources.

- If full avoidance of monarch habitat is not feasible, SJRRC will provide compensatory mitigation at a minimum of 1:1 ratio for occupied breeding and foraging habitat unless a higher ratio is required by FESA. SJRRC, in accordance with authorizations issued under FESA, will determine the compensatory mitigation required to offset impacts on habitat for monarch butterfly. Mitigation for monarch butterfly will prioritized any areas with existing monarch butterfly populations and suitable milkweed populations to support breeding.

c.i. Potential Significant Impact:

- Construction of the Proposed Project could remove or degrade state or federally regulated wetlands and other aquatic resources.

c.ii. Facts in Support of Finding:

- Most of the Ceres to Merced Extension Alignment is in developed and cropland areas, with small areas of natural land cover primarily associated with aquatic riverine and freshwater wetland habitat along natural waterways or agricultural canals.
- Both state- and federally regulated wetlands and other aquatic resources would be filled, their restricting layer perforated, graded, or a portion of their area eliminated or degraded by construction activities. The water quality of federally and state-regulated wetland resources that are adjacent to the Ceres to Merced Extension Alignment may be indirectly affected during construction. Both direct and indirect impacts on state- and federally regulated wetlands and other aquatic resources would be significant.
- Mitigation Measures BIO-4.1 and BIO-4.2 would apply to the Ceres to Merced Extension Alignment.

  Mitigation Measure BIO-4.1: Avoid and protect wetlands during construction

  - SJRRC will ensure that a qualified resource specialist (i.e., wetland biologist, ecologist, or soil scientist) will clearly identify wetland areas to be preserved abutting the Project areas and wetland areas outside of the direct construction area with high-visibility construction fencing or markers (e.g., lath or pin flags) before site preparation. Construction will not encroach upon jurisdictional wetlands identified by the resource specialist. A

formal wetland delineation will be completed prior to construction and the resource specialist will use the verified wetland delineation to confirm the location of wetland boundaries based on existing conditions at the time of the avoidance marking. Exclusion fencing or markers will be installed before construction activities are initiated, and the fencing will be maintained throughout the construction period. No construction activity, traffic, equipment, or materials will be permitted in fenced wetland areas. Exclusion fencing and markers will be removed following the completion of construction activities.

- All conditions imposed by the state and federal permits will be implemented as part of the Project. The conditions will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance.

Mitigation Measure BIO-4.2: Compensate for impacts on jurisdictional wetlands and non-wetland waters of the United States (aquatic resources) prior to improvements impacts during construction

- SJRRC and/or its contractor(s) will develop an aquatic resource (wetlands and non-wetland waters of the United States) mitigation plan, subject to approval by USACE, which will ensure no net loss of wetlands from Project impacts. The plan will detail the amount and type of wetlands (based on the verified wetland delineation) that will be compensated for (through preservation, creation, or restoration) for impacts on existing wetlands and non-wetland waters of the United States (aquatic resources) and outline the monitoring and success criteria for the compensation of wetlands and non-wetland waters of the United States. Additional enhancement options include fish barrier removal, riparian restoration, floodplain restoration, and streambank layback to improve overall ecologic function and connectivity of wetland and non-wetland waters. Enhancement sites will be located as near the impact location as possible but, in the event that local enhancement opportunities are not available, such activities will occur within the same stream system or watershed to provide improved ecologic function and connectivity of wetlands and non-wetland waters affected by the Project.
- Monitoring and success criteria applicable to created or restored wetlands will require the following.
    - At least two surveys by a qualified wetland biologist, botanist, or ecologist per monitoring year.

- At least 80 percent of the created or restored features support vegetation consistent with reference feature conditions.
- At least 80 percent of the created or restored features support hydrologic regimes similar to reference feature conditions.
- A minimum of 5 consecutive years of monitoring to ensure success criteria are met.
- Remedial actions to restore intended ecological function of created or restored features that fail to meet the success criteria for 3 consecutive years.

o Once the plan is approved, SJRRC will implement the aquatic resource compensation measures prior to the initiation of Project construction. SJRRC will be responsible for funding compensatory mitigation, monitoring of the created or restored features per the mitigation plan, and any remedial actions necessary. All conditions that are attached to the state and federal permits will be implemented as part of the Project. The conditions will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance.

d.i. Potential Significant Impact:

- Construction of the Proposed Project could remove or degrade sensitive natural communities, including riparian habitat, identified in local or regional plans, policies, and regulations or by CDFW or USFWS.

d.ii. Facts in Support of Finding:

- Most of the Ceres to Merced Extension Alignment is in developed and cropland areas, with small areas of natural land cover primarily associated aquatic riverine, wetlands, and riparian habitat along natural waterways.
- Construction of the Ceres to Merced Extension Alignment could result in impacts on sensitive natural communities, including aquatic riverine resources, wetland, and riparian habitat. Where present within the affected area, portions of sensitive natural communities, including riparian habitat, would be removed or degraded. Impacts on sensitive natural communities, including riparian habitat, would be significant.
- Mitigation Measures BIO-4.1 BIO-4.2, BIO-5.1, and BIO-5.2 would apply to the Ceres to Merced Extension Alignment.

BIO-4.1 and BIO-4.2 See Attachment C, Section C.(1)c.ii. above.

Mitigation Measure BIO-5.1: Avoid and protect sensitive natural communities, including riparian habitat, during construction

- SJRRC will ensure that a qualified resource specialist (i.e., biologist, botanist, ecologist, or soil scientist) will clearly identify sensitive natural communities, including riparian habitat, to be preserved abutting the Project areas and outside of the direct construction area with high-visibility construction fencing or markers (e.g., lath or pin flags) before site preparation. Construction will not encroach upon sensitive natural communities identified by the resource specialist. The resource specialist will use the verified wetland delineation, soils data, and land cover data to confirm the location of sensitive natural community boundaries based on existing conditions at the time of the avoidance marking. Exclusion fencing or markers will be installed before construction activities are initiated, and the fencing will be maintained throughout the construction period. No construction activity, traffic, equipment, or materials will be permitted in fenced sensitive natural community areas. Exclusion fencing and markers will be removed following completion of construction activities.
- All conditions imposed by the state and federal permits will be implemented as part of the Project. The conditions will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance.

Mitigation Measure BIO-5.2: Compensate for loss of sensitive natural communities (including riparian habitat)

- For direct effects on sensitive natural communities (including riparian habitat) that cannot be avoided, SJRRC will compensate for the loss of sensitive natural communities to ensure no net loss of habitat functions and values. Compensation ratios will be based on site-specific information and determined through coordination with the appropriate state and federal agencies during the permitting process. At a minimum, the compensation ratio will be 2:1 (e.g., 2 25 acres restored/created/enhanced or credits purchased for every 1 acre removed) for permanent impacts and 1:1 for temporary impacts (where riparian habitat will regenerate to pre-activity character within 1 year). Compensation may be a combination of offsite restoration or mitigation credits. SJRRC or its contractor(s) will develop a restoration and monitoring plan that describes how riparian habitat will be enhanced or recreated and monitored over at least 5 years, or as determined by the appropriate state and federal agencies.

- If SJRRC or its contractor(s) identifies suitable onsite areas (adjacent to the permanent construction footprint) that are outside the ROW vegetation management zone and chooses to compensate onsite or in the Project vicinity, a revegetation plan will be prepared. The revegetation plan will be developed prior to the removal of existing riparian vegetation and will be conducted onsite or in the Project vicinity to the extent feasible; however, mitigation site selection will avoid areas where future improvements are likely. The revegetation plan will be prepared by a qualified botanist or restoration specialist with experience in riparian restoration and reviewed by the appropriate agencies. The revegetation plan will specify the planting stock appropriate for each riparian land cover type and each mitigation site, ensuring the use of genetic stock from the corresponding Project area. The plan will employ the most successful techniques available at the time of planting. Success criteria will be established as part of the plan and will include a minimum of 70 percent revegetation success after 3 years, 80 percent revegetation success at the end of 5 years, and 75 percent vegetative coverage after 5 years.
- SJRRC or its contractor(s) will retain a qualified botanist, restoration ecologist, or biologist with experience in riparian restoration to monitor the plantings as necessary for 5 years. SJRRC or its contractor(s) will be responsible for maintaining the plantings, including managing invasive plants (as defined by the California Invasive Plant Council) and other weeds, and implementing irrigation and plant protection if necessary. SJRRC or its contractor(s) will submit annual monitoring reports to the regulatory agencies issuing permits related to habitat effects, including CDFW, USACE, the National Marine Fisheries Service (NMFS), and USFWS. Replanting will be necessary if success criteria are not met, and replacement plants subsequently will be monitored and maintained to meet the success criteria. The riparian habitat mitigation will be considered successful when the sapling trees established meet the success criteria, the habitat no longer requires substantial active management, and vegetation is arranged in groups that, when mature, replicate the area, natural structure, stratification, and species composition of similar riparian habitats in the region.

e.i. Potential Significant Impact:

- Construction of the Proposed Project could substantially interfere with native resident or migratory fish or wildlife species movement, established migration corridors, or their use of nursery areas.

e.ii. Facts in Support of Finding:

- Most of the Ceres to Merced Extension Alignment would be constructed within developed/landscaped land cover, with multiple parcels of natural land cover associated with ruderal, riverine (irrigation canal, river, stream), cropland (row crops and orchard), pond, annual grassland, woodland, riparian, and freshwater marsh land covers. These natural land covers offer potential for fish and wildlife movement, however, the potential for terrestrial wildlife movement is limited due to these undeveloped parcels being small and noncontiguous.
- Construction of facilities (e.g., culverts) over canals could also affect special-status wildlife species, including western pond turtle and giant garter snake movement and dispersal through this land cover type. Fish and wildlife movement could be affected by construction-related noise and vibration disturbance, the presence of construction vehicles and machinery, and habitat removal or degradation. Impacts on native resident and migratory fish and wildlife corridors from construction of the Ceres to Merced Extension Alignment would be potentially significant.
- Mitigation Measures BIO-2.3, BIO-2.7 through BIO-2.13, BIO-3.3, and HYD-1.2 would apply to the Ceres to Merced Extension Alignment for impacts on the movement of native resident and migratory fish and wildlife.

  BIO-2.3 and BIO-2.7 through BIO-2.13 See Attachment C, Section C.(1)b.ii. above.

  Mitigation Measure BIO-3.3: Implement seasonal restrictions for in-water work

  - There will be a construction work window of June 15 to October 15 for all work within creek and river channels. This time period will minimize impacts on migrating special-status fish species, such as adult steelhead and Chinook salmon. In-water work within flowing streams will only dewater up to half of the wetted stream at any time to allow fish passage.

  HYD-1.2 See Attachment C, Section C.(1)a.ii. above.

f.i. Potential Significant Impact:

- Construction of the Proposed Project could conflict with local biological resource policies, including tree preservation policies or ordinances.

f.ii. Facts in Support of Finding:

- Construction of the Proposed Project could conflict with local biological resource policies (including tree preservation policies and the

protection of sensitive plant and wildlife habitat policies or ordinances) by removing locally regulated trees and/or disturbing sensitive plant and wildlife habitat during construction.

- Tree removal is expected during construction, as part of ground-disturbance activities. Tree regulations do not apply inside or outside the UPRR ROW because UPRR is a federally regulated rail carrier and the SJRRC is a joint powers authority that benefits from the exemption contained in Public Utilities Code Section 103200.
- Construction of the Proposed Project would avoid tree removal unless it is necessary. Tree removals would be limited in areas within the existing UPRR ROW because existing UPRR maintenance actions routinely prune and remove trees in the ROW as necessary for safe operation. Tree removals are expected in some portions of the existing ROW and in environmental footprints outside the existing ROW.
- The Ceres to Merced Extension Alignment would affect a high number of trees; however, many of these are orchard trees, which are not protected by local ordinances. The number of protected trees to be removed is relatively low (<4.8 per hectare). Construction of the Ceres to Merced Extension Alignment would result in the removal of protected trees, which would be considered a potentially significant impact.
- Mitigation Measures BIO-1.1 through BIO-1.4, BIO-2.1 through 2.10, BIO-2.12 through BIO-2.14, BIO-3.1 through BIO-3.3, BIO-4.1, BIO-5.1, and HYD-1.2 would apply to the Proposed Project for construction impacts that could result in an inconsistency with a local policy.

  BIO-1.1 through BIO-1.4 See Attachment C, Section C.(1)a.ii. above.

  BIO-2.1 through 2.10, BIO-2.12 through BIO-2.14 See Attachment C, Section C.(1)b.ii. above.

  Mitigation Measure BIO-3.1: Implement noise reduction measures for pile driving

  - Potential injury and mortality associated with pile driving, which may be required for the pile installation for the new and replacement bridges, will be minimized by implementing the following measures. SJRRC's contractor(s) will implement the following measures, developed in coordination with project design engineers, to minimize the exposure of special-status fish species to potentially harmful underwater sounds.
    - If feasible, SJRRC's contractor(s) will vibrate all piles to the maximum depth possible before using an impact hammer.

- During impact driving, SJRRC's contractor(s) will limit the number of strikes per day to the minimum necessary to complete the work.
- The smallest pile driver and minimum force necessary will be used to complete the work.
- During impact driving, SJRRC's contractor(s) will use a bubble ring or similar device to minimize the extent to which the interim peak and cumulative sound exposure level (SEL) thresholds are exceeded.
- No pile driving activity will occur at night.
- A "soft start" technique shall be employed upon initial pile-driving activities every day to allow fish an opportunity to vacate the area. Soft starts require an initial set of three strikes from the impact hammer at 40 percent energy, followed by a 1-minute waiting period between subsequent three-strike sets. Soft starts for vibratory hammers will initiate noise at 15 seconds at reduced energy, followed by a 1-minute waiting period between subsequent starts. This process should continue for a period of no less than 20 minutes.

Mitigation Measure BIO-3.2: Develop and implement a hydroacoustic monitoring plan to minimize noise effects on fish

- SJRRC's contractor(s) will develop and implement a hydroacoustic monitoring plan. The monitoring plan will be submitted to the resource agencies (i.e., CDFW, NMFS, USFWS) for approval at least 60 days before the start construction. The plan will include the following requirements.
  - SJRRC's contractor(s) will monitor underwater noise levels during all impact pile driving activities on land and in water to ensure that that peak and cumulative SELs do not exceed estimated values.
  - The monitoring plan will describe the methods and equipment that will be used to document the extent of underwater sounds produced by pile driving, including the number, location, distances, and depths of the hydrophones and associated monitoring equipment.
  - The monitoring plan will include a reporting schedule that includes provision of daily summaries of the hydroacoustic monitoring results to the resource agencies and more comprehensive reports on a monthly basis during the pile driving season.

- The reports will include the number of piles installed per day, the number of strikes per pile, the interval between strikes, the peak sound pressure level, SEL, root mean square per strike, and accumulated SEL per day at each monitoring station.
- SJRRC's contractor(s) will ensure that a qualified fish biologist is on site during impact pile driving to document any occurrences of stressed, injured, or dead fish. If stressed, injured, or dead fish are observed during pile driving, SJRRC's construction contractor(s) will reduce the number of strikes per day to ensure that fish are no longer showing signs of stress, injury, or mortality.

g.i. Potential Significant Impact:

- Operation of the Proposed Project could injure or kill special-status wildlife species.

g.ii. Facts in Support of Finding:

- Increased passenger train traffic will occur following construction of the Ceres to Merced Extension Alignment, but operational conditions along the UPRR ROW are not expected to be significantly different from existing conditions with respect to special-status wildlife species. Noise and occasional train strikes from operation of the Ceres to Merced Extension Alignment could affect special-status wildlife, including pollinators such as monarch butterfly and individual birds, but these effects are expected to be similar in magnitude to the operational noise and train strikes experienced from existing freight service in this area. Operation of the Ceres to Merced Extension Alignment will not significantly change habitat conditions along the corridor after construction is completed. Operations impacts from rail service on sensitive and special-status wildlife species and their associated habitats from increased train service will be less than significant.
- The Ceres to Merced Extension Alignment will include construction and operation of new culvert structures on the Ceres Main Canal, multiple irrigation canals, and a cross-swale drainage. Irrigation canals, ditches, and agricultural drainages can provide habitat for special-status wildlife species, including western pond turtle, giant garter snake, tricolored-black bird, song sparrow (Modesto population), other migratory nesting birds, and valley elderberry longhorn beetle (where elderberry shrubs are present). Maintenance activities (vegetation management as well as ground disturbing activities, like grading) that would occur as a result of operation and maintenance of culvert structures could affect special-status wildlife species. This impact would be potentially significant.

- Vegetation management and herbicide/insecticide application on the Ceres to Merced Extension Alignment within the UPRR ROW could affect nesting birds, if management activities are conducted during the bird nesting season (1 February to 31 August). Destruction of an active bird nest would violate the MBTA and California Fish & Game Code and would, therefore, be a significant impact. Vegetation management and application of herbicide/insecticide could degrade or kill host and nectar plants for invertebrates such as monarch butterfly. Additionally, vegetation management activities could affect roosting bats. Destruction of bat roosts, including roosts for pallid bat, western mastiff bat, western red bat, and Townsend's big-eared bat—all state species of special concern and relevant under CEQA—would be a significant impact. Vegetation management could affect valley elderberry longhorn beetle through the removal of host plants and direct impacts to individual beetles. Impacts on special-status species and their habitat from vegetation management would be potentially significant.
- Operation of the Proposed Project could injure or kill special-status wildlife species. Mitigation Measure BIO-9.1, BIO-9.2 and BIO-9.3 would apply to operation of the Proposed Project.

  Mitigation Measure BIO-9.1: Avoid nesting bird impacts during operation and maintenance activities

  - SJRRC or its contractor(s) will conduct vegetation and structural maintenance activities outside of the general bird nesting season (1 February to 31 August) to the extent feasible. If vegetation and structural maintenance during the nesting season is unavoidable, SJRRC or its contractor(s) will retain a qualified wildlife biologist with demonstrated nest-searching experience to conduct pre-activity surveys for nesting birds within 300 feet of the vegetation removal location. Adjacent lands outside the ROW will be scanned with binoculars from Project operations areas, the ROW, and publicly accessible areas. The preconstruction surveys will occur no more than 3 days prior to vegetation removal activities (including removing or trimming vegetation, modifying structures that provide nesting habitat, clearing, grubbing, and staging) at each contiguous vegetation removal area.
  - If active nests are found in the area to undergo maintenance activities, no-disturbance species-specific buffer zones will be established by the biologist and marked with high-visibility fencing, flagging, or pin flags. No maintenance activities will be allowed within the buffer zones. The size of the buffer will be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 250 feet for

raptors and 50 feet for other birds (i.e., passerines). The buffer will remain in effect until the nest is no longer active, as determined by the biologist. Buffers for any nests found outside of the area to undergo vegetation removal but within 250 feet of the vegetation removal location will be established based on the biologist's best professional judgment whether the work would result in nest abandonment. If a lapse in vegetation removal activities of 3 days or longer at a previously surveyed area occurs, another preconstruction survey will be conducted.

- After all surveys activities are completed at each continuous vegetation removal area, the biologist will complete a memorandum detailing the survey effort and results and submit the memorandum to SJRRC within 7 days of survey completion.

Mitigation Measure BIO-9.2: Avoid roosting bat impacts during operation and maintenance activities

- SJRRC or its contractor(s) will conduct maintenance activities (e.g., operational tree removal and trimming, structure modification or removal) in roosting bat habitat from 15 September to 30 October to the extent feasible to avoid maternity bat roosts, roosting bats in torpor (reduced metabolic function similar to hibernation), or nonvolant (flightless) young. If operational maintenance activities cannot be conducted between September 15 and October 30, SJRRC or its contractor(s) will retain qualified biologists who will examine trees and structures to be removed, trimmed, or modified for suitable bat roosting habitat no more than 2 weeks before conducting the maintenance activity. High-quality habitat features (e.g., large tree cavities, basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch, etc.) will be identified and the area around these features searched for bats and bat signs (e.g., guano, culled insect parts, urine staining, etc.). Riparian woodland, orchards, and stands of mature broadleaf trees should be considered potential habitat for solitary foliage-roosting bat species. Survey methods will be discussed with CDFW prior to the start of surveys.
- Measures to avoid and minimize impacts on sensitive bats species will be determined in coordination with CDFW and may include the following.
    - Tree removal will be avoided between 1 April and 15 September (the maternity period) to avoid effects on pregnant females and active maternity roosts (whether colonial or solitary).
    - Tree removal, tree trimming, structure modification, or

removal of trees that provide suitable habitat for bats will be conducted between 15 September and 30 October, which corresponds to a time period when bats have not yet entered torpor or caring for nonvolant young.

- Each tree will be removed in pieces rather than felling the entire tree.
- Trees and tree limbs that do not provide habitat will be removed prior to removing trees and limbs that do provide roosting habitat.
- If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until 15 September or a qualified biologist has determined the roost is no longer active.
- Passive monitoring using full spectrum bat detectors may be needed if identification of bat species is required.

o If avoidance of nonmaternity roost trees is not possible, and tree removal or trimming must occur between 30 October and 15 September, qualified biologists will monitor tree trimming and removal. If possible, tree trimming and removal should occur in the late afternoon or evening when it is closer to the time that bats would normally arouse. Prior to removal and trimming, each tree will be shaken gently and several minutes should pass before felling trees or limbs to allow bats time to arouse and leave the tree. The biologists will search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern, or candidate threatened or endangered species, will be reported to CDFW. The biologist will prepare a biological monitoring report, which will be provided to the SJRRC and CDFW no more than 30 days following completion of all bat surveys.

Mitigation Measure BIO-9.3: Conduct pre-activity surveys for special-status wildlife species prior to conducting maintenance activities.

o SJRRC or its contractor(s) will retain a qualified biologist to conduct a pre-activity survey for special-status wildlife species prior to conducting maintenance activities within suitable habitat for special-status wildlife (i.e., within any undeveloped natural land cover). The pre-activity survey will be conducted immediately prior to the start of maintenance activities. The survey area will include all suitable habitat within the work area boundary plus a 250-foot buffer zone around the work area boundary.

- If special-status wildlife species, nest colonies, or floral resources are observed, maintenance activities will not begin until the special-status species passively moves out of the work area and a no-work buffer around nest colonies and floral resources identified during surveys has been established. The size and configuration of the no-work buffer would be based on best professional judgement of a qualified biologist and, at minimum, provide 20 feet of clearance around the resources and maintain a disturbance-free airspace. No herbicides/insecticides will be applied within the no-work buffer, except when applied to cut stumps. Biological monitoring may be required for the duration of the maintenance activity and will be determined by the discretion of the qualified biologist. If special-status wildlife species are observed, the biologist will notify USFWS and CDFW. Following completion of the pre-activity survey, the surveying biologist will prepare a memo describing the survey methods and conditions, summarize the survey effort and results. The memorandum will include any survey data form and or map showing the location of special-status wildlife species observed. The survey memo will be provided to SJRRC.
- If special-status wildlife species are not observed, maintenance activities can begin upon completion of the pre-activity survey.

h.i. Potential Significant Impact:

- Operation of the Proposed Project could conflict with local biological resource policies, including tree preservation policies or ordinances.

h.ii. Facts in Support of Finding:

- Operation of the Proposed Project is not expected to affect trees regulated by local tree preservation policies or ordinances because tree removal would occur during construction of the Proposed Project. Routine vegetation management, including tree pruning for ROW clearance associated with operations would occur entirely within areas previously disturbed and cleared during construction of the Proposed Project. Local tree regulations do not apply within the UPRR ROW. Local tree ordinances would not legally apply to tree removal or pruning associated with the operation of the Proposed Project. Furthermore, operational tree removal would be limited because tree removals necessary for the Proposed Project would be removed during construction; operations effects would be limited to pruning to maintain clearance zones established during construction. Thus, operation of the Proposed Project would not conflict with tree preservation policies or ordinances, and this impact would be less than significant.
- In addition, there are local policies related to the protection of special-

status species. Operation of the Proposed Project could result in a potentially significant impact on special-status plants, wildlife, and fish species. As such, operation of the Proposed Project could conflict with local biological resource policies, resulting in a potentially significant impact.

- Mitigation Measures BIO-9.1, BIO-9.2 and BIO-9.3 would apply to the operation of the Proposed Project.

  BIO-9.1, BIO-9.2 and BIO-9.3 See Attachment C, Section C.(1)g.ii. above.

i.i. Potential Significant Impact:

- Construction and operation of the Proposed Project could cause a substantial adverse change in the significance of an archaeological resource or tribal cultural resource.

i.ii. Facts in Support of Finding:

- While portions of the Ceres to Merced Extension Alignment are not located within areas of high archaeological sensitivity, the potential remains to encounter unanticipated deposits during ground disturbance of these proposed facilities. Encountering significant archaeological resources or tribal cultural resources during construction of the Proposed Project would result in a significant impact related to a known and unknown archaeological resources.
- Mitigation Measures CUL-2.1, CUL-2.4, and CUL-2.6 would apply to all facilities proposed for the 17 Proposed Project.

  Mitigation Measure CUL-2.1: Conduct cultural resources awareness training

  - Prior to construction (any ground-disturbing activity), the construction contractor personnel who will work onsite will attend a preconstruction cultural resources awareness tailboard training session provided by the contractor. The training will address measures to avoid or protect artifacts and archaeological features, cultural resources identification, as well as the mandatory procedures to follow should potential cultural resources be exposed during construction.

  Mitigation Measure CUL-2.4: Implement procedures in case of inadvertent archeological discoveries

  - During construction (any ground-disturbing activity), should there be an unanticipated discovery, work will stop within 100 feet of the discovery, and the construction contractor will call a qualified archaeologist to assess the significance of the find and to recommend appropriate measures. Should the discovery

include human remains, all parties will comply with federal and state regulations and guidelines regarding the treatment of human remains, including relevant sections of Native American Graves Protection and Repatriation Act (NAGPRA) (3(c)(d)), California Health & Saf. Code Section 8010 et seq., and Cal. Public Res. Code Section 5097.98, and consult with Native American Heritage Commission (NAHC), tribal groups, and the State Historic Preservation Officer.

Mitigation Measure CUL-2.6: Implement avoidance and protection measures

- Changing the rail alignment to avoid any newly discovered sites identified during project related ground disturbance is likely infeasible; however, access areas and laydown sites may be relocated should their location be found to be on archaeological sites. All avoidance and protection measures for archaeological resources will be delineated on construction drawings by the construction contractor.

j.i. Potential Significant Impact:

- Construction of the Proposed Project could disturb human remains, including those interred outside of formal cemeteries.

j.ii. Facts in Support of Finding:

- Although portions of the Ceres to Merced Extension Alignment are not located within areas of high general prehistoric archaeological resource sensitivity and high buried archaeological resource sensitivity, the potential remains to encounter unanticipated deposits, including human remains, during ground disturbance of these proposed facilities. In summary, construction of all Proposed Project facilities could result in a potentially significant impact related to the disturbance of human remains.

  CUL-2.1 and CUL-2.4 See Attachment C, Section C.(1)i.ii. above.

  Mitigation Measure CUL-3.1: Comply with state laws relating to Native American remains

  - If human remains of Native American origin are discovered during construction, it will be necessary to comply with state laws relating to the disposition of Native American burials, which fall under the jurisdiction of the NAHC (Cal. Public Res. Code 5097). If any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent human remains, until the following steps are taken:

- The appropriate county coroner has been informed and has determined that no investigation of the cause of death is required.
- If the remains are of Native American origin:
    - The descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Cal. Public Res. Code Section 5097.98.
    - If the NAHC is unable to identify a descendant or the descendant fails to make a recommendation within 24 hours after being notified by the NAHC, then no further action is required.

k.i. Potential Significant Impact:

- Construction of the Proposed Project could cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074.

k.ii. Facts in Support of Finding:

- No tribal representatives requested tribal consultation under AB 52-27 for this project. Thus, no tribal cultural resources were identified in the vicinity of the Proposed Project.
- Additionally, no prehistoric archaeological resources, which have the potential to be considered tribal cultural resources, were identified within the archaeological study area.
- Although portions of the Ceres to Merced Extension Alignment are not located within areas of high general prehistoric archaeological resource sensitivity and high buried archaeological resource sensitivity, the potential remains to encounter previously undocumented archaeological resources, which can be considered tribal cultural resources. In summary, construction of all Proposed Project facilities could result in a potentially significant impact related to tribal cultural resources.

    CUL-2.1 and CUL-2.4 See Attachment C, Section C.(1)i.ii. above.

    CUL-3.1 See Attachment C, Section C.(1)j.ii. above.

    Mitigation Measure CUL-4.1: Implement procedures in case of inadvertent tribal cultural resources discoveries

- In the event that an archaeological resource that could be considered a tribal cultural resource is unexpectedly identified during the course of the Project, and SJRRC or its contractor(s) determines that the Project may cause a substantial adverse change to such a resource, SJRRC or its contractor(s) will employ one or more of the following standard mitigation measures:
  - Consultation with the local tribal groups originally identified during outreach to the NAHC for this Project to determine if the resource is considered a tribal cultural resource.
    - Local tribal groups should be contacted immediately and have 72 hours to respond to requests to consult.
    - If no response is received treatment of the resource will occur under the direction of a qualified archaeologist.
  - Avoidance and preservation of the resource in place, including, but not limited to, planning and construction to avoid the resource and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resource with culturally appropriate protection and management criteria.
  - Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - Protecting the cultural character and integrity of the resource;
    - Protecting the traditional use of the resource;
    - Protecting the confidentiality of the resource.
  - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - Protecting the Resource.

<u>l.i. Potential Significant Impact:</u>

- Construction of the Proposed Project could violate water quality standards or WDRs or otherwise substantially degrade surface or groundwater quality.

I.ii. Facts in Support of Finding:

- Construction of the Proposed Project will involve disturbing and handling existing soil and imported fill materials and the use and storage of hazardous materials (e.g., fuels and lubricants for construction equipment) during construction activities. The improper handling and management of disturbed soil and imported fill could result in pollution of stormwater runoff with sediment and contaminants that may be in the existing soil or imported fill materials, potentially reducing the quality of the receiving waters. If spilled or improperly stored substances, such as fuels and oils, directly enter nearby surface waters or are transported to nearby surface waters in stormwater runoff, this would reduce the quality of the receiving waters. Polluted stormwater runoff and spills of hazardous materials can also infiltrate through pervious surfaces and degrade groundwater quality. Handling and management of existing soil, imported fill material, and hazardous materials in upland construction areas would be performed in accordance with a SWPPP, as required by the Construction General Permit, to ensure that stormwater runoff, surface waters, and groundwater are not polluted by these construction activities.
- Mitigation Measures HYD-1.1, HYD-1.3, HAZ-2.2, and HAZ-2.3 would apply to the Proposed Project

  Mitigation Measure HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges

  - Groundwater and dewatering effluent generated by temporary construction dewatering activities will be contained by the construction contractor(s) in an appropriately-sized storage tank and tested to determine whether the effluent is contaminated prior to discharging. Testing and discharging of the effluent will be performed in accordance with the Construction General Permit, risk management plan (RMP), and applicable resource agency permit requirements, including treating the effluent prior to discharge, if necessary. If groundwater is discharged to storm drains or directly to surface water, the discharge will be performed at appropriate flow rates to ensure that drainage capacity of storm drains and receiving waters is not exceeded, and to ensure that the flow rate of the receiving waters would not increase substantially, which could result in erosion of stream banks and affect water quality.
  - If the effluent is not suitable for discharge to storm drains or directly to receiving waters, the effluent will be discharged to sanitary sewer systems or transported for disposal at an appropriate offsite treatment or disposal facility. If the effluent would be discharged to sanitary sewer, the appropriate permit

will be obtained from the local utility agency with jurisdiction over discharges to the sanitary sewer system, and permit criteria for discharging to the sewer will be followed. These criteria include testing of the effluent, application of treatment technologies that would result in achieving compliance with the wastewater discharge limits, and discharging at or below the maximum allowable flow rate.

Mitigation Measure HYD-1.3 Limit groundwater or dewatering discharge flow rates

- If groundwater or dewatering effluent would be discharged to storm drainage systems (e.g., storm drains, conveyance pipes, canals, ditches, creeks, and rivers) in accordance with permit requirements and Mitigation Measure HYD-1.1, the discharge flow rates will be limited to ensure that the capacity of storm drainage systems would not be exceeded by the discharge. The construction contractor(s) will determine the capacity of storm drainage systems that would receive discharges by coordinating with the local government agencies that have jurisdiction over the protection and maintenance of the storm drainage systems. The capacity of storm drainage systems will be determined for various times of year and various storm events. If the capacity of the storm drainage systems cannot be determined through coordination with local government agencies, evaluations of the capacity of the storm drainage systems that would receive discharges will be performed and certified by a professional engineer. The discharge flow rates will not exceed the capacity determined for various times of year and various storm events.

Mitigation Measure Haz-2.2 Conduct site investigations

- Prior to construction, SJRRC's contractor(s) will conduct a site investigation of the Project to evaluate the chemical quality of soil, ballast, and/or groundwater that could be disturbed during construction and maintenance activities. A licensed professional will prepare a work plan describing how representative samples of soil, ballast, and groundwater will be collected and analyzed from the following potential sources of hazardous materials.
    - Railroad corridors.
    - Major roadway corridors.
    - Petroleum pipelines.
    - Hazardous materials release sites
- Work plans will be submitted to the appropriate oversight agency for review and approval. In accordance with the

approved work plans, the site investigations will be conducted and evaluated by a licensed professional. A technical report summarizing the field activities and analytical results will be submitted to the appropriate oversight agency for review and approval.

Mitigation Measure Haz-2.3 Implement construction and maintenance risk management plan

- Prior to construction, SJRRC's contractors(s) will prepare a construction risk management plan (CRMP) for the Project that would provide a framework for proper characterization and management of contaminated soil, ballast, and groundwater that could be disturbed during construction and maintenance activities. The CRMP will describe how to meet the following key objectives.
  - Identify various scenarios under which large volumes of soil and railroad ballast generated during construction and maintenance can be safely reused.
  - Identify maximum acceptable contaminant levels to protect workers, passengers, the public, and ecological receptors for each soil and ballast reuse scenario. Identify maximum acceptable contaminant levels to protect station workers and passengers potentially exposed to vapor intrusion, if any, from soil or groundwater contamination.
  - Identify sampling and analysis, stockpiling, transportation, health and safety, and other procedures by which soil and ballast must be managed in order to meet safety, regulatory and other standards.
  - Define how the groundwater that would be encountered during construction and maintenance will be characterized, properly managed, and discharged or disposed to a permitted facility.
- Based on the analytical results of the site investigations required under Mitigation Measure HAZ-2.2, maximum acceptable contaminant levels will be established for the following soil and ballast reuse scenarios.
- Unrestricted Onsite Reuse, in which soil and ballast that are excavated can be reused in any onsite area.
- Stations Reuse, in which soil and ballast that are excavated can be reused in station areas where there is anticipated to be relatively frequent potential exposure.

- Right-of-Way Reuse, in which soil and ballast that are excavated can be reused in areas where there is anticipated to be relative infrequent potential exposure along the ROW of the tracks.
- Encapsulation, in which soil and ballast that are excavated can be reused under barriers or other structures (and covered on all exposed sides by clean material).
- To protect ecological receptors, the reuse scenarios will incorporate additional limitations, as necessary, near creeks, surface waters, or other aquatic habitats based on the findings of an ecological risk assessment. Soil or ballast that contains chemical constituents at levels greater than the acceptable reuse scenarios will be disposed of in accordance with RCRA and other applicable regulations at a facility permitted to accept the waste. Imported fill materials will be characterized to demonstrate they satisfy the criteria for Unrestricted Onsite Reuse established in the CRMP.
- All extracted groundwater will be considered potentially affected and require characterization to determine the appropriate treatment requirements (if necessary) for discharge or disposal. The extracted groundwater will be collected and managed for disposal or treatment prior to discharge in compliance with local and state regulations and permit requirements. Based on the preliminary groundwater analytical results from the site investigations required under Mitigation Measure HAZ-2.2, groundwater discharge and disposal options may include the following.
- Discharge directly to receiving waters.
- Discharge to the local sanitary sewer system.
- Discharge to the storm drain system.
- Disposal/recycling at an appropriately permitted offsite facility.
- Health and safety procedures described in the CRMP will include requirements for an air quality monitoring program during excavation in areas with elevated contaminants of concern to ensure that fugitive dust emissions do not pose an unacceptable health risk to workers or the public. The air monitoring program will identify action levels for total particulates that require respiratory protection, implementation of engineering controls, and ultimately work stoppage. This monitoring program will be in addition to the fugitive dust controls required under SJVAPCD Regulation VIII.

- A licensed professional will prepare the CRMP and submit it to the appropriate oversight agency for review and approval prior to construction. The approved CRMP will be implemented during construction and maintenance of both the Project.

m.i. Potential Significant Impact:

- Operation of the Proposed Project could violate water quality standards or WDRs or otherwise substantially degrade surface or groundwater quality.

m.ii. Facts in Support of Finding:

- The Proposed Project will involve grading and reuse of existing soil and use of imported fill materials. If contaminants are present in reused existing soil or fill materials that are placed in a location exposed to stormwater, contaminants could leach into stormwater runoff from the reused existing soil or imported fill and result in pollution of stormwater runoff and surface water, potentially reducing the quality of the receiving waters. This is a potentially significant impact.
- The Ceres to Merced Extension Alignment would alter drainage patterns (e.g., altering or creating drainage systems) along tracks. If adequate stormwater control and treatment systems are not designed or constructed as part of the Proposed Project, pollutants that may be entrained in sediments could be transported from tracks to surface waters in stormwater runoff.
- Mitigation Measure HAZ-2.3 will apply to the Proposed Project

n.i. Potential Significant Impact:

- Construction of the Proposed Project could substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion, siltation, or impede or redirect flood flows.

n.ii. Facts in Support of Finding:

- During construction of the Proposed Project, stormwater drainage patterns could be temporarily altered. However, the Proposed Project would implement BMPs required in the SWPPP to minimize the potential for erosion or siltation in nearby storm drains and temporary changes in drainage patterns during construction. During construction, implementation of erosion control techniques would provide temporary and permanent erosion and sediment control during construction of the Proposed Project. Construction BMPs would capture and infiltrate small amounts of sheet-flow into the ground such that offsite runoff from the construction site would not increase, ensuring that drainage patterns are not significantly altered. Measures required by the Construction General Permit would also limit site runoff during construction and would not alter stormwater drainage patterns. BMPs

would be implemented to control construction site runoff, ensure proper stormwater control and treatment, and reduce the discharge of pollution to the storm drain system. As such, with implementation of the SWPPP and the Construction General Permit, the Proposed Project's impact related to erosion and siltation during construction would be less than significant.

- Potential flooding hazards were identified for areas intersected by the Proposed Project including storm-related flooding (mapped 100-year flood zones and mapped 200-year flood zones).
- Construction of the Ceres to Merced Extension Alignment may be located within drainage courses during construction of bridges and culverts, which could also alter drainage courses and cause flooding during construction because the placement of construction materials, equipment, and new structures (e.g., culverts, bridge supports, fill material, and temporary bridges for equipment access) within drainage courses, and potential diversion of surface water around work areas within drainage courses could obstruct flood flows. This is a potentially significant impact.
- The Proposed Project would also require construction within mapped 100-year floodplains. The Ceres to Merced Extension Alignment would intersect a mapped 100-year flood zone. If flooding of construction areas occurs, construction materials and equipment could impede or redirect flood flows. This is a potentially significant impact.
- Mitigation Measure HYD-5.1 would apply to the Ceres to Merced Extension Alignment.

  Mitigation Measure HYD-5.1: Prevent construction materials and equipment from impeding or redirecting flood flows

  - When working within areas of potential storm flooding inundation (mapped 100-year or mapped 200-year flood zones and within drainage courses), SJRRC's construction contractor(s) will closely monitor weather forecasts and will ensure that construction materials and equipment are temporarily moved out of areas of potential flooding inundation prior to the start of a storm that has the potential to cause significant flooding.

o.i. Potential Significant Impact:

- Proposed Project operations could substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion, siltation, or impede or redirect flood flows.

o.ii. Facts in Support of Finding:

- The Proposed Project intersects various flooding hazard areas,

including storm-related flooding (mapped 100-year flood zone).

- For Proposed Project facilities located within drainage courses and/or mapped flood zones, if the facilities are not appropriately designed, they could potentially impede or redirect flood flows during operation, and railroad tracks could be inundated. Under existing standard procedures, trains would not operate on railroad tracks that are inundated due to the increased risk of derailment. Under existing standard procedures, if tracks were to be inundated by flooding, the line would be shut down, the tracks would be inspected, repairs and removal of debris would be performed if needed, and operation would begin again once the water has receded and the tracks are determined to be safe and free of debris.
- The required design storm interval for new stormwater drainage systems over drainage courses would depend on the location (rural or urban) and type of drainage systems. In the Central Valley region, encroachment permits would be required from the Central Valley Flood Protection Board (CVFPB) to construct bridges, and CVFPB requires new bridges to be designed for 200-year flood events. If a bridge design cannot meet the 200-year flood criteria, the bridge would have to go through a CVFPB hearing process for approval. The review and approval of bridge designs by CVFPB would ensure that operation of new bridges in the Central Valley region would not impede or redirect flood flows.
- Mitigation Measure HYD-6.1 would apply to the Ceres to Merced Extension Alignment.

  Mitigation Measure HYD-6.1: Perform detailed hydraulic evaluations and modify designs for facilities within drainage courses and flood zones if required to reduce potential flooding impacts

  - Facilities within drainage courses, mapped 100-year flood zones, and mapped 200-year flood zones will be analyzed using detailed hydraulic evaluations to be completed during the next design phase of the facilities to ensure that the facilities would not impede or redirect flood flows. The detailed hydraulic evaluations will be performed and certified by a professional engineer and will be based on the most current and best available information regarding existing flooding hazards and will quantify the following information.
    - The potential for facilities within drainage courses, mapped 100-year flood zones, and mapped 200-year flood zones to impede or redirect flood flows including storm-related flooding.

- The potential for facilities within drainage courses, mapped 100-year flood zones, and mapped 200-year flood zones to result in changes to floodplain extent and depth, and receptors and properties that would be affected by the potential changes to floodplain conditions.

- If the Ceres to Merced Extension Alignment could result in an increase in offsite flooding conditions by more than 1 foot in floodplains and 0.1 feet in floodways for the 100-year flood or the 200-year flood (depending on location and CVFPB jurisdiction) compared to existing conditions, Project designs will be modified to reduce the potential flooding impacts to be equivalent to the existing conditions. Modifications to designs may include the following measures.
  - Increasing culvert sizes.
  - Installation of cross-drainage facilities to balance the floodplain elevations across new tracks.
  - Modifying bridge designs to reduce the restriction of flood flows through drainage courses.
- The detailed hydraulic evaluations will be submitted to the regulatory agencies that have jurisdiction over facilities within drainage courses. For facilities requiring encroachment permits from CVFPB, the detailed hydraulic evaluations will be submitted to CVFPB for review and approval.

p.i. Potential Significant Impact:

- Construction of the Proposed Project could alter drainage patterns and/or create or contribute runoff water that could substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff.

p.ii. Facts in Support of Finding:

- Construction of the Proposed Project could require the discharge of groundwater or dewatering effluent. Measures required by the Construction General Permit would control construction site runoff, ensuring proper stormwater control and water quality. Nonetheless, if the discharge is not performed at an appropriate flow rate, the discharge of groundwater or dewatering effluent could potentially increase the rate or amount of surface runoff in a manner that could result in flooding onsite or offsite, create or contribute runoff water which would exceed the capacity of existing or planned stormwater

drainage systems, or provide substantial additional sources of polluted runoff. This is a potentially significant impact

- Mitigation Measure HYD-1.3 will apply to the Proposed Project.

q.i. Potential Significant Impact:

- Proposed Project operations could alter drainage patterns or create or contribute runoff water that could substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff.

q.ii. Facts in Support of Finding:

- Portions of the Proposed Project located within the UPRR ROW would include altering drainage patterns by modifying or creating trackside ditches and drainage systems. According to the Preliminary Stormwater Management Plan (AECOM 2016a) and Preliminary Hydrology and Drainage Report (AECOM 2016b), at many places along the Ceres to Merced Extension Alignment, trackside drainage ditches are not connected to downstream drainage systems and act as retention and infiltration basins, and excess runoff from these ditches may flow overland into adjacent properties during extreme storm events. In developed urban areas, the Ceres to Merced Extension Alignment crosses several major arterial roads with existing storm drain systems, and new drainage systems may be connected to the existing local roadway drainage system. In rural areas, drainage systems may be connected to adjacent canal ditches, creeks, or rivers after implementing appropriate stormwater management systems. In general, the drainage design concepts would include the following features.
    - Construct trackside swales or ditches to collect runoff from the tracks within the UPRR ROW.
    - Allow infiltration, and detention onsite and offsite, if feasible.
    - Evaluate or improve the capacity of the existing drainage system to carry runoff from the Proposed Project, if required.
    - Construct catch basins as required to convey excess flows from the Proposed Project to the local drainage system.
    - Construct cross-culverts under the existing or new tracks to carry runoff across the trackway system to maintain the flow pattern.
- The design storm interval for new ditches and stormwater drainage systems adjacent to tracks would be a 25-year flood for rural areas and

a 50-year flood for urban areas (AECOM 2016b). Stormwater controls would be designed and constructed for facilities within the UPRR ROW in accordance with the PPDG, and may include biofiltration swales, biofiltration strips, infiltration devices, detention devices, media filters, wet basins, and dry weather diversion (AECOM 2016a). Compliance with the post-construction stormwater performance standards of the Construction General Permit would ensure that the stormwater controls are designed so that runoff from tracks would match existing runoff conditions (up to the 85th-percentile storm event).

- Mitigation Measure HYD-8.1 would apply to the Proposed Project.

  Mitigation Measure HYD-8.1: Perform detailed hydraulic evaluations and modify designs for stormwater controls if required to prevent storm drainage system capacity exceedance and/or reduce potential flooding impacts

  - Facilities that include alteration of drainage patterns such as alteration and construction of trackside ditches, construction of new impervious pavement and stormwater drainage systems at stations, and construction of new connections to existing stormwater drainage systems, will require detailed hydraulic evaluations to be completed during the next improvements design phase to ensure that the new stormwater control infrastructure is appropriately designed and that runoff from facilities would not exceed the capacity of storm drainage systems and result in flooding. The detailed hydraulic evaluations will be performed in accordance with the requirements of latest edition of the Caltrans Highway Design Manual (California Department of Transportation 2020) for tracks and station platforms, and in accordance with regulations and design requirements of local municipalities (including the local MS4 Permit requirements) for other improvements associated with stations. The detailed hydraulic evaluations will be based on the most current and best available information regarding existing stormwater drainage system capacity and existing flooding hazards. A professional engineer will perform and certify the following detailed hydraulic evaluations.

    - Facilities comply with regulations and design requirements of local municipalities for discharges to storm drainage systems within those jurisdictions.
    - Facilities are designed to accommodate storm frequencies, precipitation data, and runoff calculations.
    - The capacity of existing or proposed storm drainage systems that would receive discharges are evaluated.

- If facilities could result in exceedance of existing or proposed storm drainage systems and flooding, modification of stormwater control designs or offsite storm drainage systems will be performed to reduce and control runoff and potential for flooding. These modifications may include the following measures.
  - Reducing impervious surfaces through use of permeable pavement surfaces for station improvements.
  - Increasing the size of drainage ditches, swales, retention basins, infiltration basins, trenches, and cross-drainage facilities within track and station areas.
  - Increasing the capacity of downstream stormwater drainage systems by increasing the size of offsite storm drains, drainage canals, and retention and infiltration basins.

r.i. Potential Significant Impact:

- In a flood hazard, construction of the Proposed Project could risk release of pollutants due to project inundation.

r.ii. Facts in Support of Finding:

- Potential flooding hazards were identified for areas intersected by the Proposed Project including storm-related flooding (mapped 100-year flood zone). The Proposed Project is not located near the coast and is not, therefore, susceptible to coastal flooding hazards, such as tsunamis, extreme high tides, or SLR. The potential for the Proposed Project to be subject to flooding impacts related to dam or levee failure during operation is very low as regular inspection and maintenance of dams and levees substantially reduces the potential for their failure.
- In addition, the Ceres to Merced Extension Alignment is located in areas with mapped flood hazards. During construction, BMPs would be implemented to capture and infiltrate small amounts of sheet-flow into the ground such that offsite runoff and associated pollutants from the construction site would not increase. Measures required by the Construction General Permit would also limit site runoff and associated pollutants during construction. BMPs would be implemented to control construction site runoff, and ensure proper stormwater control and treatment, and reduce the discharge of pollution to the storm drain system. However, if flooding of construction areas occurs, construction materials and equipment within drainage courses could be inundated, which could risk release of pollutants into surface waters. This is a potentially significant impact.
- Mitigation Measures HYD-1.2 and HYD-5.1 would apply to the Ceres

to Merced Extension Alignment.

s.i. Potential Significant Impact:

- In a flood hazard, Proposed Project operations could risk release of pollutants due to project inundation.

s.ii. Facts in Support of Finding:

- The Ceres to Merced Extension Alignment would be located in a mapped flood hazard area. Under existing standard procedures, trains will not operate on railroad tracks that are inundated due to the increased risk of derailment. Railroad tracks could be inundated and can result in spills of pollutants that can impact surface water and/or groundwater. However, under existing standard procedures, if tracks were to be inundated by flooding, the line would be shut down, the tracks would be inspected, repairs and removal of debris would be performed if needed, and operation would begin again once the water has receded and the tracks are determined to be safe and free of debris.
- Furthermore, the Proposed Project will be required to comply with the post-construction stormwater performance standards of the Construction General Permit and the Small MS4 Permit or Central Valley Permit, which would require the implementation of measures that would overall minimize the release of pollutants from the Proposed Project. Nonetheless, operations of the Proposed Project, which would be located in mapped flood hazard areas could impede or redirect flood flows if not appropriately designed, which could result in flooding of offsite areas and risk release of pollutants due to inundation. This is a potentially significant impact.
- Mitigation Measure HYD-6.1 would apply to the Ceres to Merced Extension Alignment.

D. Determination

The Central Valley Water Board has determined that the Project, when implemented in accordance with the MMRP and the conditions in this Order, will not result in any significant adverse water quality or supply impacts. (California Code of Regulations, title 14, section 15096, subd. (h).) The Central Valley Water Board will file a NOD with the SCH within five (5) working days from the issuance of this Order. (California Code of Regulations, title 14, section 15096, subd. (i).)

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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/)

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: centralvalleysacramento@waterboards.ca.gov and cc: Carter.Cook@waterboards.ca.gov.
- Include in the subject line of the email:
  ATTN: Carter Cook; Project Name; and WDID No. 5A34CR00903.

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:

19 March 2025

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:	San Joaquin Regional Rail Commission Ceres Station Project
Permittee:	San Joaquin Regional Rail Commission
WDID:	5A34CR00903
Reg. Meas. ID:	458833
Place ID:	897004
Order Effective Date:	19 March 2025
Order Expiration Date:	18 March 2030

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 Name[1]	**Affiliation and Job Title**

Signature	**Date**

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

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

Permittee's Signature	**Date**

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

A. Part A – Project Reporting

1. Report Type 1 - Monthly Report

a. Report Purpose - Notifies Central Valley Water Board staff of the Project status and environmental compliance activities on a monthly basis.

b. When to Submit - On the 1st day of each month after the submittal of the Commencement of Construction Notification until a Notice of Project Complete Letter is issued to the Permittee.

c. Report Contents -

i. Construction Summary

Describe 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 April beginning one year after the effective date of the Order. 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.

<u>During the Active Discharge Period</u>

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

<u>During the Post-Discharge Monitoring Period</u>

- **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. <u>Part B – Project Status Notifications</u>

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 XIII.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 XIII.C.3.

c. **Report Contents** - As required by the approved water quality monitoring plan or as indicated in XIII.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 XIII.L. of the Order, may be requested by the Permittee as set forth below:

II. Process Steps

A. Who may apply:

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

B. How to apply:

By letter or email to the 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 verification from the CEQA Lead Agency that the proposed changes or modifications do not trigger the need for a subsequent environmental

document, an addendum to the environmental document, or a supplemental EIR. (Cal. Code Regs., tit. 14, §§ 15162-15164.)

D. Post-Discharge Certification Deviation Reporting:

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

E. Annual Summary Deviation Report:

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

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

I. General Justification for Section XIII 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 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 XIII 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.

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

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

7. **Construction General Permit Requirement**

   Permittees are required to obtain coverage under National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ; NPDES No. CAS000002), as amended, for discharges to surface waters comprised of storm water associated with construction activity, including, but not limited to, demolition, clearing, grading, excavation, and other land disturbance activities of one or more acres, or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. This is required pursuant to Clean Water Act sections 301 and 402 which prohibit certain discharges of storm water containing pollutants except in compliance with an NPDES permit. (33 U.S.C. section 1311, and 1342(p); 40 C.F.R. parts 122, 123, and 124.)

F. Administrative

1. Signatory requirements for all document submittals . . . .

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

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

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

3. The Permittee shall grant Central Valley Water Board staff . . . .

The condition related to site access requirements is authorized pursuant to the Central Valley Water Board's authority to investigate the quality of any waters of the state within its region under Water Code section 13267 and 13383. Water Code section 13267, subdivision (c) provides that "the regional board may inspect the facilities of any person to ascertain whether the purposes of this division are being met and waste discharge requirements are being complied with." Water Code section 13383 authorizes the regional boards to establish monitoring, inspection, entry, reporting, and other recordkeeping requirements, as authorized by Water Code section 13160, for any person who discharges, or proposes to discharge, to navigable waters.

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

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

conditions are necessary to ensure compliance with applicable water quality objectives and protection of beneficial uses found in the Basin Plan, adopted pursuant to Water Code section 13240, and detailed in the Order.

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

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

6. **Lake or Streambed Alteration Agreement**

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

G. Construction

1. **Dewatering- 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- Not Applicable

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

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

L. 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).