



Central Valley Regional Water Quality Control Board

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER

Effective Date: 13 January 2020

Expiration Date: 12 January 2025

Program Type: Fill/Excavation

Project Type: Channel Construction and Maintenance

Project: Lower Elkhorn Basin Levee Setback Project (Project)

Applicant: California Department of Water Resources (DWR)

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I. Order

This Clean Water Act (CWA) section 401 Water Quality Certification action and Order (Order) is issued at the request of the California Department of Water Resources (hereinafter Permittee) for the Project. This Order is for the purpose described in application submitted by the Permittee. The application was received on 2 August 2019. The application was deemed complete on 3 September 2019.

II. Public Notice

The State Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 from 9 August 2019 to 30 August 2019. The Central Valley Water Board did not receive any comments during the comment period.

III. Project Purpose

The purpose of the Project is to reduce potential flood risks to the Cities of Sacramento, West Sacramento, and Woodland by improving the flood management system consistent with the approved 2012 Central Valley Flood Protection Plan.

IV. Project Description

The 1,967-acre Project consists of dewatering, constructing a new setback levee, preparing historically irrigated land for periodical inundation, creating habitat for sensitive status species, lowering most of the Yolo Bypass East Levee along Tule Canal, lowering the Lower Elkhorn Basin Cross Levees, and creating three inlet features by breaching the degraded levees.

V. Project Location

County: Yolo

Assessor's Parcel Numbers: 042-190-003, 042-190-004, 042-250-003, 042-250-007

Nearest City: West Sacramento

Section 34, Township 10 North, Range 03 East, MDB&M

Sections 2-3, 10-14, and 24; Township 09 North; Range 03 East, MDB&M

Sections 19, 30-31, and 57; Township 09 North; Range 04 East, MDB&M

Latitude: 38.6028° and Longitude: -121.5875°

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

VI. Project Impact and Receiving Waters Information

Permitted actions through this Order will increase periodically inundated floodplain habitat in the Yolo Bypass by approximately 1,100 acres. Sediment in the Yolo Bypass is enriched with mercury due to ongoing deposition from the Sacramento River and Cache Creek. Studies have shown that inundation and cycles of wetting

and drying in mercury-rich sediment increase production of methylmercury. Therefore, the Project is expected to create additional methylmercury within the Yolo Bypass. It is also expected to have a cumulative impact in the Greater Sacramento-San Joaquin Delta (Delta) area due to other restoration projects in the region. The Yolo Bypass and Delta are impaired for methylmercury and do not have assimilative capacity for any increase in methylmercury. Methylmercury is a bioaccumulative neurotoxin that is harmful to humans and wildlife when ingested at elevated levels over a sustained period.

On 22 April 2010, the Central Valley Water Board adopted an amendment to the Sacramento River and San Joaquin River Basin Plan (the "Basin Plan Amendment") that implements a program to address mercury and methylmercury impairments in the Delta. The Basin Plan Amendment includes fish-tissue objectives for the Delta and methylmercury allocations for National Pollutant Discharge Elimination System (NPDES) wastewater facilities, municipal storm water, agricultural lands, wetlands, and open water in the Delta and Yolo Bypass. The Basin Plan Amendment also has specific requirements for managing mercury-contaminated sediment in the Cache Creek Settling Basin. Pursuant to the Basin Plan Amendment, the Permittee, United States Army Corps of Engineers (USACE), and Central Valley Flood Protection Board are required to develop and submit to the Central Valley Water Board an implementation plan to decrease mercury loads discharged from the Cache Creek Settling Basin. The implementation plan development is currently suspended due to dependence on the results from ongoing flood studies that impact the Cache Creek Settling Basin. The Permittee will continue to coordinate with the other responsible agencies to implement this requirement.

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

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

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

VII. Description of Direct Impacts to Waters of the State

To prepare the site, cofferdams and turbidity control barriers will be installed and ditches will be dewatered to land and Tule Canal by pumping. Portions of the ditches will be excavated for borrow material to be redistributed onsite; filled and graded for the construction of the new setback levee seepage berms, cutoff walks, and relief wells; and enhanced or relocated for better habitat and drainage. Multiple utility infrastructures will be relocated, including the removal of existing pipes, culverts, and outfalls from the ditches and canals. The existing levees will be degraded. Nine portions of the Yolo Bypass East Levee will be retained to create habitat for sensitive status species. Three portions of the Yolo Bypass East Levee will be notched to create inlet features.

The Project will temporarily impact 25.2 acres/33,062 linear feet of stream channel habitat and permanently impact 16.6 acres/23,870 linear feet of stream channel habitat from dewatering, creating the new levee features, redistributing native soil, constructing replacement ditches, removing infrastructure, placing rock slope protection, and installing new outfall structures. The Project will result in a net beneficial gain of approximately 6.1 acres of stream channel habitat.

Dewatering will occur within the Project area. Wet concrete will be placed into stream channel habitat in dry conditions, after completely dewatering the area.

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

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

Aquatic Resources Type	Acres	Cubic Yards	Linear Feet
Stream Channel	25.2	176,494	33,062

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

Aquatic Resources Type	Acres	Cubic Yards	Linear Feet
Stream Channel	16.6	196,822	23,870

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

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.

IX. Avoidance and Mitigation

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

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

- Limit ground-disturbance to construction areas and avoid and limit disturbance to stream banks and habitats.
- Erect and maintain high visibility fencing or alternative demarcation during construction to protect sensitive biological resource areas, inspect fencing daily, and incorporate sensitive habitat information into bid specifications.
- Monitor construction activities in sensitive biological resource areas and stop work if unauthorized project impacts occur.
- Food-related trash items, such as wrappers, cans, bottles, and food scraps, will be disposed of in closed containers and removed from the project site by construction contractors on a daily basis.
- All equipment will be stored at approved storage yards, in designated staging and containment areas, or along access roads when not in use.
- A maximum speed limit of 15 miles per hour will be observed by construction and maintenance vehicles.
- Temporary septic facilities shall be placed away from watercourses, drainages, and sensitive habitats.
- Concrete washout activities shall be performed at a designated off-site contractor yard.
- Acquire appropriate regulatory permits and prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMPs).
- Obtain appropriate discharge and dewatering permits and implement for dewatering.
- Prepare and implement a Worker Environmental Awareness Program.
- Install, monitor, and maintain erosion control measures and sediment and turbidity control.
- Barriers to minimize soil or sediment from entering waterways or wetlands.
- Inspect sediment and turbidity control barriers daily during construction for proper function and replace immediately if not functioning effectively.
- Remove sediment from sediment controls and dispose of properly.
- Treat silted water from construction activities.

- Treat all disturbed soils with appropriate erosion control.
- Implement measures such as a spill prevention control and countermeasures plan and bentonite slurry spill contingency plan to reduce the potential for environmental contamination during construction activities.

X. Compensatory Mitigation

No compensatory mitigation is requested for permanent impacts to 16.6 acres of stream channel habitat. The Project will result in a net beneficial gain of approximately 6.1 acres of stream channel habitat.

XI. California Environmental Quality Act (CEQA)

On 18 March 2019, the California Department of Water Resources, as lead agency, certified an environmental impact report (EIR) (State Clearinghouse (SCH) No. 2016092015) for the Project and filed a Notice of Determination (NOD) at the SCH on 21 March 2019. Pursuant to CEQA, the Central Valley Water Board has made Findings of Facts (Findings) which support the issuance of this Order and are included in Attachment C.

XII. Petitions for Reconsideration

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

XIII. Fees Received

An application fee of \$1,638.00 was received on 2 August 2019. 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.

An additional fee of \$140,462.00 based on total Project impacts was received on 15 August 2019.

XIV. Conditions

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

A. Authorization

Impacts to waters of the state shall not exceed quantities shown in Tables 1 and 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, 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 February. Annual reports shall continue until a Notice of Project Complete Letter is issued 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#) issued under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ; NPDES No. CAS000002).
- b. **Request for Notice of Completion of Discharges Letter:** The Permittee shall submit a Request for Notice of Completion of Discharges Letter following completion of active Project construction activities, including any required restoration and permittee-responsible mitigation. This request shall be submitted to the Central Valley Water Board staff within thirty (30) days following completion of all Project construction activities. Upon acceptance of the request, Central Valley Water Board staff shall issue a Notice of Completion of Discharges Letter to the Permittee which will end the active discharge period and associated annual fees.

- 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 and associated annual fees.

3. Conditional Notifications and Reports:

The following notifications and reports are required as appropriate.

a. Accidental Discharges of Hazardous Materials²

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

- i. As soon as (A) Permittee has knowledge of the discharge or noncompliance, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures then:
 - first call – 911 (to notify local response agency)
 - then call – Office of Emergency Services (OES) State Warning Center at:(800) 852-7550 or (916) 845-8911
 - Lastly, follow the required OES, procedures as set forth in the [Office of Emergency Services' Accidental Discharge Notification Web page](http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill_Booklet_Feb2014_FINAL_BW_Acc.pdf) (http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill_Booklet_Feb2014_FINAL_BW_Acc.pdf)
- ii. Following notification to OES, the Permittee shall notify Central Valley Water Board, as soon as practicable (ideally within 24 hours).

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

Notification may be delivered via written notice, email, or other verifiable means.

- iii. Within five (5) working days of notification to the Central Valley Water Board, the Permittee must submit an Accidental Discharge of Hazardous Material Report.
- b. Violation of Compliance with Water Quality Standards:** The Permittee shall notify the Central Valley Water Board of any event causing a violation of compliance with water quality standards. Notification may be delivered via written notice, email, or other verifiable means.
- i. This notification must be followed within three (3) working days by submission of a Violation of Compliance with Water Quality Standards Report.

c. In-Water Work and Diversions:

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

d. Modifications to Project

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

e. Transfer of Property Ownership:

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

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

the transfer of ownership. 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 or during the entire duration of temporary water diversions, any discharge(s) to waters of the state shall conform to the following water quality standards:

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

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

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

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

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

upstream out of the influence of the Project, and approximately 300 feet downstream of the work area.

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

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

Table 3: Sample Type and Frequency Requirements

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

4. Post-Construction:

Visually inspect the Project site during the rainy season for two years 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

algorithm/method and is calibrated and maintained in accordance with the manufacturer’s instructions. A calibration and maintenance log for each meter used for monitoring shall be maintained onsite.

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

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

D. Standard

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

E. General Compliance

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

2. Permitted actions must not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses for receiving waters as adopted in the Basin Plans by any applicable Regional Water Board or any applicable State Water Board (collectively Water Boards) water quality control plan or policy. The source of any such discharge must be eliminated as soon as practicable.
3. In response to a suspected violation of any condition of this Order, the Central Valley Water Board may require the holder of this Order to furnish, under penalty of perjury, any technical or monitoring reports the Water Boards deem appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The additional monitoring requirements ensure that permitted discharges and activities comport with any applicable effluent limitations, water quality standards, and/or other appropriate requirement of state law.
4. The Permittee must, at all times, fully comply with engineering plans, specifications, and technical reports submitted to support this Order; and all subsequent submittals required as part of this Order. The conditions within this Order and Attachments supersede conflicting provisions within Permittee submittals.
5. This Order and all of its conditions contained herein continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the Project. For purposes of Clean Water Act, section 401(d), this condition constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements of state law.
6. The Permittee shall adhere to all requirements in the mitigation monitoring and reporting program (MMRP) which is incorporated herein by reference and any additional measures as outlined in Attachment C, CEQA Findings of Fact.
7. **Construction General Permit Requirement:** The Permittee shall obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ; NPDES No. CAS000002), as amended, for discharges to surface waters comprised of storm water associated with construction activity, including, but not limited to, demolition, clearing, grading, excavation, and other land disturbance activities of one or more acres, or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres.
8. **Delta Regional Monitoring Program (RMP):** Delta waterways are listed Clean Water Act (CWA) Section 303(d) waterbodies as impaired for chlordane, DDT, diazinon, dieldrin, mercury, polychlorinated biphenyls, and unknown toxicity. The Delta RMP was created to coordinate the Delta-wide

monitoring, reporting, and assessment of water quality necessary for understanding delta water quality conditions and trends. The current Delta RMP Monitoring Design places a focus on monitoring for constituents that are causing significant impairment in the Delta and include pesticides and toxicity, nutrients, and mercury. Monitoring is occurring now at various locations throughout the Delta. Data used from these monitoring studies will be used by the Central Valley Water Board to inform its existing control programs such as the Delta Mercury Control Program, and to inform the development of future control programs.

As mentioned in section VI, the Project is expected to create additional methylmercury within the Yolo Bypass and a cumulative impact in the Greater Delta area due to other restoration projects in the region. The Yolo Bypass and Delta do not have assimilative capacity for any increase in methylmercury.

Further, the permitted actions may have other impacts to other constituents that are impairing Delta waters. Because the permitted actions may impact Delta quality in both water, aquatic life, and other wildlife, the Permittee shall participate in the Delta RMP.

The Lower Elkhorn Basin Levee Setback Project was not included in any prior Delta RMP Participation Plans. Therefore, the Permittee shall submit a project-specific Delta RMP Participation Plan incorporating the Lower Elkhorn Basin Levee Setback Project. Details of this plan and the associated fee, or in-kind participation, shall be developed and submitted to Central Valley Water Board staff within 60 days of issuance of this Order.

Once this project-specific Delta RMP Participation Plan has been approved by Central Valley Water Board staff, the Permittee shall adequately participate in the Delta RMP according to the specifications detailed in the plan.

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.
6. **Lake or Streambed Alteration Agreement:** The Permittee shall submit a signed copy of the California Department of Fish and Wildlife's (CDFW) Lake or Streambed Alteration Agreement or other authorization letter to the Central Valley Water Board immediately upon execution and prior to any discharge to waters of the state.

G. Construction

1. Dewatering

- a. The Permittee shall develop and maintain on-site a Surface Water Diversion and/or Dewatering Plan(s). The Plan(s) must be developed prior to initiation of any water diversions. The Plan(s) shall include the proposed method and duration of diversion activities and include water quality monitoring conducted, as described in section XIV.C.3, during the entire duration of dewatering and diversion activities. The Plan(s) must be consistent with this Order and must be made available to the Central Valley Water Board staff upon request.
- b. For any temporary dam or other artificial obstruction being constructed, maintained, or placed in operation, sufficient water shall at all times be

allowed to pass downstream, to maintain beneficial uses of waters of the state below the dam. Construction, dewatering, and removal of temporary cofferdams shall not violate section XIV.C.3.

- c. The temporary dam or other artificial obstruction shall only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel which will cause little or no siltation. Stream flow shall be temporarily diverted using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses.
- d. If water is present, the area must be dewatered prior to start of work.
- e. Dewatering will occur within the Project area.
- f. This Order does not allow permanent water diversion of flow from the receiving water. This Order is invalid if any water is permanently diverted as a part of the project.
- g. The Permittee shall work with the Central Valley Water Board to obtain coverage under an NPDES permit for dewatering activities that result in discharges into surface water.
- h. The Permittee shall work with the Central Valley Water Board to obtain coverage under Waste Discharge Requirements (WDRs) for dewatering activities that result in discharges to land.

2. Directional Drilling – Not Applicable

3. Dredging – Not Applicable

4. Fugitive Dust

Dust abatement activities can cause discharges of sediment to streams and uplands through application of water or other fluids. Dust abatement chemicals added to water can be hazardous to wildlife and, if allowed to enter streams, detrimental to water quality. Therefore, dust abatement activities shall be conducted so that sediment or dust abatement chemicals are not discharged into waters of the state. Dust abatement products or additives that are known to be detrimental to water quality or wildlife shall not be used, unless specific management needs are documented, and product-specific application plans are approved by Central Valley Water Board staff.

5. Good Site Management “Housekeeping”

- a. The Permittee shall develop and maintain onsite a project-specific Spill Prevention, Containment and Cleanup Plan outlining the practices to prevent, minimize, and/or clean up potential spills during construction of the Project. The Plan must detail the Project elements, construction equipment types and location, access and staging and construction sequence. The Plan must be made available to the Central Valley Water Board staff upon request.

- b. Refueling of equipment within the floodplain or within 300 feet of the waterway is prohibited. If critical equipment must be refueled within 300 feet of the waterway, spill prevention and countermeasures must be implemented to avoid spills. Refueling areas shall be provided with secondary containment including drip pans and/or placement of absorbent material. No hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, or other construction-related potentially hazardous substances should be stored within a floodplain or within 300 feet of a waterway. The Permittee must perform frequent inspections of construction equipment prior to utilizing it near surface waters to ensure leaks from the equipment are not occurring and are not a threat to water quality.
- c. All materials resulting from the Project shall be removed from the site and disposed of properly.

6. Hazardous Materials

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

7. Invasive Species and Soil Borne Pathogens

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

8. 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.

9. Sediment Control

- a. Except for activities permitted by the USACE 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.

10. Special Status Species

Giant garter snake, Valley elderberry longhorn beetle, Swainson's hawk, Burrowing owl, Northwestern pond turtle.

11. 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.

12. Storm Water

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

H. Site Specific – Not Applicable**I. 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 as described in a restoration plan. The restoration plan shall be submitted for written acceptance by Central Valley Water Board staff within 90 days of issuance of this Order. The restoration plan shall provide the following: a schedule; plans for grading of disturbed areas to pre-project contours; planting palette with plant species native to the Project area; seed collection location; invasive species management; performance standards; and maintenance requirements (e.g. watering, weeding, and replanting).
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 365 days of the impacts, compensatory mitigation may be required to offset temporal loss of waters of the state.
4. Total required Project mitigation information for temporary impacts is summarized in Table 4. [Establishment (Est.), Re-establishment (Re-est.), Rehabilitation (Reh.), Enhancement (Enh.), Preservation (Pres.), Unknown].

Table 4: Required Project Mitigation Quantity for Temporary Impacts by Method

Aquatic Resource Type	Mitigation Type	Units	Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Stream Channel	Permittee Responsible	Acres		25.2				

J. 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 -Not Applicable**
2. **Compensatory Mitigation Plan – Not Applicable**
3. **Irrevocable Letter of Credit – Not Applicable**
4. **Permittee-Responsible Compensatory Mitigation Responsibility – Not Applicable**
5. **Purchase of Mitigation Credits by Permittee for Compensatory Mitigation – Not Applicable**
6. **Total Required Compensatory Mitigation:** No compensatory mitigation is request for the permanent impacts to 16.6 acres of stream channel habitat.

K. Ecological Restoration and Enhancement

The quantity of waters of the state permanently gained by the Project is shown in Table 5.

Table 5: Total Ecological Restoration and Enhancement Quantity

Aquatic Resource Type	Restoration Type	Units	Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Stream Channel	Permittee-Responsible	Acres	12.8			9.9		

L. Certification Deviation

1. Minor modifications of Project locations or predicted impacts may be necessary as a result of unforeseen field conditions, necessary engineering re-design, construction concerns, or similar reasons. Some of these prospective Project modifications may have impacts on water quality. Some modifications of Project locations or predicted impacts may qualify as Certification Deviations as set forth in Attachment F. For purposes of this Certification, a “Certification Deviation” is a Project locational or impact

modification that does not require an immediate amendment of the Order, because the Central Valley Water Board has determined that any potential water quality impacts that may result from the change are sufficiently addressed by the Order conditions and the CEQA Findings. After the termination of construction, this Order will be formally amended to reflect all authorized Certification Deviations and any resulting adjustments to the amount of water resource impacts and required compensatory mitigation amounts.

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

XV. Water Quality Certification

I hereby issue the Order for the Lower Elkhorn Basin Levee Setback Project, WDID# 5A57CR00182, certifying that as long as all of the conditions listed in this Order are met, any discharge from the referenced Project will comply with the applicable provisions of Clean Water Act sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards).

The Central Valley Water Board will file a Notice of Determination (NOD) at the SCH within five (5) working days of issuance of this Order. This discharge is also regulated pursuant to State Water Board Water Quality Order No. 2003-0017-DWQ which authorizes this Order to serve as Waste Discharge Requirements pursuant to the Porter-Cologne Water Quality Control Act (Water Code, section 13000 et seq.).

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

Original Signed By James Marshall For

13 January 2020

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

Date

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

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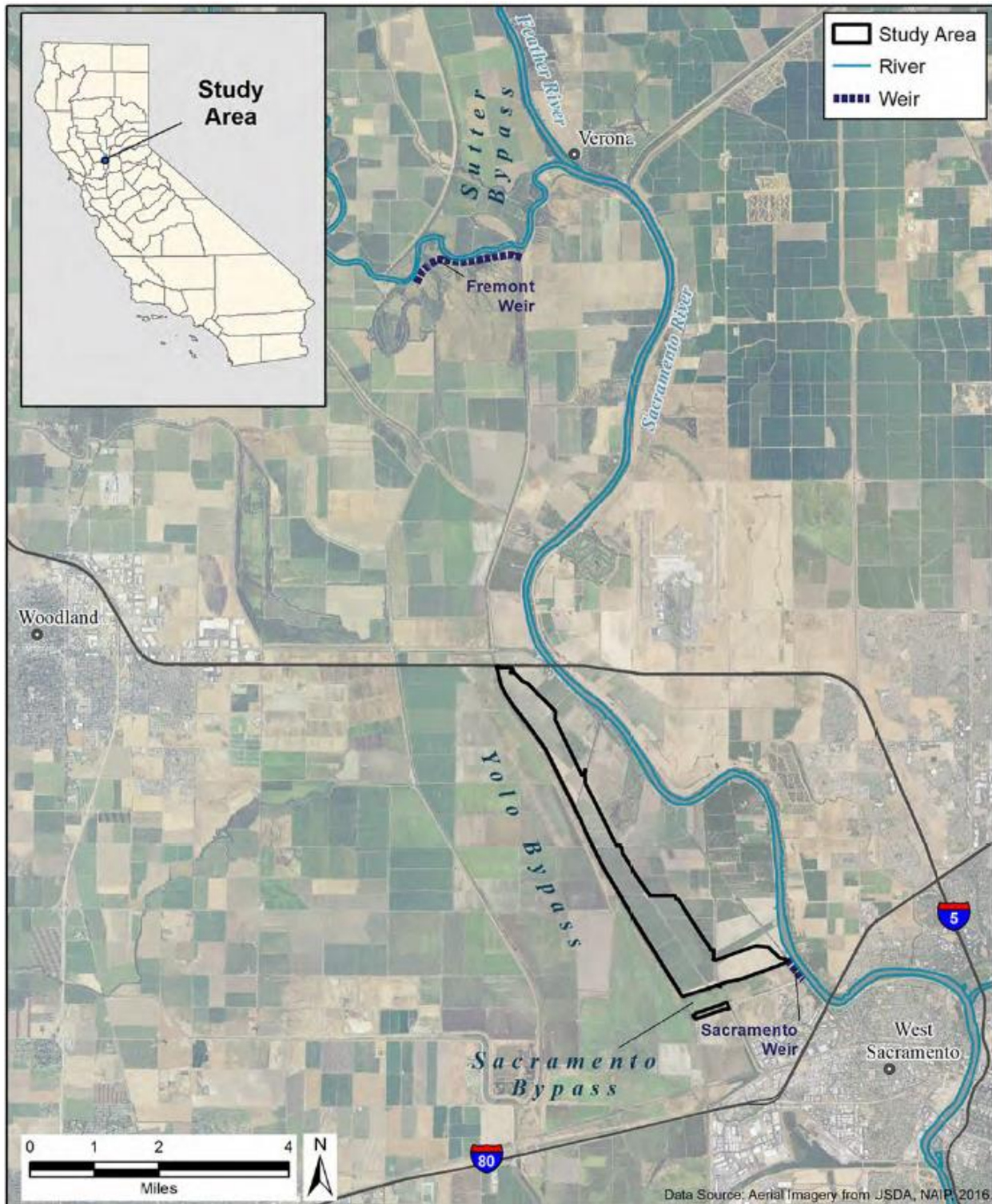


Figure 1 – Project Location Map

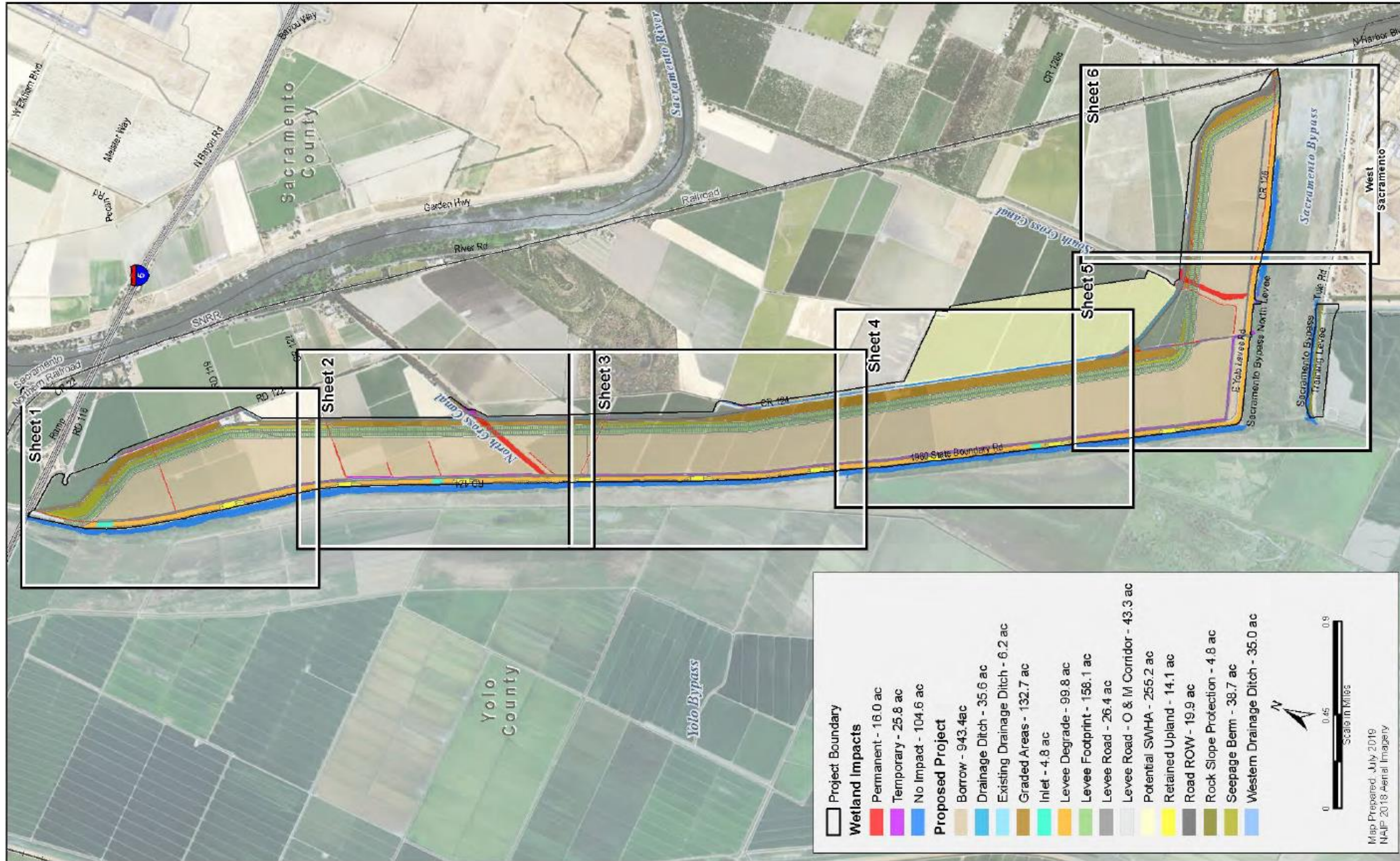


Figure 2 – Site Impact Map

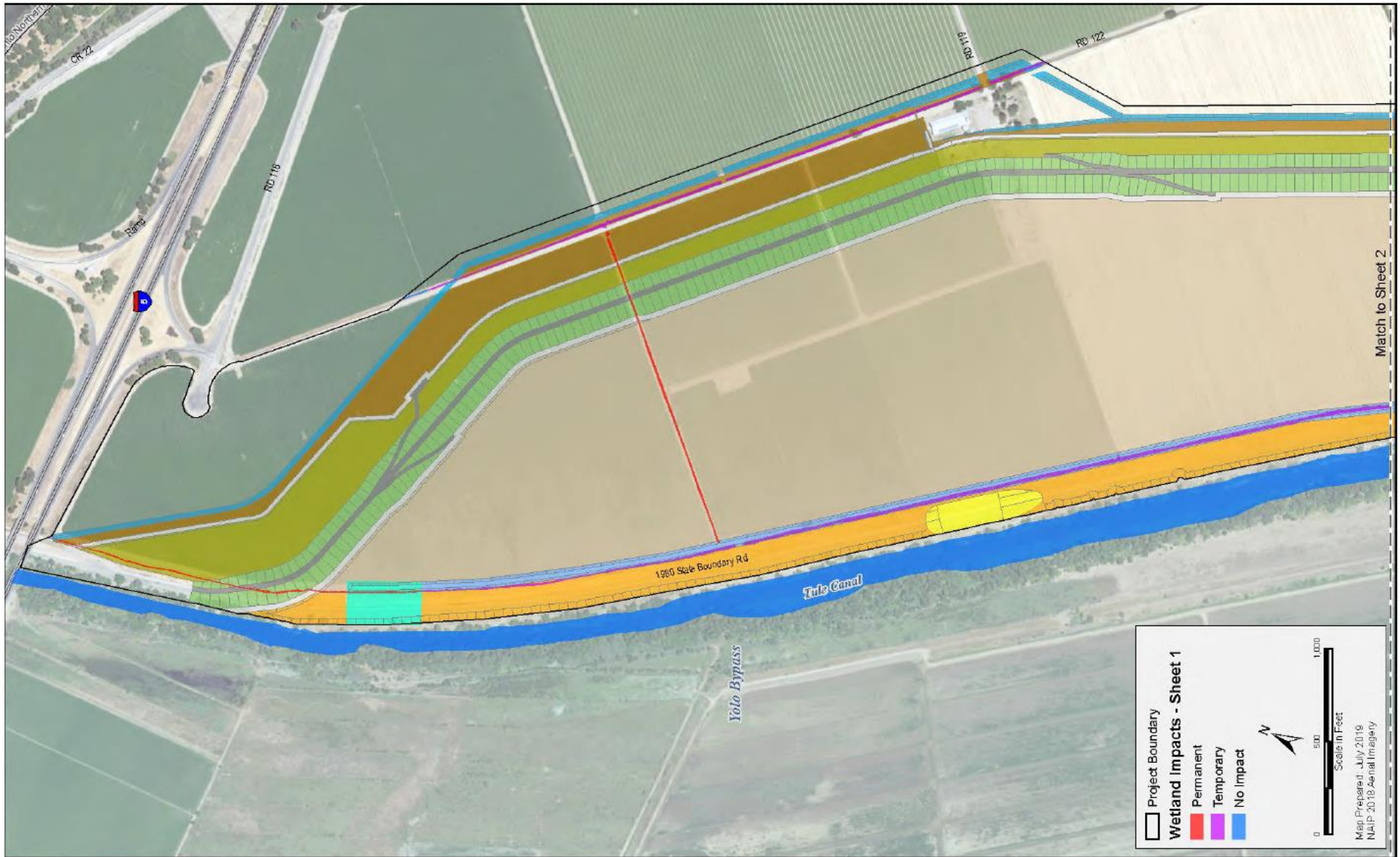


Figure 3 – Sheet 1

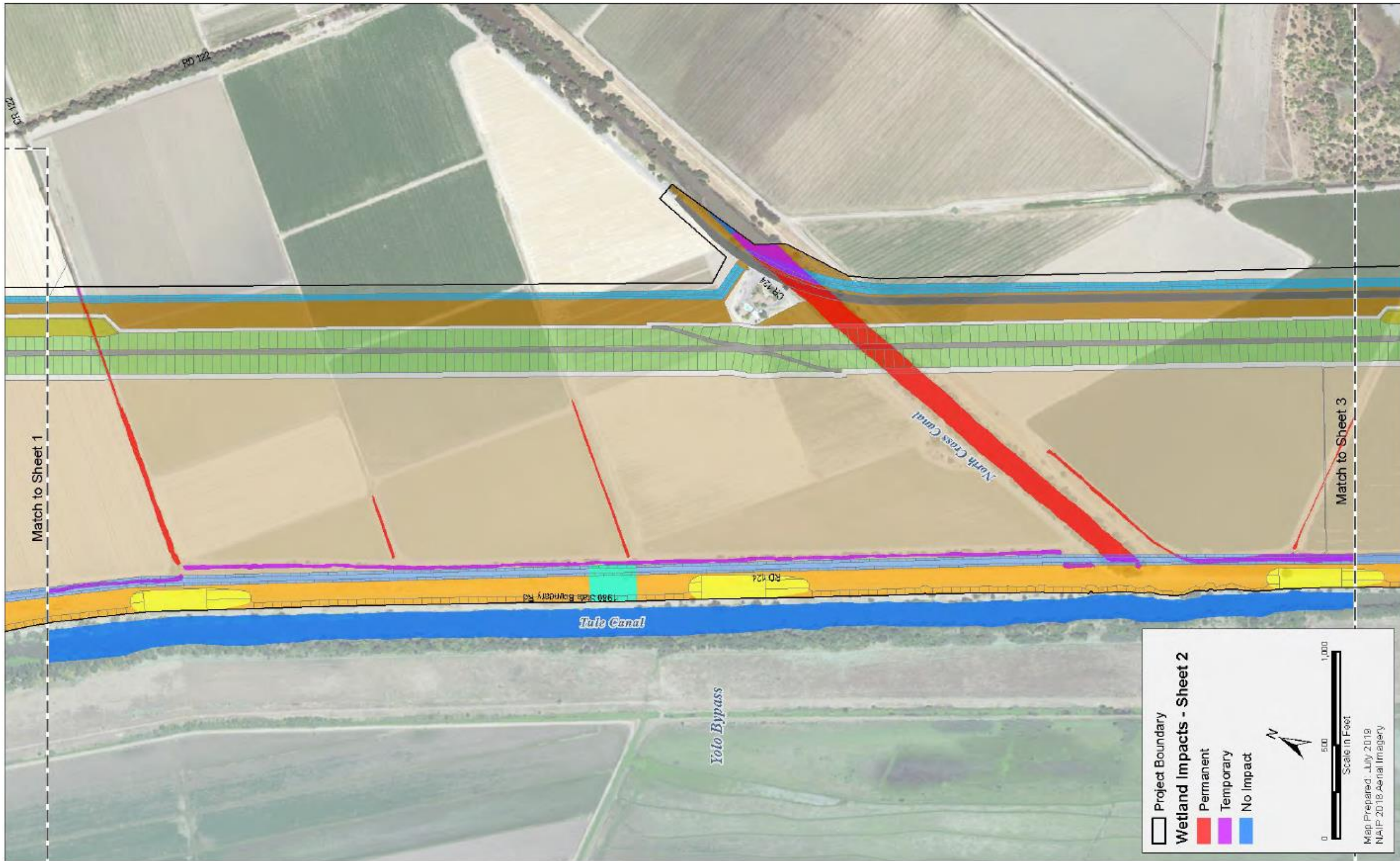


Figure 4 – Sheet 2



Figure 5 – Sheet 3

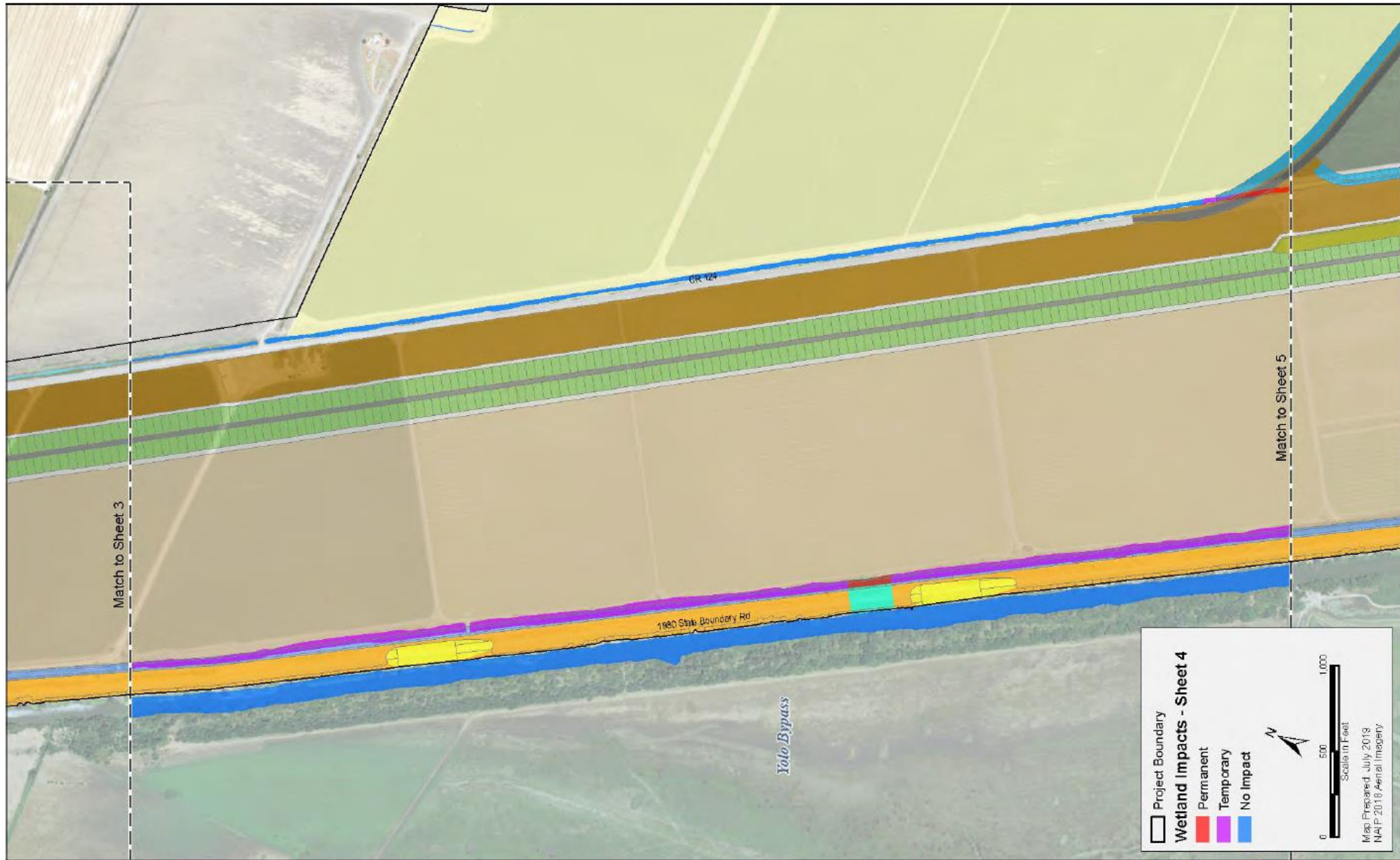


Figure 6 – Sheet 4

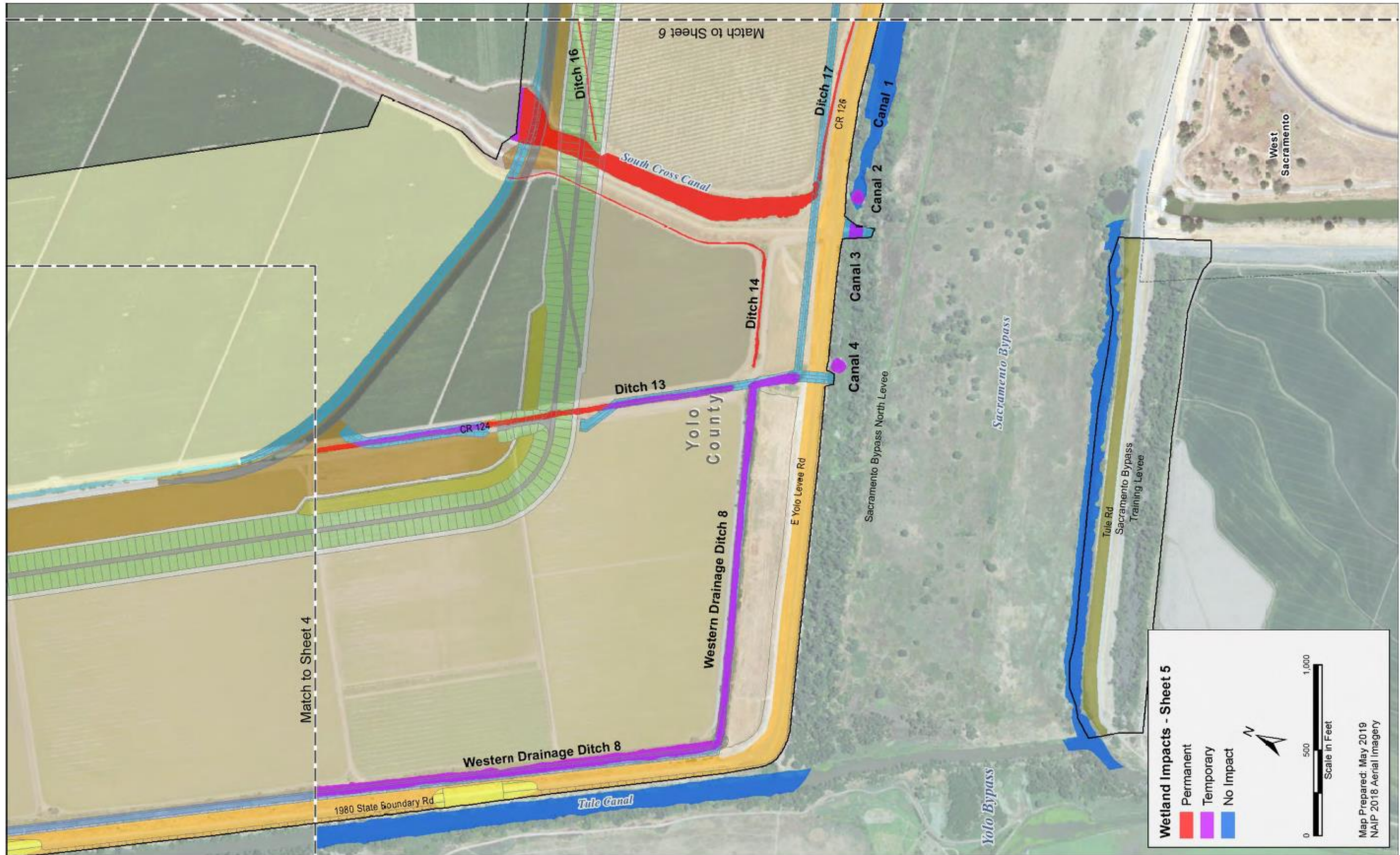


Figure 7 – Sheet 5

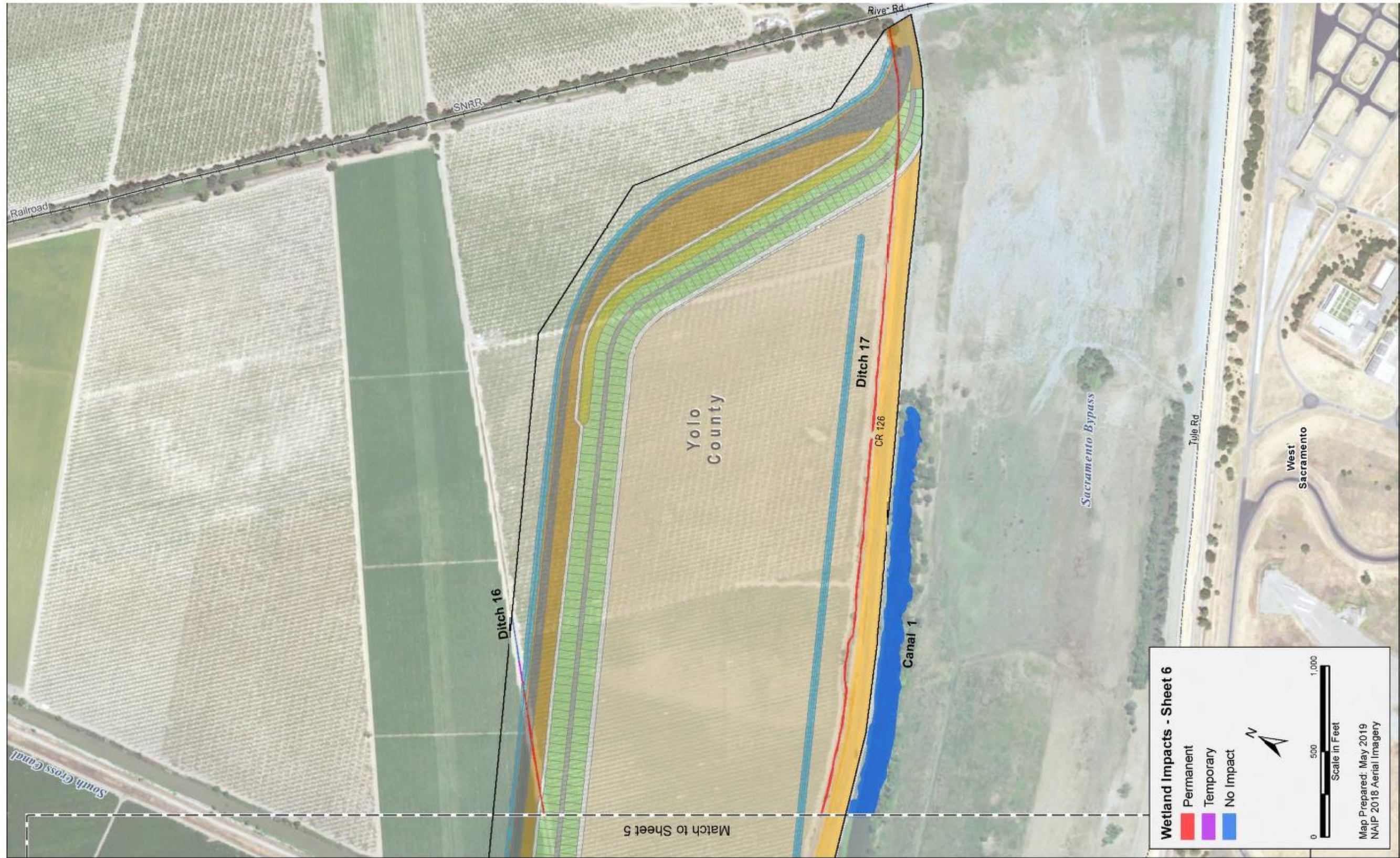


Figure 8 – Sheet 6

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Receiving Waters, Impacts and Mitigation Information

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

Table 1: Receiving Water(s) Information

Impact Site ID	Waterbody Name	Impacted Aquatic Resources Type	Water Board Hydrologic Units	Receiving Waters	Receiving Waters Beneficial Uses	303d Listing Pollutant	California Rapid Assessment Method (CRAM) ID
Western Drainage Ditch – above North Cross Canal	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
Ditch 2	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
Ditch 3	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
Ditch 4	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A

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
Ditch 5	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
Ditch 6	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
North Cross Canal	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
Western Drainage Ditch – below North Cross Canal	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
Ditch 9	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A

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
Ditch 10	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
Ditch 13	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
Ditch 14	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
South Cross Canal	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
Ditch 16	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A

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
Ditch 17	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A
Sacramento Bypass North Canal	Unnamed tributary of Tule Canal	Stream channel	510.00	Yolo Bypass	AGR, REC-1, REC-2, WARM, MIGR, SPWN, WILD	N/A	N/A

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
Western Drainage Ditch – above North Cross Canal	38.6028°	-121.5875°	No	3.60		5,775
Ditch 2	38.6028°	-121.5875°	No	0.82		3,455
Ditch 4	38.6028°	-121.5875°	No	0.01		63
North Cross Canal	38.6028°	-121.5875°	No	0.94		603

Impact Site ID	Latitude	Longitude	Indirect Impact Requiring Mitigation?	Acres	Cubic Yards	Linear Feet
Western Drainage Ditch – below North Cross Canal	38.6028°	-121.5875°	No	19.09		19,731
Ditch 9	38.6028°	-121.5875°	No	0.02		92
Ditch 10	38.6028°	-121.5875°	No	0.07		367
Ditch 13	38.6028°	-121.5875°	No	1.18		1,798
South Cross Canal	38.6028°	-121.5875°	No	0.14		319
Ditch 16	38.6028°	-121.5875°	No	0.02		239
Sacramento Bypass North Canal	38.6028°	-121.5875°	No	0.39		220

Table 3: Individual Permanent Fill/Excavation Impact Information

Impact Site ID	Latitude	Longitude	Indirect Impact Requiring Mitigation?	Acres	Cubic Yards	Linear Feet
Western Drainage Ditch – above North Cross Canal	38.6028°	-121.5875°	No	1.08		2,304
Ditch 3	38.6028°	-121.5875°	No	0.33		1,780
Ditch 4	38.6028°	-121.5875°	No	0.64		1,518
Ditch 5	38.6028°	-121.5875°	No	0.09		354
Ditch 6	38.6028°	-121.5875°	No	0.18		893

Impact Site ID	Latitude	Longitude	Indirect Impact Requiring Mitigation?	Acres	Cubic Yards	Linear Feet
North Cross Canal	38.6028°	-121.5875°	No	6.03		2,590
Western Drainage Ditch – below North Cross Canal	38.6028°	-121.5875°	No	0.25		881
Ditch 9	38.6028°	-121.5875°	No	0.22		1,585
Ditch 13	38.6028°	-121.5875°	No	0.8		1,413
Ditch 14	38.6028°	-121.5875°	No	0.4		2,282
South Cross Canal	38.6028°	-121.5875°	No	5.2		1,948
Ditch 16	38.6028°	-121.5875°	No	0.21		1,401
Ditch 17	38.6028°	-121.5875°	No	1.17		5,571

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A. Environmental Review

On 18 March 2019, the California Department of Water Resources, as lead agency, certified a Final Environmental Impact Report (FEIR) (State Clearinghouse (SCH) No. 2016092015) for the Project and filed a Notice of Determination (NOD) at the SCH on 21 March 2019. The Central Valley Water Board is a responsible agency under CEQA (Public Resources Code, section 21069) and in making its determinations and findings, must presume that the California Department of Water Resources' certified environmental document comports with the requirements of CEQA and is valid. (Public Resources Code, section 21167.3.) The Central Valley Water Board has reviewed and considered the environmental document and finds that the environmental document prepared by the California Department of Water Resources addresses the Project's water quality impacts. (California Code of Regulations, Title 14, section 15096, subd. (f).) The environmental document includes the mitigation monitoring and reporting program (MMRP) developed by the California Department of Water Resources 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: 3464 El Camino Avenue, Suite 150, Sacramento, CA 95821.

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

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

C. Findings

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

- (1) Findings regarding impacts that will be 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:

The Project will result in less than significant impacts with mitigation for the potential disturbance and/or loss of jurisdictional waters (WATERS-1); substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation, or flooding on- or off-site (HH-3); possible temporary and short-term impacts on water quality from stormwater runoff, erosion, and spills associated with construction (WQ-1); and possible temporary effects on groundwater or surface water quality resulting from contact with the water table during construction (WQ-2).

a.ii. Facts in Support of Finding:

- **Mitigation Measure WATERS-1:** Implement measures to avoid, minimize, and compensate for loss of jurisdictional waters.

For impacts to jurisdictional waters that cannot be avoided (i.e., loss of waters), California Department of Water Resources (DWR) will implement the measures described below.

- A formal delineation of waters of the United States was conducted by DWR biologists during field surveys. The findings will be documented in a detailed report and submitted to USACE for verification as part of the formal Section 404 wetland delineation process.
- DWR will develop an appropriate and feasible mitigation plan to compensate for loss of jurisdictional waters. In accordance with USACE and Central Valley Water Board policy, jurisdictional waters will be replaced or restored on a “no-net-loss” basis. Replaced or restored waters will, preferably, be located in the study area and will have the same functions and services as the permanently affected waters. The mitigation plan will detail appropriate compensation measures determined through consultation with the respective regulatory agencies ((USACE, Central Valley Water Board, and possibly CDFW), methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails. The final mitigation plan will be approved by the regulatory agencies prior to issuance of the Section 401 Water Quality Certification and Section 404 permit. DWR anticipates that compensatory mitigation for impacts to jurisdictional waters will be implemented consistent with Ecosystem Project Elements framework described in Section 3.4.10 in Chapter 3, “Alternatives,” and shown on Table 3-5.
- Authorization for fill of jurisdictional waters will be secured from USACE via the Section 404 permitting process before starting project construction. Any measures determined necessary during the 404 permitting process will be implemented.

- Water quality certification pursuant to Section 401 of the Clean Water Act will be obtained from Central Valley Water Board before starting project construction. Any measures required as part of the issuance of water quality certification will be implemented.
- **Mitigation Measure WQ-1:** Limit Ground-disturbance to construction areas and avoid and limit disturbance to stream banks and habitats.

DWR will limit ground-disturbance to construction areas, including necessary access routes and staging areas. The number of access routes, size of staging areas, and total area of the project activity will be limited to the minimum necessary. When possible, existing access routes and points will be used. All roads, staging areas, and other facilities will be placed to avoid and limit disturbance to stream banks and habitat when feasible.
- **Mitigation Measure WQ-2:** Install monitor, and maintain erosion control measures to minimize soil or sediment from entering waterways or wetlands.

DWR will install erosion control measures that minimize soil or sediment from entering waterways and wetlands. These measures will be monitored for effectiveness, and maintained throughout construction activities.
- **Mitigation Measure WQ-3:** Inspect sediment and turbidity control barriers daily during construction for proper function and replace immediately if not functioning effectively.

DWR will inspect performance of sediment and turbidity control barriers at least once each day during construction to ensure they are functioning properly. Should a control barrier not function effectively, it will be immediately repaired or replaced. Additional controls will be installed as necessary.
- **Mitigation Measure WQ-4:** Remove sediment from sediment controls and dispose of properly.

DWR will remove sediment from sediment controls once the sediment has reached 1/3 of the exposed height of the control. Sediment collected in these devices will be disposed of away from the collection site at designated fill areas on the project site.
- **Mitigation Measure WQ-5:** Treat silted water from construction activities.

DWR will treat water containing mud or silt from construction activities by filtration, or retention in a settling pond, adequate to prevent muddy water from entering live waterways.
- **Mitigation Measure WQ-6** Treat all disturbed soils with appropriate erosion control.

DWR will ensure that all disturbed soils undergo appropriate erosion control treatment (e.g., sterile straw mulching, seeding, planting) prior to the end of the construction season, or prior to October 15, whichever comes first.

- **Mitigation Measure WQ-7:** Obtain appropriate discharge and dewatering permit and implement provisions for dewatering.

Before discharging any dewatered effluent to surface water, DWR will obtain a Low Threat Discharge and Dewatering NPDES permit, or an Individual Permit from the Central Valley Water Board if the dewatering is not covered under the RWQCB's NPDES Construction General Permit. The dewatering permit includes extensive water quality monitoring to adhere to the strict effluent and receiving water quality criteria outlined in the permit. As part of the permit, the permittee will design and implement measures as necessary to meet the discharge limits identified in the relevant permit. For example, if dewatering is needed during the construction of a cutoff wall, the dewatering permit will require treatment or proper disposal of the water prior to discharge if it is contaminated. These measures will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable.

Implementation measures could include the retention of dewatering effluent until particulate matter has settled before it is discharged, use of infiltration areas, and other BMPs. Final selection of water quality control measures would be subject to approval by Central Valley Water Board. DWR will verify that coverage under the appropriate NPDES permit has been obtained before allowing dewatering activities to begin. DWR or its authorized agent will perform routine inspections of the construction area to verify that the water quality control measures are properly implemented and maintained. DWR will notify its contractors immediately if there is a non-compliance issue and shall require compliance.

- **Mitigation Measure GEO-2:** Acquire appropriate regulatory permits, and prepare and implement a Storm Water Pollution Prevention Plan and associated Best Management Practices.

Prior to the start of earth-moving activities, DWR will obtain coverage under the State Water Resources Control Board's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ as amended by Order 2012-006-DWQ), including preparation and submittal of a Notice of Intent (NOI) to discharge with the Central Valley Water Board. The contractor shall be required to prepare a SWPPP and comply with the conditions of the NPDES general stormwater permit for construction activity. For work conducted under NPDES authorization, the SWPPP shall describe the construction activities to be conducted, Best Management Practices (BMPs) that will be implemented to prevent contaminated stormwater discharges into waterways, and inspection and

monitoring activities that will be conducted. Construction and postconstruction monitoring shall be conducted to ensure that all erosion-control efforts are performing as designed.

Final design and construction plans will require the implementation of standard erosion, siltation, and good housekeeping BMPs. BMPs will include pollution prevention measures (erosion and sediment control measures and measures to control non-stormwater discharges and hazardous spills), demonstration of compliance with all applicable Central Valley Water Board and other applicable water quality standards, local Yolo County erosion and sediment control standards (because the relocated County Roads 124 and 126 would be turned over to Yolo County for future maintenance), identification of responsible parties, detailed construction timelines, and a BMP monitoring and maintenance schedule. BMPs will be applied to meet the maximum extent practicable and best conventional technology/best available technology requirements and to address compliance with water quality standards. A construction and postconstruction monitoring program will be implemented to ensure compliance and effectiveness of BMPs.

- **Mitigation Measure HAZ-1:** Implement measures such as a spill prevention control and countermeasures plan and bentonite slurry spill contingency plan to reduce the potential for environmental contamination during construction activities.

In addition to compliance with all applicable Federal, State, and local regulations, DWR will implement the measures described below to further reduce the risk of accidental spills and protect the environment.

- Prepare and Implement a Spill Prevention Control and Countermeasures Plan. A written spill prevention control and countermeasures plan (SPCCP) will be prepared and implemented. The SPCCP and all material necessary for its implementation will be accessible on site prior to initiation of project construction and throughout the construction period. The SPCCP will include a plan for the emergency cleanup of any spills of fuel or other material. Employees/construction workers will be provided the necessary information from the SPCCP to prevent or reduce the discharge of pollutants from construction activities to waters and to use the appropriate measures should a spill occur. In the event of a spill, work will stop immediately and the CDFW, United States Fish and Wildlife Service (USFWS), National Marine Fisheries Service, Central Valley Regional Water Quality Control Board, and USACE will be notified within 24 hours.
- Dispose of All Construction-related Debris and Materials at an Approved Disposal Site. All debris, litter, unused materials, sediment, rubbish, vegetation, or other material removed from the construction

areas that cannot reasonably be secured will be removed daily from the project work area and deposited at an appropriate disposal or storage site.

- Use Safer Alternative Products to Protect Streams and Other Waters. Every reasonable precaution will be exercised to protect streams and other waters from pollution with fuels, oils, and other harmful materials. Safer alternative products (such as biodegradable hydraulic fluids) will be used where feasible.
- Prevent Any Contaminated Construction By-products from Entering Flowing Waters; Collect and Transport Such By-products to An Authorized Disposal Area. Petroleum products, chemicals, fresh cement, and construction by-products containing, or water contaminated by, any such materials will not be allowed to enter flowing waters and will be collected and transported to an authorized upland disposal area.
- Prevent Hazardous Petroleum or Other Substances Hazardous to Aquatic Life from Contaminating the Soil or Entering Waters of the State or United States. Gas, oil, other petroleum products, or any other substances that could be hazardous to aquatic life and resulting from project-related activities, will be prevented from contaminating the soil and/or entering waters of the State and/or waters of the United States.

(2) Findings regarding mitigation measures which are the responsibility of another agency. (Public Resources Code, section 21081, subd. (a)(2); California Code of Regulations, Title 14, section 15091, subd.(a)(2).)

There are changes or alterations that are within the responsibility and jurisdiction of another public agency and not the jurisdiction of the Central Valley Water Board. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

a.i. Potential Significant Impact:

The Project will result in less than significant impacts with mitigation for the temporary disturbance of fish, habitat degradation and adverse effects on fish health during construction activities (FISH-1); degradation and contamination of aquatic habitat and adverse effects on fish health and survival associated with exposure of disturbed soils and contaminated materials (FISH-3); fish stranding in expanded setback levee areas associated with enhanced floodplain inundation (FISH-4); potential loss of special-status plants and potential loss and degradation of special-status plant habitat (BIO-1); potential effects on valley elderberry longhorn beetle and its habitat (BIO-2); potential disturbance of loss of giant garter snakes and their habitat (BIO-3); potential disturbance of loss of northwestern pond turtles and their habitat (BIO-4); potential loss of burrowing owl individuals from destruction of occupied burrows and nest disturbance (BIO-5); potential disturbance of

nesting special-status birds and common raptor species, potential loss of active nests and nest trees, and potential loss of nesting and foraging habitat (BIO-6); potential disturbance or loss of roosting special-status bats (BIO-7); potential disturbance and loss of sensitive habitats, including riparian habitat (BIO-8); potential interference with terrestrial wildlife movement, migration corridors, and nursery sites (BIO-9).

a.ii. Facts in Support of Finding:

- Implement Mitigations Measures GEO-2, HAZ-1, WQ-1, WQ-2 listed above.
- **Mitigation Measure HAZ-2c:** Implement remediation of Old Bryte Landfill.

DWR will confirm that remediation of the Old Bryte Landfill has been completed in compliance with DTSC requirements before any project-related ground-disturbance occurs in the landfill area.

- **Mitigation Measure BIO-1a:** Conduct focused surveys for special-status plants, and avoid impacts, where feasible.

To avoid effects of project activities on special-status plants, DWR will ensure that the following measures are implemented before commencement of ground-disturbing activities. If avoidance consistent with these measures cannot be achieved, DWR will implement the minimization and compensation measures included in Mitigation Measure BIO-1b described below.

- Conduct Pre-construction Special-status Plant Surveys during the Blooming Periods. A qualified botanist will conduct surveys for woolly rose-mallow with potential to occur in appropriate habitat within the project footprint. The surveys will follow the most current applicable guidelines established by CDFW, and will be conducted at the appropriate time of year when the target species would be clearly identifiable. If no special-status plants are found during focused surveys, no further action is required. However, if special-status species are found, DWR will implement Mitigation Measure BIO-1b.
- Mark Special-status Plant Populations and Occupied Habitat in the Field for Avoidance during Construction Activities and Include a Minimum Habitat Buffer of 25 Feet. If special-status plants are found, areas of occupied habitat will be identified. The construction contractor will avoid these areas where feasible. Temporary fencing will be installed to protect all occupied habitat located adjacent to construction areas that can be avoided. The avoidance area shall include a minimum habitat buffer of 25 feet.
- **Mitigation Measure BIO-1b:** If avoiding construction-related effects on special-status plants is infeasible, minimize and, where appropriate, compensate for effects on special-status plant species and loss of habitat.

If the focused surveys described above in Mitigation Measure BIO-1a have been completed and avoiding effects on special-status plant species is infeasible, DWR will coordinate with CDFW to determine acceptable methods for minimizing or compensating for effects on a species. DWR will ensure that the measures described below are implemented to minimize and compensate for effects of the project on special-status plants.

- Develop and Implement a Mitigation Plan for Directly Affected Special-status Plants. If habitat occupied by special-status plants cannot be avoided during project construction, an appropriate and feasible mitigation plan to compensate for direct loss of special-status plants will be developed by DWR and provided to CDFW for approval. The plan will detail appropriate compensation measures determined through consultation with CDFW, methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails. Implementation methods may include salvaging and transplanting individual plants, collecting the seeds of affected plants, and collecting and translocating seed- and rhizome-containing mud. Compensation also may include preserving in perpetuity other known populations of this species in the project vicinity at ratios of or greater than 1 to 1. The plan will be developed in consultation with and approved by CDFW before construction activities begin in areas containing special-status plant species. DWR will implement the CDFW-approved plan.
- **Mitigation Measure BIO-1c:** Prepare and implement an invasive plant management plan.

To ensure that no new invasive plants are carried onto the project construction sites, and that existing invasive plants are not spread, DWR will prepare and implement an Invasive Plant Management Plan that will contain the following measures at a minimum.

- Clean construction vehicles and equipment inside and out at an authorized washing facility before arrival at the project construction areas.
- Inspect vehicles and equipment to ensure they are free of soil and debris that could harbor nonnative plant seeds, roots, or rhizomes.
- Use certified weed-free vegetative materials for all imported materials, including all imported straw.
- Construction vehicles and equipment shall be cleaned inside and out at an authorized washing facility before arrival at the project construction areas and shall be inspected in an attempt to ensure they are free of soil and debris that could harbor nonnative plant seeds, roots, or rhizomes.

- Clean all construction vehicles if invasive or noxious weeds are already present in portions of the project construction areas before moving from infested areas to areas that are weed-free. Exterior cleaning will consist of pressure-washing vehicles and equipment, with close attention paid to the tracks, feet, and/or tires and on all elements of the undercarriage. Vehicle cabs will be swept out, and refuse will be disposed at an approved off-site location.
- **Mitigation Measure BIO-2a:** Conduct focused surveys for elderberry shrubs, and avoid impacts, where feasible.

To avoid effects of project activities on valley elderberry longhorn beetle or the beetle's host plant, DWR will ensure that the following measures are implemented before commencement of ground-disturbing activities. If avoidance consistent with these measures cannot be achieved, DWR will implement the minimization and compensation measures included in Mitigation Measure BIO-2b described below.

- Conduct Focused Survey for Elderberry Shrubs. DWR will retain a qualified biologist to conduct a focused survey in areas where elderberry shrubs could occur within 100 feet of project construction and O&M areas. The survey will follow the USFWS conservation guidelines for the valley elderberry longhorn beetle (USFWS 2017). If elderberry shrubs are found, DWR will implement avoidance measures that are consistent with the USFWS conservation guidelines for this species (USFWS 2017).
- Temporarily Fence All Elderberry Shrubs Adjacent to Construction Areas and Designate the Area as Environmentally Sensitive. All elderberry shrubs located adjacent to construction areas, but can be avoided, will be temporarily fenced and designated as environmentally sensitive areas by DWR. These areas will be avoided by all construction personnel. Where feasible, effects will be avoided by establishing and maintaining a 100- foot-wide buffer around elderberry plants. Where a 100-foot buffer is not feasible, effects may be minimized by providing a minimum setback, with a buffer around elderberry plants measuring at least 20 feet wide.
- Prohibit Use of Pesticides or Chemicals within Established Buffers around Elderberry Shrubs. No insecticides, herbicides, or other chemicals that might harm the beetle or its host plant will be used by DWR within established buffers (20 feet) around elderberry shrubs.
- **Mitigation Measure BIO-2b:** If avoiding construction-related effects on elderberry shrubs is infeasible, minimize and, where appropriate, compensate for effects on valley elderberry longhorn beetle and loss of habitat.

If the focused surveys described above in Mitigation Measure BIO-2a have been completed and avoiding direct effects on valley elderberry longhorn beetle is infeasible, DWR will coordinate with USFWS to determine acceptable methods for minimizing or compensating for effects on this species. DWR will ensure that the measures described below are implemented to minimize and compensate for effects of the project on valley elderberry longhorn beetle and its habitat.

- Transplant and Compensate for Elderberry Shrubs That Cannot be Avoided. Elderberry shrubs that cannot be avoided and require removal will be transplanted by DWR. If none of the areas of suitable habitat to be created as part of the project would be available before the impact would occur, alternative transplant locations will be identified. Transplant activities will be conducted in accordance with USFWS guidelines (USFWS 2017). If ground-disturbing activities are to occur within 20 feet of the dripline of an elderberry shrub, minimization and compensation measures consistent with the USFWS conservation guidelines (USFWS 2017) will be implemented. These measures include transplanting elderberry shrubs to the riparian habitat creation areas and planting compensatory elderberry seedlings and associated native plantings.
- Prepare and Implement a Mitigation Plan. The mitigation plan will specify how to manage the elderberry transplant area to ensure that the appropriate habitat conditions are provided. At a minimum, the plan will specify the number of replacement elderberry shrubs and associated native plants to be established and associated success criteria; specify remedial measures to be undertaken if survival success criteria are not met; and describe short- and long-term maintenance and management.
- Consult with USFWS, Obtain Appropriate Take Authorizations, and Implement All Conditions. If it is determined that implementation of a project component would result in take of valley elderberry longhorn beetle (Federally listed species), despite implementation of avoidance and minimization measures, consultation with USFWS will be required and an incidental take authorization will be required. All measures developed through consultation with USFWS will be implemented by DWR to mitigate adverse impacts to this special-status species.
- **Mitigation Measure BIO-3a:** Implement measures to avoid impacts to giant garter snake and its habitats, where feasible.

To avoid adverse effects of project activities on giant garter snakes, DWR will ensure that the following measures are implemented before commencement of ground-disturbing activities. If avoidance consistent with these measures cannot be achieved, DWR will implement the

minimization and compensation measures included in Mitigation Measure BIO-3b, described below.

- Avoid Construction Activities within 200 Feet from the Banks of Suitable Giant Garter Snake Habitat and Temporarily Fence and Designate Suitable Giant Garter Snake Habitat to be Avoided as an Environmentally Sensitive Area. If potentially suitable aquatic habitat for giant garter snake is identified in or within 200 feet of project construction areas by a qualified biologist, DWR will establish a 200-foot buffer around the aquatic habitat, where feasible. Buffers will be marked in the field with guidance from a qualified biologist using temporary fencing, high-visibility flagging, or other equally effective means for clearly delineating the buffers. Construction activities will not occur within the buffer, and workers will avoid entering the buffer at all times. If avoidance buffers are observed, no other mitigation measures for impacts on giant garter snakes will be required. If work must occur within 200 feet of potentially suitable aquatic habitat, DWR will implement mitigation measures included in Mitigation Measure BIO-3b, as determined to be necessary by a qualified biologist.
- **Mitigation Measure BIO-3b:** If avoiding construction-related effects on giant garter snake is infeasible, minimize and, where appropriate, compensate for effects on this species and loss of habitat.

If the measures described above in Mitigation Measure BIO-3a have been completed and avoiding adverse effects on giant garter snake is infeasible, DWR will coordinate with USFWS and CDFW to determine acceptable methods for minimizing or compensating for effects on this species. DWR will ensure that the measures described below are implemented to minimize and compensate for effects of the project on giant garter snake.

- Have a Qualified Biologist Available to Monitor Construction Activities Occurring in Suitable Giant Garter Snake Habitat. If construction activities that could result in direct, adverse effects on giant garter snakes (e.g., burrow collapse, crushing) would occur during periods when giant garter snakes have a higher probability of occurring in terrestrial habitats (i.e., between October 1 and May 1 or outside this period in mornings, evenings, overnight, or when ambient air temperatures are less than approximately 75°F or greater than approximately 90°F), DWR will ensure that a qualified biologist is present during initial ground disturbance. The qualified biologist will follow the requirements specified in the bullet below to ensure that giant garter snakes are protected to the maximum extent feasible during construction activities.

Staff trained in the identification of giant garter snakes will monitor all construction occurring in aquatic habitat during the active season.

When initial ground disturbance will occur in areas of suitable giant garter snake habitat, a qualified biologist will monitor the work. As work is conducted, the qualified biologist will visually scan work areas, equipment, and materials (e.g., excavated sediment and associated aquatic vegetation) for giant garter snakes. If any snake and/or giant garter snakes are observed, DWR will halt all work and follow the requirements specified in the bullet below.

- Stop Work if a Giant Garter Snake is Observed in Construction Area and Allow Snakes to Leave the Construction Area on Their Own or Have USFWS-qualified Biologist Capture and Relocate Giant Garter Snake. If giant garter snakes are observed in a construction area, DWR will stop work until the snake moves out of the area of construction activity and will notify a qualified biologist immediately. If possible, the snake will be allowed to leave on its own volition, and the qualified biologist will remain in the area until the biologist deems his or her presence no longer necessary to ensure that the snake is not harmed. Alternatively, with prior CDFW and USFWS approval and appropriate handling permits, the qualified biologist may capture and relocate the snake unharmed to suitable habitat at least 200 feet from the construction area. DWR will notify CDFW and USFWS by telephone or email within 24 hours of a giant garter snake observation during construction activities. If the snake does not voluntarily leave the construction area and cannot be captured and relocated unharmed, construction activities within approximately 200 feet of the snake will stop to prevent harm to the snake, and CDFW and USFWS will be consulted to identify next steps. In that case, DWR will implement the measures recommended by CDFW and USFWS prior to resuming construction activities in the area.
- Conduct Initial Earth-movement Activities within Suitable Upland Habitat for Giant Garter Snake between May 1 and October 1. When possible, DWR will complete construction and other ground-disturbing activities within suitable upland habitat for the giant garter snake between May 1 and October 1. Initial earth-moving is expected to correspond with the snake's active season (as feasible in combination with minimizing disturbance of nesting Swainson's hawks). Work in giant garter snake upland habitat may also occur between October 2 and November 1 or April 1 through April 30 provided ambient air temperatures exceed approximately 75°F during work and maximum daily air temperatures have exceeded approximately 75°F for at least 3 consecutive days immediately preceding work. During these periods, giant garter snakes are more likely to be active in aquatic habitats and less likely to be found in upland habitats. Where feasible, before construction activities occur in potentially suitable terrestrial giant garter snake habitat during periods when snakes are active (between

May 1 and October 1 when ambient air temperatures exceed 75 °F), DWR will mow areas of herbaceous vegetation surrounding planned work areas to a height of no less than 6 inches where and when feasible to increase visibility and the probability of giant garter snake detection during surveys and monitoring.

- Conduct a Pre-construction Survey within Suitable Giant Garter Snake Habitat within 3 Days before Commencement of Ground-disturbing Activities. DWR will ensure that a qualified biologist surveys areas of planned ground disturbance for burrows, soil cracks, and crevices that may be suitable for use by giant garter snakes when within suitable terrestrial habitat. Surveys will be completed no more than 3 days before conducting any ground-disturbing maintenance activities in terrestrial habitat potentially supporting giant garter snakes. Any identified burrows, soil cracks, crevices, or other habitat features will be flagged or marked by the qualified biologist. The biologist will provide USFWS with written documentation of the monitoring efforts within 48 hours after the survey is completed. The construction area will be re-inspected by a qualified biologist whenever a lapse in construction activity of 2 weeks or greater has occurred at any particular construction site.

If feasible and accepted by CDFW and USFWS, DWR will also use other survey techniques (e.g., scent-detection dogs) as an alternative or a supplement to surveys conducted by a qualified biologist. Such surveys would be used to identify cracks and burrows to help determine giant garter snake occupancy, and these burrows would be flagged to be avoided during subsequent work as described above.

- Limit Sediment Removal Activities between October 1 and April 30. Where feasible for collection canals and other channels that involve sediment removal in the wet, DWR will conduct maintenance activities in aquatic habitats potentially supporting giant garter snakes between October 1 and April 30. During this time, giant garter snakes are more likely to be occupying upland burrows and are less likely to be in the aquatic habitat.
- Deposit Excavated Spoils Outside of Designated Environmentally Sensitive Areas and Inspect Deposited Spoil Piles Prior to Grading. When feasible, DWR staff members will deposit spoils in areas that do not provide suitable giant garter snake upland habitat. Such areas include compacted or gravel roadbeds, orchards, and recently disked farm fields. If spoils disposal would occur within potentially suitable upland habitat for giant garter snake, excavated spoils will be placed to avoid canal banks and burrows. A qualified biologist trained in giant garter snake identification will monitor all spoils disposal.

Immediately preceding grading deposited spoils piles, a qualified biologist will survey planned work areas for giant garter snake and burrows. Additionally, a qualified biologist trained to identify garter snakes will monitor all work as it occurs. Grading of deposited spoils piles will only occur during periods when giant garter snakes are likely to be active in aquatic habitat.

- Ensure that Suitable Giant Garter Snake Aquatic Habitat that is Dewatered Remains Dry for 15 Consecutive Days and if Not Possible, Remove Potential Snake Prey. DWR will dewater maintenance areas potentially providing aquatic habitat for giant garter snakes to the extent feasible. Any dewatered aquatic habitat will be kept dry for at least 15 consecutive days before excavating or filling of the dewatered habitat. If 15 consecutive days are not feasible, then DWR will consult with both USFWS and CDFW to apply appropriate measures. If dewatering cannot remove all water, potential giant garter snake prey (e.g., fish and tadpoles) will be removed so that giant garter snakes and other wildlife are not attracted to the construction area.
- Restore All Suitable Giant Garter Snake Habitat Subject to Temporary Ground-disturbance to Pre-project Conditions. After construction activities are complete, DWR will ensure that all suitable giant garter snake habitat subject to temporary earth-movement, including storage and staging areas and temporary roads, will be restored to pre-project conditions. These areas will be recontoured, if appropriate, and revegetated with appropriate native plant species to promote restoration of the area to pre-project conditions. Appropriate methods and plant species used to revegetate such areas will be determined on a site-specific basis in consultation with USFWS and CDFW.
- Develop and Implement a Mitigation Plan to Offset Unavoidable Loss of Habitat. If potentially occupied habitat for giant garter snake cannot be avoided during project construction, DWR will develop and implement an appropriate and feasible mitigation plan to compensate for potential disturbance, displacement, injury, or the mortality of individuals. The plan will be provided to USFWS and, as necessary, CDFW for approval. Compensation for direct impacts may include preserving, enhancing, and/or creating giant garter snake habitat at an on- or off-site location, or purchasing credits at a USFWS-approved mitigation bank may be identified as appropriate mitigation. DWR will implement the plan once the plan is approved by USFWS (and CDFW, as necessary).
- Consult with USFWS and CDFW and Obtain Appropriate Take Authorizations. If it is determined that implementation of a project component would result in take of giant garter snake, despite implementation of avoidance and minimization measures, DWR will

seek authorization for take of giant garter snake under the Federal ESA and possibly CESA. If it is determined that implementation of a project component is likely to result in take under either regulation, DWR will implement all measures developed through consultation with USFWS and CDFW to mitigate adverse impacts.

- **Mitigation Measure BIO-4:** Avoid and minimize impacts to northwestern pond turtle and its habitats, where feasible.

To avoid effects of project activities on northwestern pond turtle, DWR will ensure that the measures described below are implemented before commencement of ground-disturbing activities.

- Avoid Potential Northwestern Pond Turtle Habitat, to the Extent Feasible, and Establish Temporary Buffers. DWR will avoid ground-disturbance (e.g., grading, disking, road construction, or similar activities that could disturb or crush western pond turtles and their nests) within 200 feet of potentially suitable western pond turtle aquatic habitat, as determined by a qualified biologist. Potential suitable aquatic habitat has suitable basking sites (such as logs, rocks, mats of floating vegetation, or open mud banks) and underwater refugia (such as rocks or submerged vegetation). DWR will observe this buffer during western pond turtle breeding periods (May 1 to November 1), when nests and hatchlings may be present. This 200-foot buffer, or another buffer approved in consultation with CDFW, will be marked in the field by a qualified biologist using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the buffers. Construction activities that could result in ground disturbance will not occur within the buffer to the extent feasible. If such construction activities must occur in buffers, a buffer of reduced width will be established (in consultation with CDFW) by a qualified biologist, marked, and avoided during construction activities in that location. All ground-disturbing activities occurring within the original buffer distance will be monitored by a qualified biologist who would be either on-call or on-site, as appropriate to reduce impacts.
- Where Feasible, Conduct Construction Activities within Suitable Northwestern Pond Turtle Habitat Between May 1 and November 1. Where feasible, DWR will conduct construction activities in aquatic habitats that are potentially supporting western pond turtles between May 1 and November 1. During this time, western pond turtles are more likely to be active in aquatic habitats and can actively move to avoid maintenance activities in aquatic habitat.
- Conduct a Pre-construction Survey for Northwestern Pond Turtles within Suitable Aquatic Habitats and Adjacent Suitable Uplands within 24 Hours of Project Disturbance and Immediately after Dewatering. A pre-construction survey for northwestern pond turtles within aquatic

habitats and adjacent suitable uplands to be disturbed by project activities will be conducted by a qualified biologist. In aquatic habitats to be dewatered during project construction, surveys will be conducted immediately after dewatering and before any subsequent disturbance. Elsewhere, surveys will be conducted within 24 hours before project disturbance.

- Stop Work if Northwestern Pond Turtle Observed in Construction Area and, with CDFW Approval, Move Animal to the Nearest Suitable Habitat Outside the Area if Found On-site. If northwestern pond turtles are observed in a construction area, DWR will stop work within approximately 200 feet of the turtle, and a qualified biologist will be notified immediately. If possible, the turtle will be allowed to leave on its own and the qualified biologist will remain in the area until the biologist deems his or her presence no longer necessary to ensure that the turtle is not harmed. Alternatively, the qualified biologist may capture and relocate the turtle, unharmed and with prior CDFW approval, to suitable downstream habitat at least 200 feet. If the turtle does not voluntarily leave the maintenance area and cannot be captured and relocated unharmed, construction activities within approximately 200 feet of the turtle will stop to prevent harm to the turtle, and CDFW will be consulted to identify the next steps, if needed.
- **Mitigation Measure BIO-5a:** Conduct a habitat assessment and focused surveys for burrowing owls, and avoid impacts, where feasible.

To avoid effects of project activities on burrowing owls, DWR will ensure that the following measure is implemented before commencement of ground-disturbing activities. If burrowing owls are detected in the construction area, DWR will implement the avoidance and minimization measures included in Mitigation Measure BIO-5b described below.

- Conduct an Assessment of Burrowing Owl Habitat Suitability in Areas Subject to Project-Related Disturbance and Conduct a Focused Survey for Burrowing Owl. A qualified biologist will conduct an assessment of burrowing owl habitat suitability in areas subject to project-related disturbance. The assessment will evaluate the area subject to direct impact, as well as adjacent areas within up to 1,500 feet, depending on the potential extent of indirect impact. If suitable burrows or sign of burrowing owl presence are observed, a focused survey for burrowing owls would be conducted in areas of suitable habitat within the area of potential direct and indirect impact. The survey will be conducted in accordance with Appendix D of the Staff Report on Burrowing Owl Mitigation (CDFG 2012). A letter report documenting the survey methods and results shall be prepared and submitted to CDFW.

- **Mitigation Measure BIO-5b:** If surveys detect burrowing owl in the Project area, implement measures to avoid and minimize effects to burrowing owl and establish protective buffers around occupied burrows and monitor.

If the focused surveys described above in Mitigation Measure BIO-5a have been completed and burrowing owl are detected at the project site, DWR will coordinate with CDFW to determine acceptable methods for avoiding and minimizing effects on this species. DWR will ensure that the measures described below are implemented to avoid and minimize effects of the project on burrowing owl.

- Consult with CDFW Regarding Best Approach to Avoid and Minimize Potential Impacts to Burrowing Owl if Active Burrows Are Observed and Implement Measures. If any burrowing owls or active burrows are observed, DWR will establish a buffer based on the activity dates and the level of disturbance in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012). Buffers will be marked in the field by a qualified biologist using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the buffers. Construction activities will not occur within the established buffer and workers will avoid entering the area.

If active burrows cannot be avoided with the minimum buffers, DWR will consult with CDFW to determine the best approach to avoid and minimize potential impacts. Such measures will conform to the Staff Report on Burrowing Owl Mitigation (CDFG 2012) and may modified buffers or passive relocation of owls during the non-breeding season, if it is infeasible to implement an adequate buffer. Passive relocation of owls will be conducted in accordance with an exclusion and relocation plan developed in coordination with and approved by CDFW. The relocation plan will describe methods for passive relocation of the owls, destruction of suitable burrows, and how the site will be maintained to prevent owl reoccupation.

- Provide a Protective Buffer for Occupied Burrows during the Breeding Seasons and Monitor Burrows to Ensure that Project Activities do not Result in Adverse Effects on Nesting Burrowing Owls. Burrows occupied during the breeding season (February 1 through August 31) will be provided with a protective buffer until a qualified biologist verifies through noninvasive means that either (1) the birds have not begun egg-laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer will depend on distance from the nest to area of project disturbance, type and intensity of disturbance, presence of visual buffers, and other variables that could affect susceptibility of the owls to disturbance. Monitoring will be conducted to confirm that

project activity is not resulting in detectable adverse impacts on nesting burrowing owls.

- Instruct Construction Personnel of Potential Presence of Western Burrowing Owls and the Importance of Minimizing Impacts on Borrowing Owls and Their Habitat. Before earth-movement, all on-site construction personnel will be instructed regarding the potential presence of western burrowing owls, identification of these owls and their habitat, and the importance of minimizing impacts on burrowing owls and their habitat.

- **Mitigation Measure BIO-6a:** Compensate for loss of Swainson's hawk foraging habitat.

To minimize effects of project activities on foraging habitat for Swainson's hawk, DWR will ensure that the following measure is implemented.

- Retain or Acquire and Preserve Suitable Swainson's Hawk Foraging Habitat. To offset impacts to foraging habitat, DWR would either retain or acquire and preserve land that would be managed specifically to optimize its value as foraging habitat for Swainson's hawk. This would be accomplished by creating habitat types (e.g., agricultural or other vegetation types) that can be managed to provide high-quality foraging habitat for Swainson's hawk throughout the nesting season. Grasslands that are temporarily impacted would be converted to perennial native grasslands, which would be expected to provide higher-quality foraging habitat than the grasslands that would be impacted. Additional agricultural lands would be acquired for management as Swainson's hawk foraging habitat. DWR will coordinate with CDFW to identify suitable foraging habitat, based on the amount and quality of the habitat, to offset the loss.

CDFW recommends a mitigation goal of 1:1 for Swainson's hawk foraging habitat loss, although this may be adjusted to account for the varying qualities of habitat that are converted and preserved.

Compensatory Swainson's hawk foraging habitat should be located in close proximity to the impact sites, should contain at least the same quality or better of suitable foraging habitat than habitat impact sites, and should be connected to other protected habitat thereby contributing to a larger habitat preserve.

- **Mitigation Measure BIO-6b:** Conduct focused surveys for nesting special-status birds and common raptor species, and avoid impacts, where feasible.

To avoid effects of project activities on nesting special-status birds and common raptor species, DWR will ensure that the following measures are implemented before commencement of construction activities, including tree removal. If avoidance consistent with these measures cannot be

achieved, DWR will implement the minimization measures included in Mitigation Measure BIO-1b described below.

- Conduct Vegetation Removal between September 16 and January 31 to the Extent Feasible. Vegetation removal, particularly tree removal, will be conducted between September 16 and January 31, to the extent feasible, to minimize potential loss of active bird nests.
- Conduct Pre-construction Surveys for Active Nests of Special-status Birds, Common Raptor Species, and Colonial-nest Egrets and Herons in Areas of Suitable Habitat before Starting Construction. If construction activities that could affect suitable habitat for special-status birds, common raptor species, and colonial-nesting egrets and herons cannot be conducted outside of the respective nesting seasons, DWR will complete pre-activity surveys for nesting birds (including raptor and passerine nest surveys and heron and egret rookeries). Surveys of all potential nesting trees and habitat in the area will be conducted by a qualified biologist during the nesting season (generally February 15 – September 15 but may be adjusted for individual species). Surveys will be conducted within suitable nesting habitat that could be affected by construction activities and will include a 500-foot buffer area (or larger area if required by established survey protocol) surrounding these areas.

Where appropriate, pre-activity surveys will follow established survey protocols or guidelines. These protocols include the following:

- Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015 (CDFW 2015)
- Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000)
- A Natural History Summary and Survey Protocol for the Western Yellow-billed Cuckoo Population (Halterman et al. 2015)
- Least Bell's Vireo Survey Guidelines (USFWS 2001)

If no established survey protocol exists, the qualified biologist will complete surveys within 1 week of the start of the activity, or within 2 weeks of restart of the activity after the activity has lapsed. If no nesting birds are detected during pre-activity surveys, no additional mitigation measures are required.

- **Mitigation Measure BIO-6c:** If avoiding construction-related effects on nesting special-status birds and common raptors is infeasible, implement minimization measures.

If the measures described above in Mitigation Measure BIO-6b have been completed and avoiding effects on nesting special-status birds and common raptor species is infeasible, DWR will coordinate with CDFW to determine acceptable methods for minimizing for effects on these species. DWR will ensure that the measures described below are implemented to minimize effects of the project on nesting special-status birds and common raptor species.

- Establish and Maintain Buffers Around Active Nest Sites to Avoid Nest Failure and Monitor Nest Sites to Confirm that Project Activities Are Not Adversely Affecting the Nesting Birds or Their Young. If any active nests, or behaviors indicating active nests are present, are observed, DWR will establish appropriate-sized avoidance buffers around the nest sites, as determined by a qualified biologist in coordination with CDFW to avoid nest failure resulting from project activities. The size and shape of the buffer will depend on the species, nest location, nest stage, and specific construction activities to be performed while the nest is active. For active tricolored blackbird nests, DWR will contact CDFW and a 300- foot no-disturbance buffer shall be established around the nesting colony. The buffer will be expanded if the birds are exhibiting agitated behavior, or the buffers may be adjusted (reduced) if a qualified biologist determines it would not be likely to adversely affect the nest. If required, buffers will be marked in the field by a qualified biologist using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating.

Monitoring will be conducted by a qualified biologist, either continuously or periodically during work, to confirm that project activity is not resulting in detectable adverse impacts on nesting birds or their young. The qualified biologist will be empowered to stop construction activities that, in the biologist's opinion, threaten to cause unanticipated and/or unpermitted adverse effects on special-status wildlife (e.g., nest abandonment). If construction activities are stopped, the qualified biologist will consult with CDFW (and USFWS if appropriate) to determine appropriate measures that DWR will implement to avoid adverse effects.

No project activity will commence within the buffer areas until a qualified biologist has determined that the young have fledged or the nest site is otherwise no longer in use.

- Consult with USFWS and CDFW and Obtain Appropriate Take Authorizations. If it is determined that any construction activity would potentially result in the incidental take of any bird protected under ESA or CESA (e.g., western yellow-billed cuckoo, bank swallow, least Bell's vireo, tricolored blackbird, Swainson's hawk), despite implementation of the above mitigation measures, DWR will obtain take authorization

from USFWS and/or CDFW (as appropriate). All measures developed through consultation with USFWS and/or CDFW will be implemented by DWR to mitigate for authorized take. Take of a California Fully Protected species (e.g., white-tailed kite) is not authorized.

- **Mitigation Measure BIO-7:** Avoid and minimize disturbance and loss of roosting special-status bats.

DWR will implement the following measures to avoid and minimize potential disturbance or loss of roosting special-status bats.

- Conduct Bat Surveys for Active Maternity Roosts for Trees with Suitable Roost Cavities or Dense Cover Designated for Removal. If removal of trees with suitable roost cavities and/or dense cover must occur during the bat pupping season (April 1 through July 31), surveys for active maternity roosts in trees designated for removal shall be conducted by a qualified biologist. The surveys shall be conducted from dusk until dark.
 - Establish Appropriate Buffers Around Roosts Sites to Avoid Destruction or Abandonment and Prohibit all Construction Activity Until the End of the Pupping Season. If a special-status bat maternity roost is located, appropriate buffers around the roost sites shall be determined by a qualified biologist and implemented to avoid destruction or abandonment of the roost resulting from tree removal or other project activities. The size of the buffer shall depend on the species, roost location, and specific construction activities to be performed in the vicinity. No project activity shall commence within the buffer areas until the end of the pupping season (August 1) or until a qualified biologist confirms the maternity roost is no longer active.
 - Conduct Vegetation Removal Between September 16 and January 31 to the Extent Feasible. Vegetation removal, particularly tree removal, shall be conducted between September 16 and January 31, to the extent feasible, to minimize potential loss of bat maternity roosts.
- **Mitigation Measure BIO-8a:** Designate, protect, avoid, and monitor riparian habitat, and obtain and comply with required State permits/authorizations and conditions.

DWR will implement the measures described below to avoid impacts riparian habitat.

- Limit Ground-Disturbance to Construction Areas and Avoid and Limit Disturbance to River and Creek Banks and Habitats When Feasible. Ground-disturbance will be limited to construction areas, including necessary access routes and staging areas. The number of access routes, size of staging areas, and total area of the project activity will be limited to the minimum necessary. When possible, existing access

routes and points will be used. All roads, staging areas, and other facilities will be placed to avoid and limit disturbance to river and creek banks and habitat when feasible.

- Erect and Maintain High-visibility Fencing during Construction to Protect Sensitive Biological Resource Areas, Inspect Fencing Daily, and Incorporate Sensitive Habitat Information into Bid Specifications. Before the commencement of construction activities, high-visibility fencing will be erected to protect areas of sensitive biological resources that are located adjacent to construction areas, but can be avoided, from encroachment of personnel and equipment. The fencing will be inspected before the start of each work day and will be removed only when the construction within a given area is completed. Sensitive habitat information will be incorporated into project bid specifications, along with a requirement for contractors to avoid these areas.
- Monitor Construction Activities in Sensitive Biological Resource Areas and Stop Work if Unauthorized Project Impacts Occur. A qualified biologist will monitor all construction activities in sensitive biological resource areas to ensure that avoidance and minimization measures are being properly implemented and no unauthorized activities occur. If construction activities threaten to cause unanticipated and/or unauthorized project impacts, the biologist will notify the onsite construction manager, who would stop work. Project activity will not resume until the conflict has been resolved.
- **Mitigation Measure BIO-8b:** Obtain and comply with required State permits/authorizations, implement permit conditions, and develop and implement a mitigation plan.

DWR will implement the measures described below to minimize, and, if necessary, compensate for loss of riparian habitat.

- Coordinate with Regulatory Agencies to Obtain Appropriate Permits/Authorizations and Implement Permit Conditions. If it is determined that implementation of a project component would result in direct impacts to riparian habitat, despite implementation of avoidance and minimization measures, a CDFW streambed alteration agreement will be obtained under Section 1602 of the California Fish and Game Code for all work on the waterside of the levees and along jurisdictional canals and ditches.
- Develop and Implement a Mitigation Plan to Compensate for Loss of Sensitive Habitats. A riparian habitat mitigation plan resulting in no-net-loss of riparian functions and values will be prepared to compensate for loss of riparian vegetation along the rivers and creeks in the project site. This mitigation plan will be developed and provided to the appropriate regulatory agencies for review and approval. The plan will

detail appropriate compensation measures determined through consultation with CDFW, methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails. The plan will be developed in consultation with and approved by the appropriate regulatory agencies before construction activities begin in areas containing sensitive habitats. The plan will be implemented by DWR.

- Implement Mitigation. Mitigation may be accomplished through replacement, enhancement of degraded habitat, or off-site mitigation at an established mitigation bank. The mitigation plan developed under Mitigation Measure WATERS-1 for impacts on waters of the United States may be suitable if it adequately covers project construction activities within CDFW designated sensitive habitats or waterways under CDFW jurisdiction. Any conditions of issuance of the streambed alteration agreement, including minimization and compensation measure, will be implemented as part of project implementation.

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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REPORTS AND NOTIFICATION REQUIREMENTS

I. Copies of this form

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

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

II. Report Submittal Instructions

- A.** Check the box on the Report and Notification Cover Sheet next to the report or notification you are submitting. **(See your Order for specific reports required for your Project)**
 - **Part A (Monthly & Annual Reports):** These reports will be submitted monthly and annually until a Notice of Project Complete Letter is issued.
 - **Part B (Project Status Notifications):** Used to notify the Central Valley Water Board of the status of the 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: Jordan.Hensley@waterboards.ca.gov
 - Include in the subject line of the email:
ATTN: Jordan Hensley; Project Name; and WDID No. 5A57CR00182

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.
- B. Request for Notice of Completion of Discharges Letter:** This request by the Permittee to the Central Valley Water Board staff pertains to projects that have post construction monitoring requirements, e.g. if site restoration was required to be monitored for 5 years following construction. Central Valley Water Board staff will review the request and send a Completion of Discharges Letter to the Permittee upon approval. This letter will initiate the post-discharge monitoring period and a change in fees from the annual active discharge fee to the annual post-discharge monitoring fee.
- C. Request for Notice of Project Complete Letter:** This request by the Permittee to the Central Valley Water Board staff pertains to projects that either have completed post-construction monitoring and achieved performance standards or have no post-construction monitoring requirements, and no further Project activities are planned. Central Valley Water Board staff will review the request and send a Project Complete Letter to the Permittee upon approval. Termination of annual invoicing of fees will correspond with the date of this letter.
- D. Post-Discharge Monitoring Period:** The post-discharge monitoring period begins on the date of the Notice of Completion of Discharges Letter and ends on the date of the Notice of Project Complete Letter issued by the Central Valley Water Board staff. The Post-Discharge Monitoring Period includes continued water quality monitoring.
- E. Effective Date:** 13 January 2020

IV. Map/Photo Documentation Information

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

A. Map Format Information:

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

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

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

V. Report and Notification Cover Sheet

Project: Lower Elkhorn Basin Levee Setback Project
Permittee: California DWR Resources
WDID: 5A57CR00182
Reg. Meas. ID: 433418
Place ID: 860313
Order Effective Date: 13 January 2020
Order Expiration Date: 12 January 2025

VI. Report Type Submitted

A. Part A – Project Reporting

Report Type 1 Monthly Report
Report Type 2 Annual Report

B. Part B – Project Status Notifications

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

C. Part C – Conditional Notifications and Reports

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

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

Print Name¹	Affiliation and Job Title
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Signature	Date
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¹STATEMENT OF AUTHORIZATION (include if authorization has changed since application was submitted)

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

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

1. Report Type 1 - Monthly Report

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

During the Active Discharge Period

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

During the Post-Discharge Monitoring Period

- **Topic 2: Mitigation for Temporary 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.

B. Part B – Project Status Notifications

1. Report Type 3 - Commencement of Construction

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

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 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 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: Post-Construction Storm Water BMPs
 - 1) Date of storm water Notice of Termination(s), if applicable.
 - 2) Report status and functionality of all post-construction BMPs.

C. Part C – Conditional Notifications and Reports

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

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

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

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

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

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

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

4. Report Type 9 - Modifications to Project Report

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

5. Report Type 10 - Transfer of Property Ownership Report

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

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

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

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SIGNATORY REQUIREMENTS

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

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

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

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

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

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CERTIFICATION DEVIATION PROCEDURES

I. Introduction

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

II. Process Steps

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

D. Post-Discharge Certification Deviation Reporting:

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

E. Annual Summary Deviation Report:

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