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ENVIRONMENTAL PROTECTION

State Water Resources Control Board

WATER QUALITY ORDER NO. 2018-0024-EXEC SECOND AMENDED CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER

Effective Date: October 2, 2018

Reg. Meas. ID: 395528

Program Type: Fill/Excavation

Place ID: 805103

Project Type: Railroads

SWRCB ID: SB 16006-IN
USACE#: SPK-2009-01482

Project: California High Speed Train System, Fresno to Bakersfield
(Project)

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I. Order

This Clean Water Act (CWA) section 401 Water Quality Certification action and Order (Order) is **amended and** issued at the request of the California High Speed Rail Authority (herein after Permittee **or Authority**) for the Project. This Order is for the purpose described in application and supplemental information submitted by the Permittee. The **first** application was received on March 21, 2014. The application was determined complete on July 7, 2016. Prior to receiving a complete application, State Water Board staff issued a notice of incomplete application and the Permittee responded to the request for application information on the following dates (Table 1).

Amendment 1: This amendment authorizes construction to proceed on the segment of the Project referred to as PP 1.b, previously excluded from the Order. Changes to the certification and attachments include: (1) describing the additional impacts to waters that are expected to result from construction of PP 1.b; (2) describing the compensatory mitigation to be provided for temporary and permanent impacts to waters; (3) Maps showing the location of waters impacts for PP 1.b. No other changes are authorized or intended by this amendment. **All changes due to this amendment to the Clean Water Act Section 401 Water Quality Certification issued on January 27, 2017 are shown below as additions in bold underline, and deletions in bold strikethrough.**

Amendment 2: In response to a request from the Permittee received on August 30, 2018, this amendment authorizes stream, riparian, and wetland restoration, enhancement, and establishment construction to proceed at two compensatory mitigation sites that have been approved for the Project: Cottonwood Creek and Kings River. Changes to the Order include: (1) revised Project description to include the two designated compensatory mitigation sites and the associated restoration work at the sites, (2) revised Project area maps illustrating the compensatory mitigation site locations, (3) revised Project impact tables with new temporary impacts that result from the restoration work, and (4) re-evaluation of the previous CEQA findings of fact. No other changes are authorized or intended by this amendment. All changes due to this amendment to the Clean Water Act Section 401 Water Quality Certification issued on August 9, 2017, are shown as additions in bold underline, and deletions in bold strikethrough.

Table 1: Record of Notice(s) of Incomplete Application	
Date(s) of Notice of Incomplete Application	Date all requested information was received.
3/27/2014, 7/2/2014, 4/28/2015	7/7/2016

State Water Board staff requested additional information necessary to supplement the contents of the complete application and the Permittee responded to the request for supplemental information on the following dates (Table 2).

Table 2: Record of Supplemental Application Information	
Date of Request for Supplemental Information	Date all requested information was received.
7/3/2015	11/17/2016

Additionally, State Water Board Staff issued a Denial Without Prejudice on July 3, 2015.

II. Public Notice

The State Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 from September 23, 2016 to October 14, 2016. The State Water Board did not receive any comments during the comment period.

III. Project Purpose

The purpose of the Project is to construct, operate, and maintain the Fresno to Bakersfield (F-B) Section of the California High Speed Train (HST) system to provide the public with electric powered high-speed rail service that provides predictable and consistent travel times between major urban centers and connectivity to airports, mass transit systems, and the highway network in the South San Joaquin Valley, and to connect the northern and southern portions of the proposed system.

IV. Project Description

The Project will construct approximately 87 miles of the overall HST project. The Project will be completed in phases. This amended Order permits construction of Permitting Package (PP) 1.a, to construct 29.3 miles of the F-B section, and PP 1.b to complete the balance of the 87 mile F-B section, and restoration work at two compensatory mitigation sites: Kings River and Cottonwood Creek. This work shall be conducted as described in the California High Speed Rail Authority – Fresno to Bakersfield Section Permittee Responsible Mitigation Plan for On-site and Off-site Mitigation, Permit Package 1(b), August 2018 (update), which is incorporated by reference. Permitted compensatory mitigation work at both sites entails establishment, re-establishment, and rehabilitation of wetlands, vernal pools, riverine flood plain, and riparian woodland resources.

When completed, the Project – in conjunction with other project HST sections - would provide new steel wheel on steel rail high speed passenger rail service to more than 90 percent of the state’s population. At final build-out, the system would connect and serve the major metropolitan areas of California, extending from San Francisco and Sacramento in the north to San Diego in the south.

The Project includes the HST tracks, structures, stations, traction power substations, maintenance facilities, and train vehicles. The HST will use four different track types. These track types have varying profiles: low, near-the-ground tracks are at grade, higher tracks can be elevated by either a structure or on a retained fill platform, and below-grade tracks are in a retained cut. The type of bridges that might be built includes full channel spans, large box culverts, or, for some larger river crossings, piers within the ordinary high-water channel. The track structure will consist of either a direct fixation system (with track, rail fasteners, and slab), or ballasted track, depending on local conditions.

V. Project Location

The Project is a linear transportation project traversing four counties, Fresno, Kings, Tulare and Kern (See Attachment A, Map 1). The Project extends from East American Avenue in Fresno County to the point where the right-of-way for the HST crosses Poplar Avenue, north of West Tulare Avenue, between the communities of Shafter and Wasco. **Maps are provided in Attachment A.** The overall Project area for the Fresno-Bakersfield section is shown in Map 1.a of Attachment B. The project area for PP1.a is shown in map 1.b. This amended order authorizes work for PP 1.a and 1.b as shown in Maps 1.c and 1.d and as described in Tables 3 and 4 below. **This Order also authorizes restoration work at the Kings River and Cottonwood Creek compensatory mitigation sites, as shown in Maps 1.f and 1.g respectively (Attachment A), and as described in Table 4.**

The PP 1.a section of the Project is as shown in Map 1.b and as described in Table 3 below.

The PP 1.b section of the Project and **the approved compensatory mitigation sites are** as shown in Maps 1.c, d, **and e, f and g, and** as described in Table 4 below.

Table 3: Location Details for California High Speed Train – Fresno to Bakersfield Certification – Permitting Package (PP) 1.a				
Beginning and end points	Description	Latitude	Longitude	Miles
PP 1.a				
1.a - North, north end (Point A) ¹	Beginning 1,000 ft. south of E American Ave	36° 39' 48.6468"N ²	119° 45' 2.6136"W	14.5
1.a- North, south end (Point B)	Davis Ave, approx. 1,000 ft. east of S. Fowler Ave	36° 28' 28.3872"N	119° 40' 12.954"W	
PP1.a - South, north end (Point C)	1,000 ft. north of Dover Ave	36° 25' 7.5246"N	119° 36' 3.3834"W	14.8
1.a – South, South End (Point D)	1,000 ft. south of Kansas Ave	36° 12' 26.2728"N	119° 36' 41.4036"W	
			PP 1(a) Total Miles	29.3
Notes:				
1. Points are Illustrated in Attachment A, Maps 1.b <u>and 1.c</u>				
2. North Latitude and West Longitude in degrees, minutes and seconds.				

Table 4: Location Details for California High Speed Train – Fresno to Bakersfield Certification -- Permitting Package (PP) 1.b and Approved Compensatory Mitigation Sites				
Beginning and end points	Description	Latitude	Longitude	Miles
PP 1.b				
1.b - North, north end (Point B)	Davis Ave, approx. 1,000 ft. east of S. Fowler Ave	36° 28' 28.3872"N	119° 40' 12.954"W	6.0
PP 1.b - North, south end (Point C)	1,000 ft. north of Dover Ave	36° 25' 7.5246"N	119° 36' 3.3834"W	
1.b – South, north End (Point D)	1,000 ft. south of Kansas Ave	36° 12' 26.2728"N	119° 36' 41.4036"W	58.7
1.b – South, south End (Poplar Ave)	Poplar Ave	35° 31' 14.39"N (estimated)	119° 17' 44.969"W (estimated)	
			PP 1(b) Total Miles	64.7
na	<u>Kings River Mitigation Site</u>	<u>36.7091</u>	<u>-119.5336</u>	na
na	<u>Cottonwood Creek Mitigation Site</u>	<u>36.4317</u>	<u>-119.4023</u>	na
Notes:				
1. Points are Illustrated in Attachment B, Map 1b.				
2. North Latitude and West Longitude in degrees, minutes and seconds.				
3. Approximate centroids for mitigation sites				

VI. Project Impact and Receiving Waters Information

The Project is located within the jurisdiction of the Central Valley Regional Water Quality Control Board (Regional Water Board). Receiving waters and groundwater potentially impacted by this Project are protected in accordance with the applicable water quality control plans (Basin Plan) for the region and other plans and policies which may be accessed online at: 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. Project impact and receiving waters information for PP 1.a, 1b, **and the approved mitigation sites and 1.b** can be found in Attachment B, **which has been revised to include mitigation site restoration, enhancement, and establishment temporary impacts**. 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 are also shown in Table 1 of Attachment B.

VII. Description of Direct Impacts to Waters of the State

Temporary Project impacts will result from pre-construction and construction activities that will place temporary fill in waters. These activities include construction of temporary access roads and staging areas.

Temporary impacts will also occur as a result of construction necessary for restoration, enhancement, and establishment of streams, riparian areas, and wetlands at the approved compensatory mitigation sites. A total of 120 linear feet of temporary stream impacts will occur at the Cottonwood Creek mitigation site as a result of installation of two drainage crossings. A total of 1,663 linear feet of temporary stream impacts will occur at the Kings River mitigation site due to reduction of the grade along the drainage feature that runs around the west side of the site to reestablish seasonal riverine habitat.

Permanent Project impacts for PP 1.a are the result of permanent removal or modification of streams, wetlands (including vernal pools), detention basins, irrigation ditches and canals. Detention basins are categorized as “lakes”. Irrigation ditches and canals are categorized as “stream channels”. Project fill/excavation quantities for all PP 1.a and PP1.b impacts are summarized in Table 5.

Table 5: Total Project Fill/Excavation Quantity – Permitting Package (PP) 1.a and 1.b, including Kings River and Cottonwood Creek Mitigation Site Temporary Impacts

Aquatic Resource Type	Temporary Impact ¹			Permanent Impact					
				Physical Loss of Area			Degradation of Ecological Condition Only		
	Acres	CY ²	LF	Acres	CY	LF	Acres	CY	LF
Lake*	11.400			35.420		**			
Stream Channel (anthropogenic) ***	9.340		14,070	53.230		96,286			
Stream Channel (natural)	0.490 2.010		97 1,880	2.190		2,605			
Stream Channel Total	9.83 11.840		14,167 15,950	55.420		98,891			
Riparian									
Wetland	4.090 5.310			1.570					
Vernal Pool	0.290			1.340					

1. Includes only temporary direct impacts to waters of the state and does not include upland areas 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.

2. Cubic Yards (CY); Linear Feet (LF)

*Lake impacts are to constructed detention basins used for irrigation tailwater collection/redistribution, with no substantial watershed connection.

**Linear feet (cumulative linear feet of multiple sites) not reported.

***PP 1.a and PP 1.b stream impacts include impacts to constructed canals and ditches, most of which do not directly connect to natural watercourses; no natural watercourses are impacted by PP 1.a.

******An estimated 0.01 acre of emergent wetland is located within and adjacent to seasonal riverine and has been included with seasonal riverine.**

VIII. Description of Indirect Impacts to Waters of the State

The State Water Board recognizes the potential for indirect impacts to waters of the state associated with the Project. Indirect impacts are reasonably foreseeable changes in the environment caused by the Project and its direct impacts, but that are later in time or further removed in distance from the project and its direct impacts. For PP 1.a, and PP1.b, and the Kings River and Cottonwood Creek Compensatory Mitigation Sites of the Project, no indirect impacts are assessed.

IX. Avoidance and Minimization

The Project, through location and design, is the least environmentally damaging practicable alternative of those considered in the Project EIR/EIS (see section XI). Additional project avoidance and minimization measures include construction BMPs to avoid and control leaks, spills and discharges to water, erosion and sediment control measures, and restoration measures for temporary impacts (further described in section XIV(1)). These measures are presented in the Project Mitigation Monitoring and Reporting Program (MMRP), dated May 2014, and further discussed in the CEQA findings, Attachment A.

X. Compensatory Mitigation

The Permittee has agreed to provide compensatory mitigation for direct impacts as described in section XIV (HI) for permanent impacts.

XI. California Environmental Quality Act (CEQA)

On May 7, 2014, the California High Speed Rail Authority, as lead agency, certified an environmental impact report/environmental impact statement (EIR/EIS) (State Clearinghouse (SCH) No. 2009091126) for the Project and filed a Notice of Determination (NOD) at the SCH on May 8, 2014. In addition, on August 27, 2018, the Permittee issued a memorandum reporting the results of a re-examination of the Project EIR/EIS, in which the impacts of the proposed work at the Kings River and Cottonwood Creek mitigation sites were considered. The analysis found that the proposed changes would not constitute a substantial change in the Project footprint, the proposed action, or the circumstances under which the proposed action would be undertaken, other than a new location for mitigation habitat. Pursuant to CEQA, the State Water Board has made Findings of Facts (Findings) which support the issuance of this Order, and are included in Attachment C. These are the same findings included in the original Order and first amendment. For the second amendment of the Order, the State Water Board has examined the proposed project elements to be permitted by this second amended Order (i.e., restoration work at the approved mitigation sites). Based on this examination, the State Water Board finds that the activities: (1) are consistent with the overall Project description provided in the Project EIR/EIS, (2) would entail no new significant impacts to any resource subject to the Water Boards' authorities, and (3) do not require any new mitigation measures to address impacts to any resources subject to the Water Boards' authorities that might result from those activities. Therefore, modification of the original CEQA findings presented in Attachment C is not required.

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 \$1,097.00 was received on March 21, 2014. 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 with the dredge and fill fee calculator. An additional fee of \$73,794.00 was received on April 28, 2015. This fee applies to PP 1.a and PP 1.b. **An additional fee of \$31,639.00 was received on October 20, 2017, for the first amendment of the Order. An additional fee of \$23,290.00 was received on August 30, 2018, for this second amendment of this Order. The maximum fee of \$130,000.00 was attained with the August 30, 2018, fee submittal.**

XIV. Conditions

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

A. Authorization

Impacts to waters of the state shall not exceed quantities shown in Table 4, Section VII.

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.

1. Project Reporting

Annual Reporting: The Permittee shall submit an Annual Report each year on January 31. Annual reporting shall continue until a Notice of Project Complete Letter is issued to the Permittee. Annual reports shall include information detailed in Attachment D, Part A "Reporting". The Annual Report will also include all required mitigation monitoring and reporting elements outlined in sections XIVH(1) and I(1).

2. Project Status Notifications

- a. **Commencement of Construction:** The Permittee shall submit a Commencement of Construction Report at least seven (7) days prior to start of initial ground disturbance activities.
- b. **Request for Notice of Completion of Discharges Letter:** The Permittee shall submit a Request for Notice of Completion of Discharges Letter following completion of active Project construction activities, including any required restoration and permittee-responsible mitigation. This request shall be submitted to the State Water Board staff within thirty (30) days following completion of all Project construction activities. Upon acceptance of the request, State 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,¹ and no further Project activities will occur. This request shall be submitted to State Water Board staff within thirty (30) days following completion of all Project activities. Upon approval of the request, the State 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 (Wat. Code, § 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:
[http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill Booklet Feb2014 FINAL BW Acc.pdf](http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill%20Booklet%20Feb2014%20FINAL%20BW%20Acc.pdf)
- ii. Following notification to OES, the Permittee shall notify State Water Board, as soon as practicable (ideally within 24 hours). Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.
- iii. Within five (5) working days of notification to the State 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 State Water Board of any event causing a violation of compliance with water quality standards. Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.

- i. Examples of noncompliance events include discharges to waters of the state due to failure to install or maintain adequate storm water BMPs, hazardous

¹ Completion of post-construction monitoring requirements shall be determined by State Water Board staff and shall be contingent on successful attainment of restoration and mitigation performance criteria. Definitions of reporting terms (e.g., Notice of Completion of Discharges, Notice of Complete) are provided in Attachment E).

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 & Saf. Code, § 25501.)

material spills due to negligence, and unpermitted operations in waters of the state.

- ii. 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:

- i. The Permittee shall notify the State Water Board at least forty-eight (48) hours prior to initiating work in water or stream diversions. Notification may be via telephone, e-mail, delivered written notice, 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 State Water Board staff.

- d. Modifications to Project:** Project modifications may require an amendment of this Order. The Permittee shall give advance notice to State 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 State 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 State Water Board in accordance with the following terms:

- i. The Permittee must notify the State 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 State Water Board at least 10 days prior to the transfer of ownership. The purchaser must also submit a written request to the State 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 State 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 State 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 (i.e., any time construction activity is occurring in or adjacent to surface waters when flowing, ponded or pooled water is present) to detect accidental discharge of construction related pollutants (e.g. oil and grease, turbidity plume, or uncured concrete). Site monitors and construction personnel shall be vigilant in observing the water surface, so that if any contaminant plume, sheen, etc. occurs, it will be seen and acted upon in a timely manner.
2. **Accidental Discharges/Noncompliance:** Upon occurrence of an accidental discharge of hazardous materials or a violation of compliance with a water quality standard, State Water Board staff may require water quality monitoring based on the discharge constituents and/or related water quality objectives and beneficial uses.
3. **In-Water Work or Diversions:** For Project activities involving planned work in water or stream diversions in delineated waters of the state where flowing or standing water is present, or where flowing or standing water may occur during the Project activities; a water quality monitoring plan shall be submitted to State Water Board staff for acceptance at least 30 days in advance of any discharge to the affected water body. Water quality monitoring shall be conducted in accordance with the approved plan.
4. **Inspections after Completion of Structure Installation at Individual Sites:** Visually inspect the Project site following completion of construction activities in the immediate proximity of any waters of the state for three years to ensure that erosion, stream instability, or other discharge of pollution is not occurring in or downstream of the Project site as a result of the Project. Annual reporting for this requirement shall be provided as part of the Post-Construction Compliance Reports, as described in Project mitigation measure BIO MM#15 until revegetation success criteria described in the plan to be approved under mitigation measure BIO MM #6 are met, and as described in condition H.1 below. If a discharge is occurring, the applicant shall immediately commence remedial actions, and shall contact the designated State Water Board staff contact within three (3) working days. The State Water Board may require the submission of a Violation of Compliance with Water Quality Standards Report. Additional permits may be required to carry out any necessary site remediation.

D. Standard

1. This Order is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330, and California Code of Regulations, title 23, chapter 28, Article 6 commencing with section 3867. Additionally, the State Water Board reserves the right to suspend, cancel, or modify and reissue this Order, after providing notice to the Permittee, if the State 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 (Wat. Code, § 13000 et seq.) or federal Clean Water Act section 303 (33 U.S.C. § 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 State 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, provide 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 California High Speed Train Fresno to Bakersfield MMRP, dated May, 2014 and accessible at: http://www.hsr.ca.gov/docs/brdmeetings/2014/brdmtg_050614_Item5_6_ExB_Mitigation_Monitoring_Reporting_Program.pdf, which is incorporated herein by reference. The Permittee shall also comply with any additional measures as outlined in Attachment C, CEQA Findings of Fact.
7. **Construction General Permit Requirement:** The Permittee shall maintain compliance with conditions described in, and required by, NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ as amended; NPDES No. CAS000002).

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 & G. Code, §§ 2050-2097) or the federal Endangered Species Act (16 U.S.C. §§ 1531-1544). If a "take" will result from any act authorized under this Order held by the Permittee, the Permittee must obtain authorization for the take 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 State Water Board staff, Regional 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. A Water Quality Monitor shall be employed during construction and shall report to the Contractor's Mitigation Manager as designated in the MMRP. The Water Quality Monitor

shall be on site during all ground-disturbing activities that have the potential to affect water quality. The Water Quality Monitor must be notified by the contractor 24 hours prior to the implementation of all MM's pertaining to hydrology, water quality, erosion control, and storm water management. The Water Quality Monitor shall report on compliance of these Project MMs and related conditions of this Certification. The designated Water Quality Monitor shall be qualified and knowledgeable in water quality, erosion and sediment control regulations, practices and principles. The Water Quality Monitor must, at minimum, be a Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP) or a Qualified SWPPP Developer (QSD) as defined in the State Water Board Order 2009-0009-DWQ, effective July 1, 2010, as amended by Orders 2010-0014-DWQ and 2012-0006-DWQ [NPDES No. CAS000002] (collectively, Construction General Permit).

7. Project MMs pertaining to biological resources shall be monitored by a Project Biological Monitor. The Project Biological Monitor must be notified 24 hours prior to the implementation of a biological MM by the contractor. The reports of the status of biological MM must be reported directly to the Project Biological Monitor by the contractor.
8. The Biological Resources Management Plan (BRMP), as required by (MM) Bio-MM#5, must include all biological resources mitigation measures that are described in the EIR/EIS. The BRMP includes measures to protect water quality and beneficial uses of waters of the state; therefore, the conditions of the BRMP that address water quality and beneficial uses must be approved by State Water Board prior to the start of construction.
9. All Project personnel must receive Worker Environmental Awareness Program (WEAP) training before starting work in the Project area, as described in mitigation measure Bio-MM#3. The WEAP shall include training in appropriate water quality protection measures, including compliance with pertinent conditions of this Certification.
10. Lake and Streambed Alteration Agreement – The Permittee shall submit a signed copy of the Department of Fish and Wildlife's lake and streambed alteration agreement to the State Water Board immediately upon execution and prior to any discharge to waters of the state.

G. Construction Conditions

Good Site Management – “Housekeeping”

1. All materials and supplies necessary for implementing these construction conditions must be on-site and ready for use at the start of construction activity, and must remain in supply and ready for implementation throughout the construction process. All non-structural BMP materials (e.g., training documents, compliance tracking procedures) must be ready for use at the start of construction.
2. Construction material, debris, spoils, soil, silt, sawdust, rubbish, steel, welding slag, welding rods, other organic or earthen material, or any other substances which could be detrimental to water quality or hazardous to aquatic life that is discharged as a result of project related activities shall be prevented from entering waters of the state.

3. Waste containers shall be available and regularly serviced at all active construction sites. No rubbish, waste material or waste containers shall be placed and maintained in a manner that could accidentally spill or discharge the contents into waters of the state.
4. The limits of Project disturbance identified in the Project construction plans must be clearly identified in the field with highly visible markers such as construction fencing or silt barriers prior to start of construction activities within waters of the state. Such identification must be properly maintained until construction is completed and the soils have been stabilized. Equipment, materials, or any other substances or activities that may impact waters of the state outside of the limits of Project disturbance are prohibited.
5. Environmentally sensitive areas and environmentally restricted areas must be delineated for exclusion prior to start of construction, as required by mitigation measure Bio-MM#7.

In-Water Work Conditions

6. The term “work in water” means any ground disturbing activities in any delineated waters of the state, including waters of the U.S., that are permitted under this certification, regardless of the presence or absence of flowing or standing water. Work in water commences at the onset of the regulated activity and continues until the activity is finished and all restoration of the affected work area is complete. In-water work activities must not cause water quality objectives of the receiving waters to be exceeded.
7. All surface waters, including ponded waters, shall be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to waters of the state.
8. Disturbed in-water work areas must be temporarily stabilized to prevent erosion at least 48 hours prior to the predicted commencement of a rainfall event with greater than a 50 percent probability of occurrence, as predicted by the National Oceanic and Atmospheric Administration (NOAA) - National Weather Service. If the predicted commencement of such a rainfall event is less than 48 hours after the prediction is issued, temporary stabilization of the disturbed in-water work areas must begin immediately.
9. Except for the following conditions, equipment must not be operated in standing or flowing waters without site-specific approval from State Water Board staff:
 - a. All construction activities must be effectively isolated from water flows to the greatest extent possible. This may be accomplished by working in the dry season or dewatering the work area in the wet season. When work in standing or flowing water is required, structures for isolating the in-water work area and/or diverting the water flow must not be removed until all disturbed areas are cleaned and stabilized. The diverted water flow must not be contaminated by construction activities. All open flow temporary diversion channels must be lined with filter fabric or other appropriate liner material to prevent erosion. Structures used to isolate the in-water work area and/or diverting the water flow (e.g., coffer dam, geotextile silt curtain) must not be removed until all disturbed areas are stabilized, whether that removal is for seasonal work cessation or for permanent removal at the end of the project.
 - b. Cofferdams and water barrier construction must be adequate to prevent seepage into or from the work area to the greatest extent feasible.

- c. Flow diversions must be conducted in a manner that prevents pollution and/or siltation and in a manner that restores pre-Project flows (except for variation in flows due to seasonality, upstream diversions, etc.) upon completion of the activity. Diverted flows must be of sufficient quality and quantity, and of appropriate temperature, to support existing fish and other aquatic life both above and below the diversion. Diversions must be designed, installed, and maintained to reduce erosion. Pre-Project flows must be restored to the affected surface water body upon completion of work at that location.
10. If groundwater dewatering is required for the Project, the Applicant shall consult with the Regional Water Board to determine if additional permits are required. If additional Regional Water Board permits relating to dewatering are required, the designated State Water Board staff contact identified in this Certification must be notified and copied on pertinent correspondence pertaining to those other required permits.
 11. All temporary dewatering methods shall be designed to have the minimum necessary impacts to waters of the state. All dewatering methods shall be installed such that natural flow is maintained upstream and downstream of the diversion area. Any temporary dams or diversions shall be installed such that the diversion does not cause sedimentation, siltation, or erosion upstream or downstream of the diversion area. All dewatering methods shall be removed immediately upon completion of activities for which diversions are needed.
 12. All temporary dewatering activities are subject to the work-in-water reporting and monitoring conditions presented in sections XIV.B.3.c and XIV.C.3 above.

Directional Drilling

13. Because Horizontal Directional Drilling (HDD) and similar drilling operations may affect water quality, the following conditions shall apply to all drilling operations under waters of the state:
 - a. The discharge of bentonite, drilling muds, lubricants or any drilling compounds into waters of the state is prohibited. A draft HDD or drilling plan shall be prepared, and shall be subject to review by State Water Board staff at least 30 days before drilling activities under waters of the state. No HDD or other drilling operations under waters of the state shall commence until the HDD plan is approved by State Water Board staff.
 - b. Release of bentonite, drilling muds, lubricants or any drilling compounds through fractures in the streambed or bank substrate during drilling is referred to as a "frack-out." Because of the potential for frack-outs to occur, the HDD or drilling plan shall include a frack-out response plan. The frack-out response plan shall specify all measures to be initiated if frack-outs should occur during HDD operations.
 - c. For all HDD and other drilling sites, a means of containment (e.g., damming, fluming) or screening capable of capturing all of the potential discharge shall be described in the HDD plan. The downstream end of any such containment structure shall be capable of containing all bentonite or other drilling muds or debris that may be released during boring or drilling. Any drilling mud, spoils, etc. must be completely removed from the streambed prior to removal of the containment structures (e.g., dam, flume, and screen).

- d. An environmental monitor (monitor) shall provide monitoring for compliance with the HDD or drilling plan throughout drilling operations under waters of the state.
- e. Any HDD or other drilling operation shall be designed and directed in such a way as to minimize the risk of spills and discharges of all types including the frack-out release of drilling lubricants through fractures in the streambed or bank substrates. In substrates where frack-outs are likely to occur, HDD contractors shall employ all reasonable means and methods available to minimize potential for frack-out.
- f. All drilling muds or compounds will be contained and properly disposed of after drilling activities are completed.
- g. If bore pits are excavated to support drilling operations, spoils shall be stored a minimum of 25 feet from the top of the bank of streams or wetland/riparian boundary. Spoils shall be stored behind a sediment barrier and covered with plastic or otherwise stabilized (i.e., tackifiers, mulch, or detention).

Hazardous Materials

- 14. The discharge of petroleum products or other excavated materials to waters of the state is prohibited.
- 15. Project activities shall not cause visible oil, grease, or foam in the work area or downstream.
- 16. Spill containment supplies shall be on site in all work areas in sufficient quantities to allow immediate remediation of fuel, oil, hydraulic fluid or similar leaks and spills.
- 17. Appropriate BMPs must be implemented throughout Project activities to prevent and control potential leaks/spills/drainage of potentially hazardous materials such as: petroleum lubricants, fluids and fuels; non-petroleum lubricants, fluids and fuels such as non-petroleum hydraulic fluid; cured and uncured cements; epoxies, paints and other protective coating materials; cement concrete or asphalt concrete, and washings and cuttings thereof.
- 18. Discharge of unset cement, concrete, grout, damaged concrete spoils, or water that has contacted uncured concrete or cement, or related washout to surface waters, ground waters, or land is prohibited. If concrete washout is necessary at a site, washout containment to prevent any discharge shall be used. Wastewater may only be disposed by delivery to a sanitary waste water collection system/facility (with authorization from the facility's owner or operator) or a properly-licensed disposal or reuse facility. Solid residue from dried cement, concrete, grout, or concrete spoils must be properly disposed of by delivery to an approved landfill or return to an aggregate plant for reuse.
- 19. A staging area for equipment and vehicle fueling and storage shall be designated at least one-hundred (100) feet away from waters of the state, in a location where fluids or accidental discharges cannot flow into waters of the state.

20. All Project construction vehicles and equipment shall be well maintained and checked daily for fuel, oil, and hydraulic fluid leaks or other problems that could result in any discharge of toxic or polluting materials.
21. A daily log must be maintained during construction to note the presence and absence of waste releases from vehicles and equipment parked or operated within 100 feet of waters of the state. Copies of the daily log must be maintained on-site. Daily visual inspections for waste releases of all vehicles and equipment parked or operating within or within 100 feet of waters of the state must be conducted before the vehicles or equipment are used for conducting work for the day. Any spillage from leaks must be reported in the daily log and contaminated soils must be immediately removed from the Project site and disposed of at an approved area or facility. State Water Board staff may request this information at any time. Any waste releases (i.e., spills, leaks, etc.) of five gallons or greater must be reported to State Water Board staff within 24 hours with an explanation of how the problem was resolved.
22. Stationary equipment (motors, pumps, generator, etc.) and vehicles parked in delineated waters shall be positioned over drip pans or other types of containment. Spill and containment equipment (oil spill booms, sorbent pads, etc.) shall be maintained on site at all locations where such equipment is used or staged.
23. Equipment working in delineated waters, including in areas protected by diversions, shall be removed from the delineated waters for fueling or service including maintenance whenever feasible. When use of stationary equipment that would require refueling or service in delineated waters is planned, BMPs for managing the additional risk posed by that refueling and service shall be developed and presented to State Water Board staff for approval. Such BMPs should include any additional precautions necessary to minimize and contain any potential spills and leaks.
24. If construction-related materials reach surface waters, appropriate spill response procedures must be initiated as soon as the incident is discovered. In addition, the State Water Board staff contact identified in this Certification must be notified via email and telephone within twenty-four (24) hours of the occurrence.
25. Installation and operation of any underground storage tanks must be conducted in compliance with Health and Safety Code, division 20, chapter 6.7 (commencing with section 25280) and California Code of Regulations, title 23, division 3, chapter 16 (commencing with section 2610).

Invasive Species and Soil Borne Pathogens

26. The Applicant is responsible for ensuring that all Project personnel follow proper weed control practices and for ensuring that project personnel are subject to those plans' requirements. As specified in Bio-MM#4, a Weed Control Plan(s) must be prepared and implemented for the entire Project, including the off-site compensatory mitigation sites. In addition to the plan elements specified in the MMs and the MMRP, the Weed Control Plan(s) must include measures to: (1) limit movement of weed propagules by vehicular traffic through route restrictions; (2) use cleaning stations; and, (3) provide training of Project personnel in prevention of weed dispersal. The Weed Control Plan(s), and any subsequent revisions, must be approved by State Water Board staff prior to implementation and prior to the start of construction.

27. Any straw, hay or other unprocessed plant material used for any purpose must be certified or documented as being weed free.
28. Soil borne pathogens are any nematodes, or any bacterial, protozoan, viral or fungal pathogens that can cause disease or death to native plants, agricultural crops or ornamental plants (e.g., *Phytophthora ramorum*, the cause of sudden oak death syndrome, and *Phytophthora lateralis*, the cause of Port Orford cedar root disease). Any equipment entering or leaving the project area from an area of known soil borne pathogen infestation shall be thoroughly cleaned using methods appropriate for the known pathogen before entering or leaving the project area. The fungus that causes Valley Fever, *Coccidioides* spp., is not considered as a soil borne pathogen in this certification.

Roads and Bridges

29. 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.
30. 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.
31. 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.
32. Any structure, including but not limited to, culverts, pipes; piers, and coffer dams, placed within a stream where fish (as defined in 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 Applicant shall be responsible for restoration of conditions as necessary (as determined by the State Water Board and Regional Water Board) to secure passage of fish across the structure.
33. Stream-crossing structures must be designed and constructed to safely convey the flow from the 100-year, 24-hour storm event (including associated bed load and debris movement) and must not result in a change in floodway elevations of more than 12 inches. Stream-crossing structures must be properly aligned within the stream and otherwise engineered, installed, and maintained, to assure resistance to washout, and to prevent erosion and/or aggradation of the stream.
34. 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.

Fugitive Dust

35. 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 State Water Board staff.

H. Mitigation for Temporary Impacts

1. The Permittee shall restore all areas of temporary impacts to waters of the state and all Project site upland areas of temporary disturbance which could result in a discharge of waters of the state as described in a restoration plan. **The amount of mitigation for temporary impacts shall be as listed in Tables 6 and 7 below.** The restoration plan shall be submitted for written acceptance by State Water Board staff within ninety (90) days of issuance of this Order. The restoration plan shall be prepared in compliance with Project mitigation measure BIO-MM#6, and 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). The Permittee shall abide by the following mitigation monitoring requirements: The restoration plan shall also provide measurable performance goals, a plan for annual monitoring and reporting for achievement of those goals, and adaptive management provisions for circumstances where monitoring shows that restoration goals are not being achieved.
2. The State Water Board may extend the monitoring period beyond requirements of the restoration plan upon a determination by State Water Board Executive Director that the performance standards provided in the approved restoration plan have not been met or are not likely to be met within the monitoring period.
3. If initial restoration of temporary impacts to waters of the state is not completed within 365 days of the completion of construction at that location, additional mitigation may be required to offset temporal loss of waters of the state. Initial restoration means all actions that are necessary and appropriate to return an area of temporary disturbance to its pre-project condition or better immediately following the end of construction activity. Initial restoration may include revegetation according to the restoration plan, or stabilization of the site until the appropriate season for planting arrives.

Table 6: Required Project Mitigation Quantity for Temporary Impacts for PP 1.a								
Aquatic Resource Type	Mit. Type ³	Units	Method ⁴					
			Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Stream Channel	PR	LF			3900 ⁵			
Stream Channel	PR	Acres			1.62			

Table 7: Required Project Mitigation Quantity for Temporary Impacts for PP 1.b								
Aquatic Resource Type	Mit. Type ⁶	Units	Method ⁷					
			Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Lake	PR	Acres		11.400				
Anthropogenic Stream Channel	PR	LF		10,171				
Anthropogenic Stream Channel	PR	Acres		7.720				
Natural Stream Channel	PR	LF		97 <u>213</u>				
Natural Stream Channel	PR	Acres		0.490 <u>1.970</u>				
Wetland	PR	Acres		1.090 <u>5.310</u>				
Vernal Pool	PR	n/a		0 <u>0.290</u>				

³ PR: Permittee Responsible

⁴ Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.). Unknown applies to advance credits with an unknown method and or location.

⁵ For PP 1.a, Rehabilitation of temporary impacts shall be in the form of reconstruction of temporarily affected canals and ditches.

⁶ PR: Permittee Responsible

⁷ Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.). Unknown applies to advance credits with an unknown method and or location.

(footnote continued on next page)

I. Compensatory Mitigation for Permanent Impacts⁸

1. **Final Compensatory Mitigation: For PP1.a,** the Permittee shall provide compensatory mitigation for impacts to waters of the state in accordance with the *Draft Permittee Responsible Mitigation Plan for Onsite and Offsite Mitigation for the Fresno to Bakersfield Section of the California High Speed Rail Project Permit Package 1(a)* (Compensatory Mitigation Plan) dated December 1, 2016 and incorporated herein by reference. Compensatory Mitigation for permanent Project impacts shall be provided through establishment of new facilities; i.e., through replacement by relocation of the detention basins, irrigation ditches and canals removed by Project activities. Any deviations from, or revisions to, the Compensatory Mitigation Plan must be pre-approved by State Water Board staff.

As described in section 5.1 of the PP 1.a Compensatory Mitigation Plan, existing storage and conveyance capacity for detention basins, irrigation ditches and canals will be documented with as-built drawings if available, with GPS measurements or aerial photograph interpretation and in coordination with the owner or operator of the facility. Replacement of the detention or conveyance will be coordinated and implemented to meet the operational needs of the facility while preserving functions and values/beneficial uses of the waters affected. This documentation of compliance with PRMP section 5.1 shall be provided to the Water Boards before the onset of construction.

~~For PP1 .b, the permittee shall provide compensatory mitigation as described in the HST FB Permittee-Responsible Mitigation Plan for On-Site and Off-Site Mitigation, Permit Package 1b (PP 1b Mitigation Plans), dated August 2017, and its appendices which include "Mitigation Site Compensatory Mitigation Plans" for four sites: CD Hillman, Cross Creek, Kings River, and Cottonwood Creek. The Kings River and Cottonwood Creek sites shall be acquired in fee title by Westervelt Ecological Services (WES); a conservation easement shall be held by Sequoia Riverlands Trust (SRTI for both parcels. The CD Hillman site shall also be acquired in fee title by WES, who will coordinate with the USFWS to transfer ownership to the Kern National Wildlife Refuge. The Cross Creek East and West sites' habitat development rights shall be purchased by WES; a conservation easement for the habitat development rights shall be held by SRT. Any proposed changes by the applicant in designation of easement holders or arrangement of site protection mechanisms shall be subject to approval by the Water Boards.~~

For PP1.b, the permittee shall provide compensatory mitigation as described in the HST FB Permittee-Responsible Mitigation Plan for On-Site and Off-Site Mitigation, Permit Package 1 (b) (PP 1.b Mitigation Plan) as updated August 2018, and its appendices which include "Mitigation Site Compensatory Mitigation Plans" for: CD Hillman, Cross Creek (May, 2018), Kings River (September, 2018), and Cottonwood Creek. Final versions of these plans are subject to Water Boards approval.

⁸ Compensatory Mitigation is for permanent physical loss and permanent ecological degradation of a water of the state.

The State Water Board may extend the monitoring period beyond requirements of the restoration plan upon a determination by State Water Board Executive Director that the performance standards provided in the approved restoration plan have not been met or are not likely to be met within the monitoring period.

2. **Compensatory Mitigation Monitoring Requirements:** Reporting submittals should be included in the Annual Report as described in Attachment D instructions. For PP1.a, Monitoring and reporting for replacement or restored features shall be conducted as described in section 5.5 of the PP 1.a Compensatory Mitigation Plan. The Authority shall provide documentation that the performance standards, including owners' approval, provided in section 5.4 and 5.5 of the Compensatory Mitigation Plan are achieved before requesting a Notice of Complete for the Project.

~~For PP 1.b, the permittee shall provide compensatory mitigation for anthropogenic features as described for PP 1.a. For impacts to natural watercourses such as natural streams and vernal pools, compensatory mitigation shall be provided by the permittee as described in the approved PP 1.b Mitigation Plans. For PP1.b, monitoring and reporting for replacement or restored features shall be conducted as described in the PP 1.b Compensatory Mitigation Plan.~~ The Permittee shall provide documentation that the performance standards, including owners' approval where applicable, are achieved before requesting a Notice of Complete for the Project.

3. **Irrevocable Letter of Credit:** An irrevocable letter of credit will not be required for PP1.a compensatory mitigation for the Project. Financial assurances for PP 1.a compensatory mitigation are waived by this Order. The purpose of financial assurances is to allow the State Water Board to implement a required mitigation project in the event the permittee fails to successfully complete the project in accordance with the applicable performance standards. ~~For PP 1.a, the~~ eCompensatory mitigation will be completed under the terms and conditions of the Authority's construction contracts for the Project. All detention basins, irrigation ditches and canals will be replaced on-site at a 1:1 ratio. This waiver is based on the following findings:

- a. The Authority has the legal authority to spend an appropriate amount of mitigation funding necessary to successfully complete the mitigation in accordance with the Compensatory Mitigation Plan.
- b. The Authority has approved the expenditure of that amount of mitigation funding necessary for successfully completing the compensatory mitigation in accordance with the provisions of the Compensatory Mitigation Plan for PP 1a.

For compensatory mitigation for PP 1.b, the State Water Board requires that sufficient financial assurances be in place prior to the issuance of a water quality certification to ensure that the mitigation projects will be completed. HRSA has agreed to provide financial assurances according to the terms in Attachment F. Pursuant to these terms in Attachment F, HSRA shall enter into a covenant or obligation to spend the amount of mitigation funding

necessary to implement and maintain the mitigation required by the PRMP and this Certification. HRSA shall include a provision that names the State Water Board as a third party beneficiary entitled to act, in its sole discretion, to enforce HSRA's obligations to implement and maintain the required mitigation.

The State Water Board acknowledges that the terms set forth in Attachment F, along with any other financial assurances required by the U.S. Army Corps of Engineers in connection with the HSRA application for a permit, should be sufficient.

4. **Permittee-Responsible Compensatory Mitigation Responsibility:** Permittee responsible compensatory mitigation installation shall be completed within 365 days of authorized impacts, unless an extension is approved by the State Water Board staff. Any requests for extension shall be provided by the applicant to the State Water Board in writing at least sixty days in advance of the end of the 365 day period. Requests for extension shall provide a clear description of the need for the extension and a proposed new time line for completion. The PP 1.b Compensatory Mitigation Plan must be approved by the State Water Board prior to impacts to waters of the state.
5. **Total Required Compensatory Mitigation:** For PP1.a, and 1.b, the Permittee is required to provide compensatory mitigation for the authorized impacts to natural streams, wetlands (including vernal pools), lakes (i.e., detention basins) and anthropogenic stream channels (i.e., irrigation ditches and canals). Compensatory mitigation for these permanent project impacts shall be provided through establishment of new facilities; i.e., through replacement by relocation of the detention basins, irrigation ditches and canals. Total required Project compensatory mitigation information for permanent physical loss of area, and permanent degradation of ecological condition is summarized in Tables 8 and 9.a-b.
6. **Mitigation Quantities:**
 - a. Mitigation quantities reported in Tables 8 and 9a-b are minimum quantities necessary for the Project. Mitigation capacity provided at the four sites specified in the PP 1.b Mitigation Plan exceeds the minimum quantities provided for the Project. This excess capacity shall be retained in reserve and may, upon approval by State Water Board staff, be applied to unforeseen new impacts for the Project or to impacts that may arise due to activities under other permitted projects (e.g., changes in footprint due to revised design, additional mitigation due to potential temporal loss between season of impact and season of replacement mitigation, etc.).
 - b. Any remaining excess mitigation capacity not required for PP 1.b impacts may, upon approval by State Water Board staff, be applied to other HST-related activities such as the future construction of the Bakersfield - Locally Generated Alternative, the Heavy Maintenance Facility, or the Command Center. Use of any reserve capacity shall be contingent on site-specific consideration of impacts, watershed location, appropriate mitigation ratios, and any other relevant factors.

- c. Excess capacity includes:
 - i. King’s River mitigation site: 0.59 acres of wetland enhancement, 6.29 acres of wetland re-establishment, 4.22 acres of wetland rehabilitation, and 0.87 acres of stream {riparian} enhancement.
 - ii. Cottonwood Creek mitigation site: 2.39 acres of vernal pool rehabilitation, 6.87 acres of vernal pool enhancement, and 91.8 acres of vernal pool preservation.
 - iii. Cross Creek mitigation site: 172.81 acres of vernal pool preservation.

Table 8: Required Project Compensatory Mitigation Quantity for Permanent Physical Loss of Area for PP 1.a and PP 1.b Anthropogenic Channels and Basins								
Aquatic Resource Type	Comp Mit. Type	Units	Method ⁹					
			Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Lake	PR	Acres	35.420					
Stream Channel	PR	Acres	52.230					
Stream Channel	PR	LF	96,286					

⁹ Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.). Unknown applies to advance credits with an unknown method and or location.

Table 9a: Required Project Compensatory Mitigation Quantity for Temporary Impacts for PP 1.b Natural Features								
Aquatic Resource Type	Comp Mit. Type	Units	Method ¹⁰					
			Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Stream Channel	PR	Acres			.049			
Stream Channel	PR	LF			97			

Table 9b: Required Project Compensatory Mitigation Quantity for Permanent Physical Loss of Area for PP 1.b Natural Channels and Wetlands								
Aquatic Resource Type	Comp Mit. Type	Units	Method ¹¹					
			Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Stream Channel	PR	Acres		2.390 <u>3.57</u>	1.48	5.230 <u>6.11</u>		
<u>Riparian Zone</u>	<u>PR</u>	<u>Acres</u>					<u>5.890</u>	
Wetland	PR	LF		2.300 <u>7.52</u>	<u>4.220</u>	<u>0.590</u>		
Vernal Pool	PR	Acres	1.320 <u>4.020</u>		1.830		<u>189.850</u>	

J. 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 resources. Some modifications of Project locations or predicted impacts may qualify as Certification Deviations as set forth in Attachment G. 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 State Water Board has determined that any potential water resource impacts that may result from the change are sufficiently addressed by the Order conditions and the CEQA

¹⁰ Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.). Unknown applies to advance credits with an unknown method and or location.

¹¹ Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.). Unknown applies to advance credits with an unknown method and or location.

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.

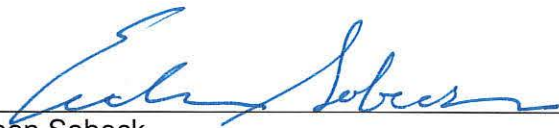
2. A Project modification shall not be granted a Certification Deviation if it warrants or necessitates changes that are not addressed by the Order conditions or the CEQA environmental document such that the Project impacts are not addressed in the Project's environmental document or the conditions of 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 California High Speed Train System, Fresno to Bakersfield Section, State Water Board I.D. no. SB16006-IN, 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 State 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 (Wat. Code, § 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.



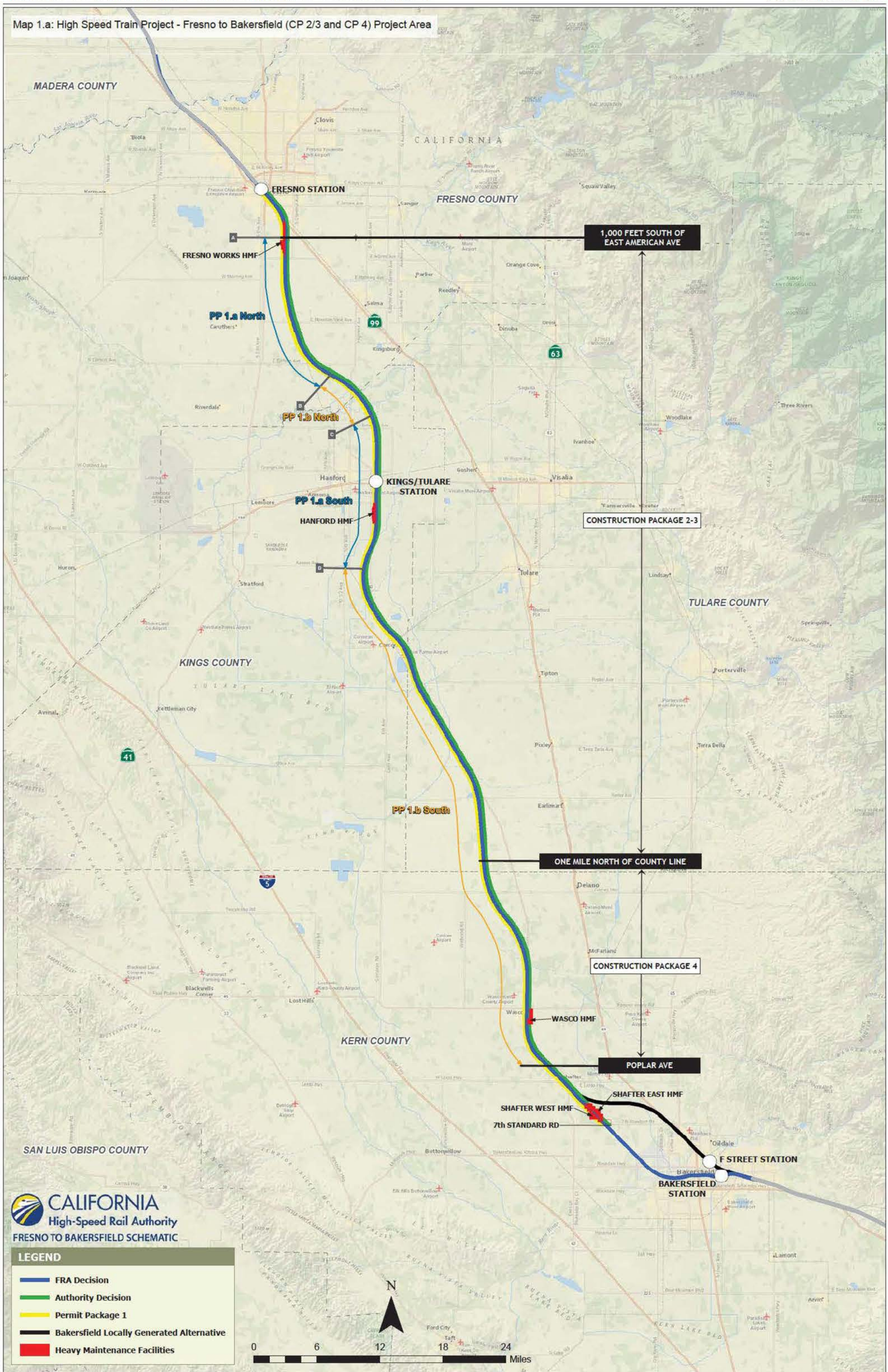
Eileen Sobeck
Executive Director
State Water Resources Control Board

10/2/18
Date

Attachment A	Project Maps
Attachment B	Receiving Waters, Impact, and Mitigation Information
Attachment C	CEQA Findings of Facts
Attachment D	Report and Notification Requirements
Attachment E	Signatory Requirements
Attachment F	Financial Assurances
Attachment G	Certification Deviation Procedures

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Map 1.a: High Speed Train Project - Fresno to Bakersfield (CP 2/3 and CP 4) Project Area



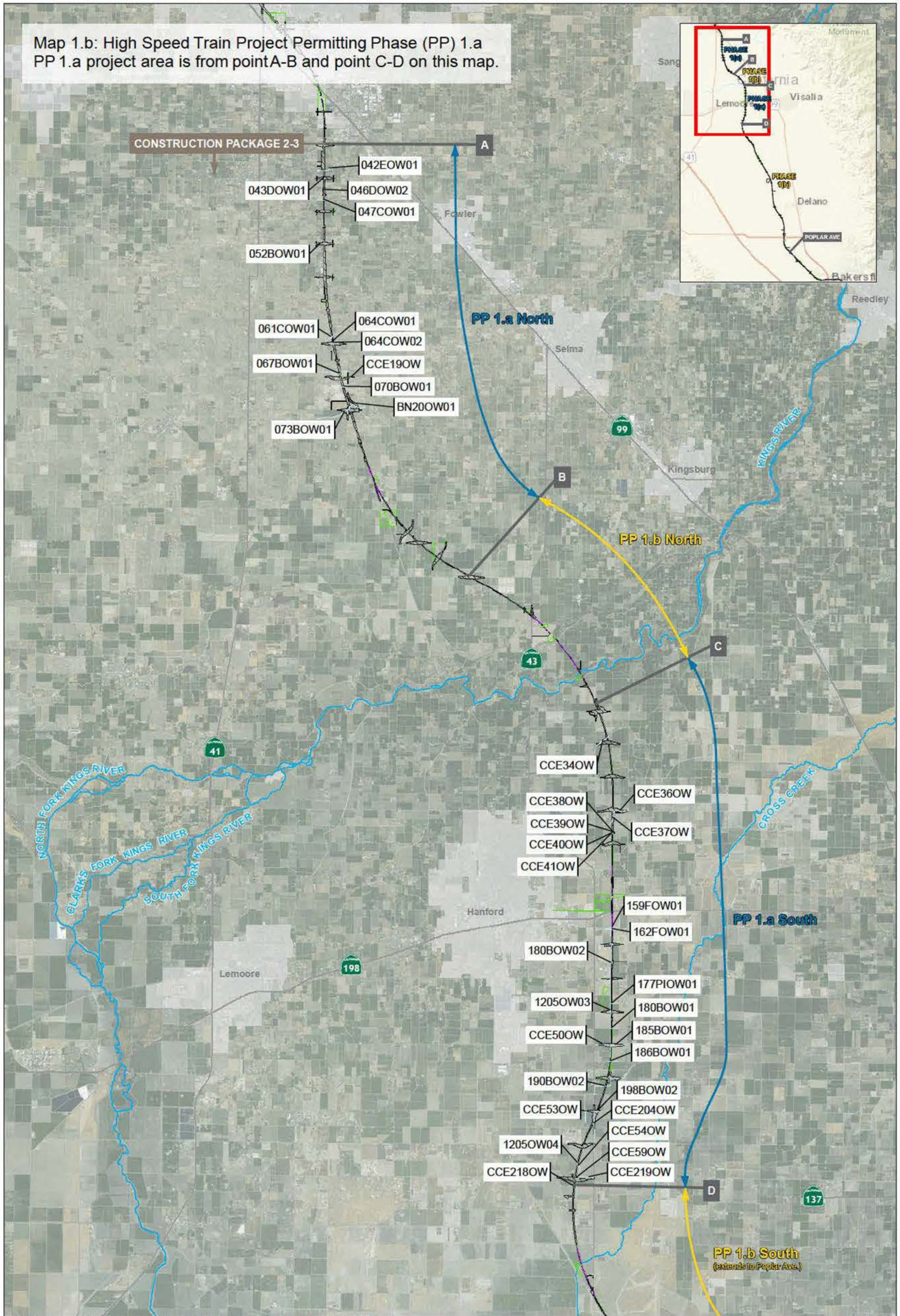
CALIFORNIA
 High-Speed Rail Authority
 FRESNO TO BAKERSFIELD SCHEMATIC

LEGEND

- FRA Decision
- Authority Decision
- Permit Package 1
- Bakersfield Locally Generated Alternative
- Heavy Maintenance Facilities



Map 1.b: High Speed Train Project Permitting Phase (PP) 1.a
 PP 1.a project area is from point A-B and point C-D on this map.

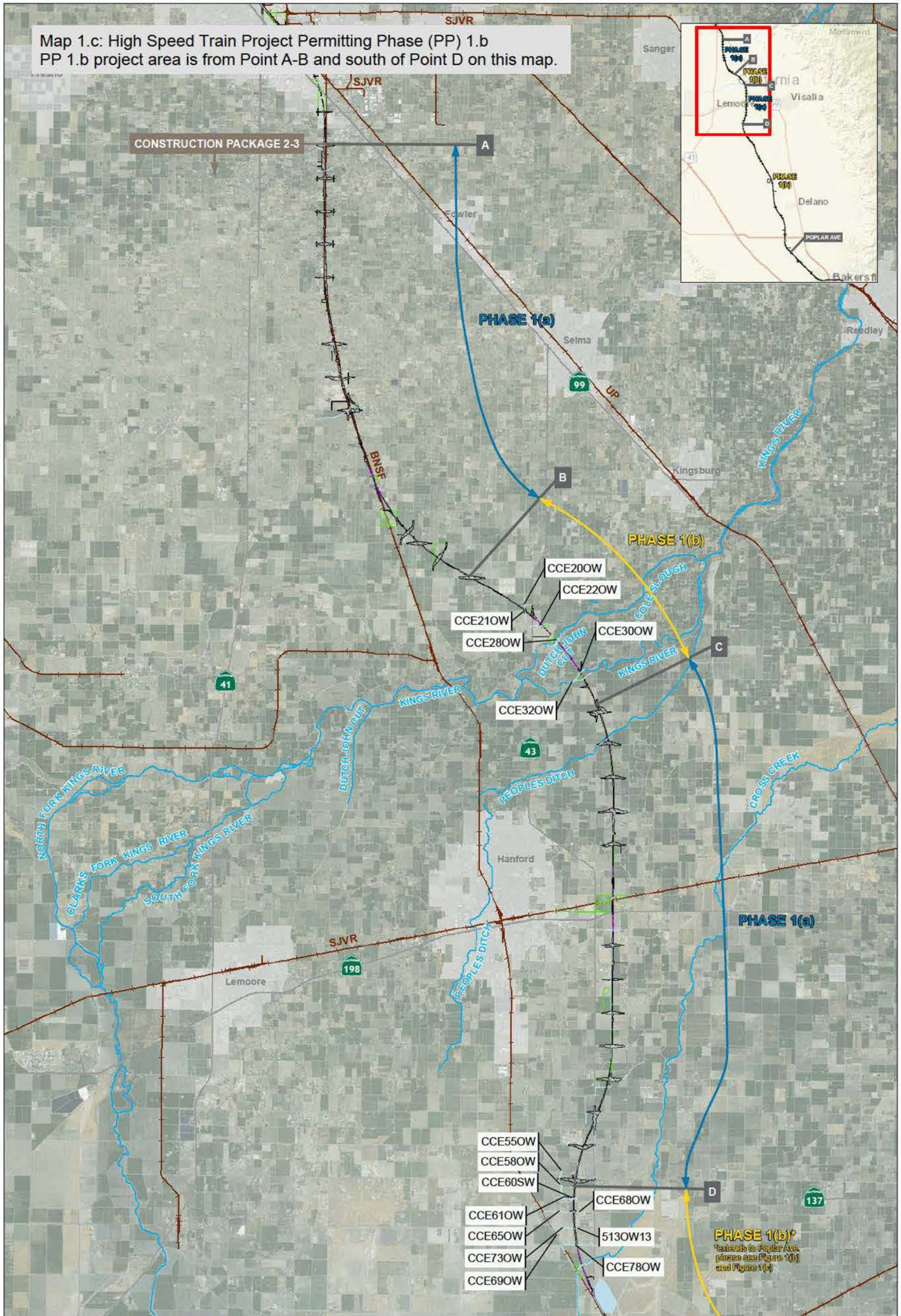


FOOTPRINT IS FROM SECTION 401 WATER QUALITY CERTIFICATION APPLICATION (MARCH 2014)
 PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
 Source: URS/HMM/Arup Joint Venture, 2009-2015; Esri 2003 and 2016.

December 21, 2016

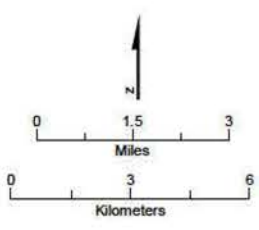


Map 1.c: High Speed Train Project Permitting Phase (PP) 1.b
 PP 1.b project area is from Point A-B and south of Point D on this map.

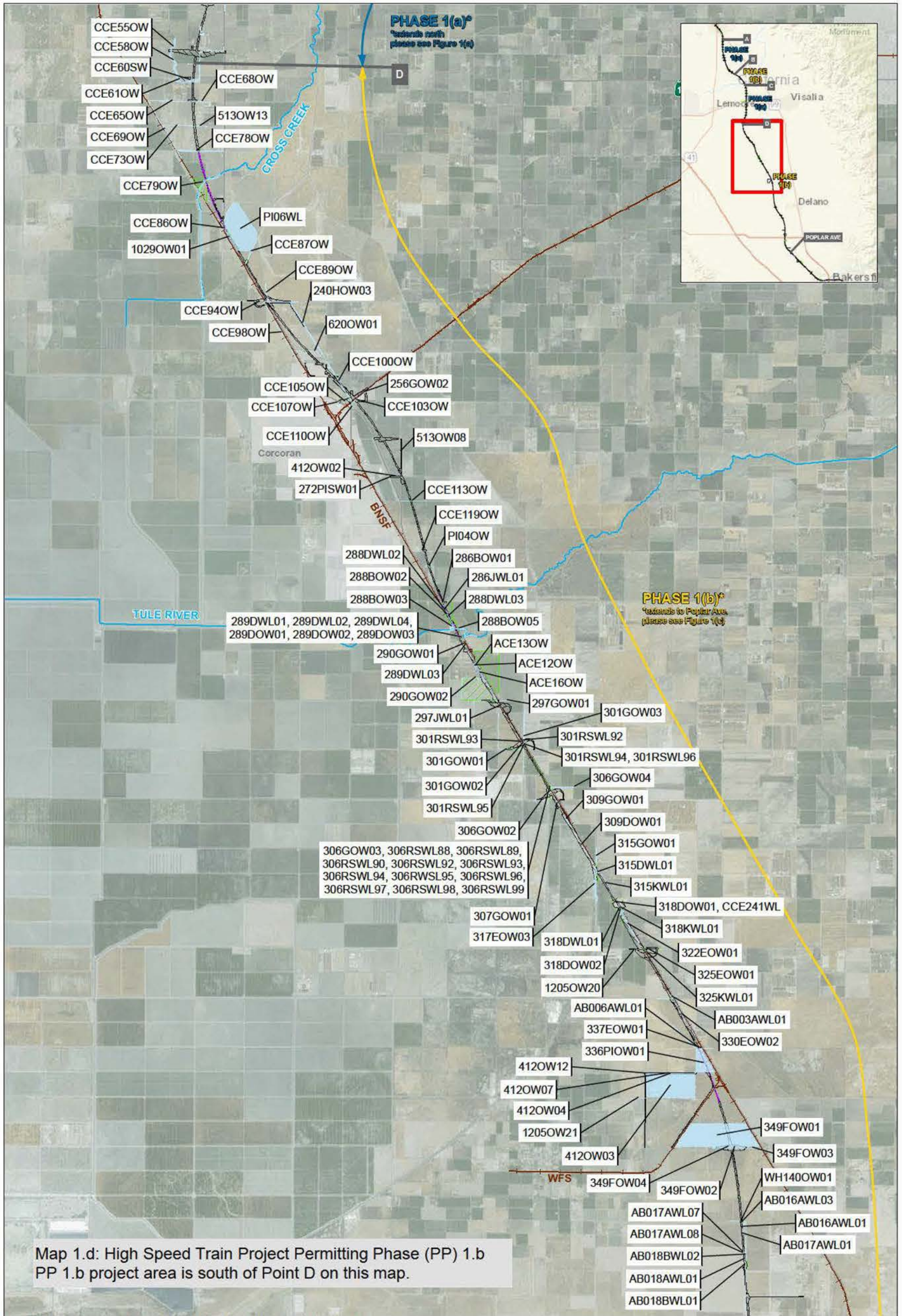


FOOTPRINT IS FROM SECTION 401 WATER QUALITY CERTIFICATION APPLICATION (MARCH 2014)
 PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
 Source: URS/HMM/Arup Joint Venture, 2009-2015; Esri 2003 and 2016.

January 16, 2017



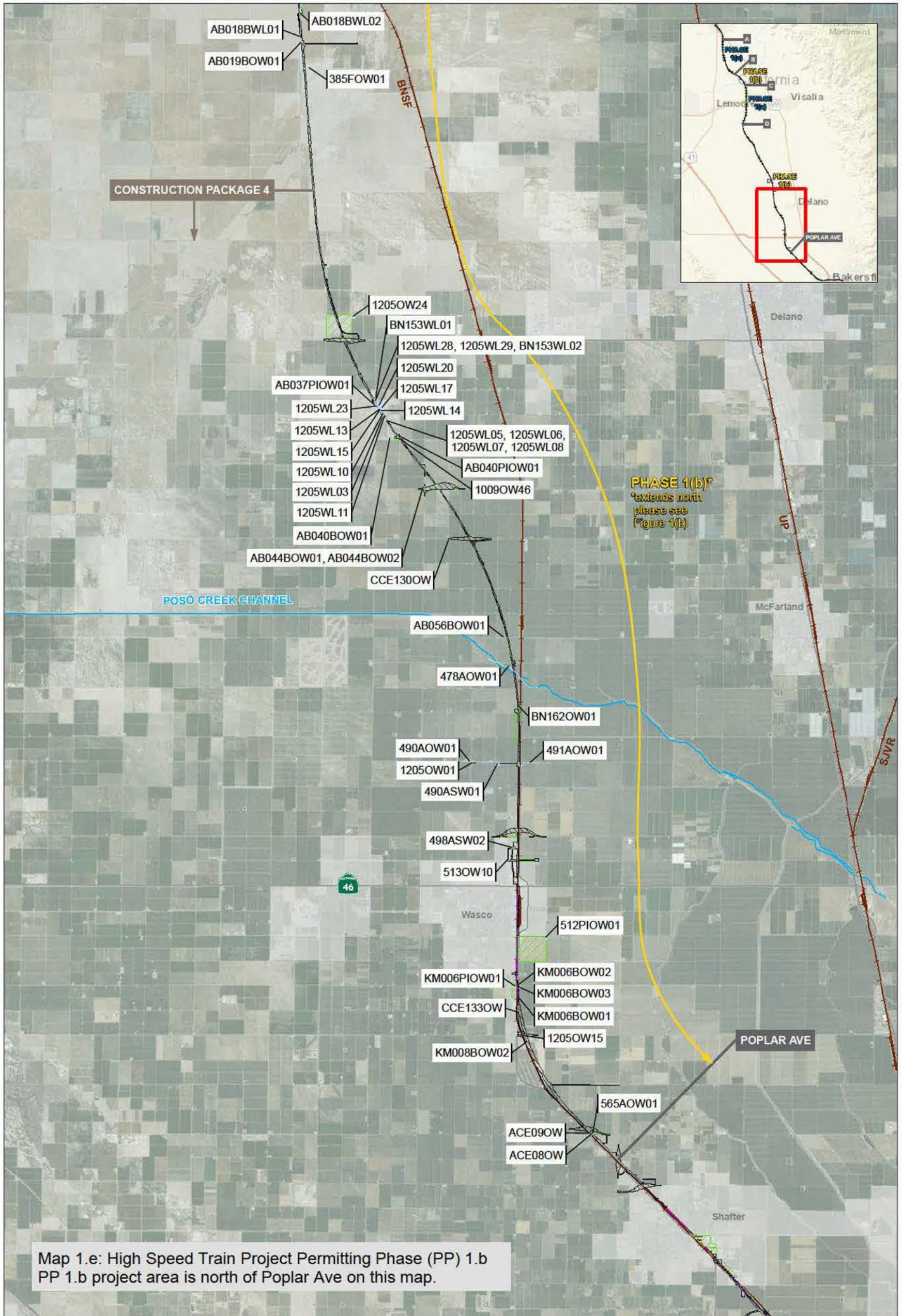
- | | |
|------------------------|----------------------|
| — Highway | Impact Type |
| — Hydrographic Feature | ▨ Direct - Permanent |
| — Railroad | ▨ Direct - Temporary |
| — Water Feature | ▨ Temporary No Fill |
| — Feature ID | |
| — City Boundary | |



FOOTPRINT IS FROM SECTION 401 WATER QUALITY CERTIFICATION APPLICATION (MARCH 2014)
 PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
 Source: URS/HMM/Arup Joint Venture, 2009-2015; Esri 2003 and 2016.

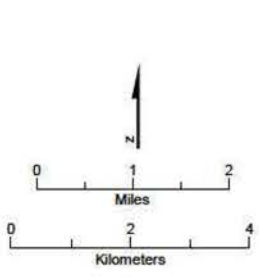
January 16, 2017





FOOTPRINT IS FROM SECTION 401 WATER QUALITY CERTIFICATION APPLICATION (MARCH 2014)
 PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
 Source: URS/HMM/Arup Joint Venture, 2009-2015; Esri 2003 and 2016.

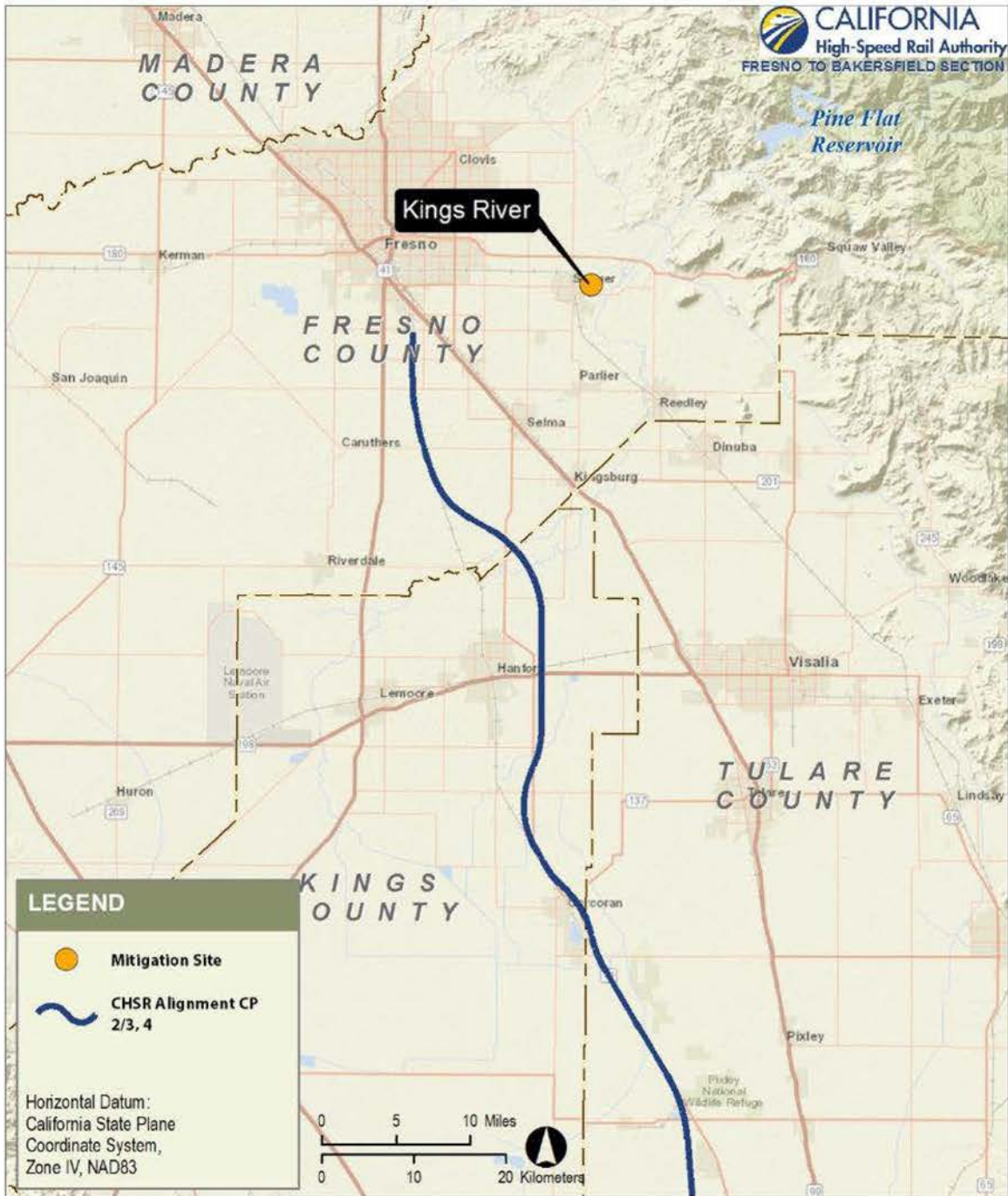
January 16, 2017



- | | |
|------------------------|----------------------|
| — Highway | Impact Type |
| — Hydrographic Feature | ▨ Direct - Permanent |
| — Railroad | ▨ Direct - Temporary |
| — Water Feature | ▨ Temporary No Fill |
| — Feature ID | |
| — City Boundary | |

**CALIFORNIA HIGH SPEED TRAIN
FRESNO TO BAKERSFIELD - ATTACHMENT A -
PROJECT MAPS Map 1.f - Kings River Mitigation Site**

REG. MEAS. ID: 395528
PLACE ID: 805103



Regional Location Map

Source: Draft Kings River Compensatory Mitigation Plan, January, 2018.



Regional Location Map Source: Draft Cottonwood Creek Compensatory Mitigation Plan, May, 2018

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Receiving Waters

The attached Tables 1 and 2 show the receiving waters associated with each impact and Permittee responsible mitigation site. These tables compile all reported impacts to waters of the state for the High Speed Train Fresno to Bakersfield Permitting Packages **1.a and 1.b, respectively.**

Table 1

Permit Package	Anticipated Year of Construction	Waters Name	Type	Latitude	Longitude	Permanent Acreage Impacts	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed
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STREAM CHANNEL / CANALS/DITCHES

1.a	2016 / 2017	CCE218OW	Canals/Ditches	36.2073	-119.6114	0.04	187	On Site	1	124	0.04	0.03	On Site	1	0.03	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	CCE59OW	Canals/Ditches	36.2108	-119.6096	0.23	879	On Site	1	40	0.23	0.01	On Site	1	0.01	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	CCE219OW	Canals/Ditches	36.2111	-119.6041	0.33	1,462	On Site	1	0	0.33	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	CCE53OW	Canals/Ditches	36.2402	-119.6054	0.02	67	On Site	1	61	0.02	0.01	On Site	1	0.01	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	CCE204OW	Canals/Ditches	36.2402	-119.6005	1.17	3,754	On Site	1	0	1.17	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	198BOW02	Canals/Ditches	36.2403	-119.5986	0.24	883	On Site	1	0	0.24	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	190BOW02	Canals/Ditches	36.2548	-119.5909	1.56	2,273	On Site	1	217	1.56	0.16	On Site	1	0.16	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	186BOW01	Canals/Ditches	36.2622	-119.5914	0.01	61	On Site	1	37	0.01	0.01	On Site	1	0.01	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	185BOW01	Canals/Ditches	36.2693	-119.5917	2.25	4,898	On Site	1	71	2.25	0.03	On Site	1	0.03	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	CCE50OW	Canals/Ditches	36.2695	-119.5957	0.20	1,771	On Site	1	0	0.20	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	180BOW01	Canals/Ditches	36.2767	-119.5911	0.04	178	On Site	1	63	0.04	0.01	On Site	1	0.01	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	177PIOW01	Canals/Ditches	36.2876	-119.5911	0.01	120	On Site	1	0	0.01	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	180BOW02	Canals/Ditches	36.3053	-119.5920	0.34	1,454	On Site	1	458	0.34	0.12	On Site	1	0.12	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.9 / 558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	162POW01	Canals/Ditches	36.3201	-119.5915	0.00	0	On Site	1	20	0.00	0.02	On Site	1	0.02	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	159POW01	Canals/Ditches	36.3208	-119.5913	0.00	0	On Site	1	20	0.00	0.01	On Site	1	0.01	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes

Table 1																				
Permit Package	Anticipated Year of Construction	Waters Name	Type	Latitude	Longitude	Permanent Acreage Impacts	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed
1.a	2016 / 2017	CCE37OW	Canals/D tches	36.3676	-119.5918	0.62	1,312	On Site	1	303	0.62	0.13	On Site	1	0.13	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	CCE36OW	Canals/D tches	36.3720	-119.5867	0.96	1,813	On Site	1	60	0.96	0.04	On Site	1	0.04	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	CCE34OW	Canals/D tches	36.4039	-119.5956	0.61	896	On Site	1	236	0.61	0.18	On Site	1	0.18	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	073BOW01	Canals/D tches	36.5490	-119.7330	0.66	1,611	On Site	1	1717	0.66	0.71	On Site	1	0.71	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.7	18030009	San Joaquin River	Upper Dry
1.a	2016 / 2017	BN20OW01	Canals/D tches	36.5500	-119.7328	0.04	203	On Site	1	0	0.04	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.7	18030009	San Joaquin River	Upper Dry
1.a	2016 / 2017	070BOW01	Canals/D tches	36.5573	-119.7388	0.09	338	On Site	1	122	0.09	0.03	On Site	1	0.03	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.7	18030009	San Joaquin River	Upper Dry
1.a	2016 / 2017	CCE19OW	Canals/D tches	36.5614	-119.7351	0.13	195	On Site	1	0	0.13	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.7	18030009	San Joaquin River	Upper Dry
1.a	2016 / 2017	067BOW01	Canals/D tches	36.5632	-119.7422	0.11	350	On Site	1	59	0.11	0.02	On Site	1	0.02	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.7	18030009	San Joaquin River	Upper Dry
1.a	2016 / 2017	064COW01	Canals/D tches	36.5767	-119.7460	0.05	219	On Site	1	0	0.05	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.7	18030009	San Joaquin River	Upper Dry
1.a	2016 / 2017	064COW02	Canals/D tches	36.5767	-119.7455	0.08	336	On Site	1	0	0.08	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.7	18030009	San Joaquin River	Upper Dry
1.a	2016 / 2017	052BOW01	Canals/D tches	36.6200	-119.7525	1.01	2,923	On Site	1	119	1.01	0.04	On Site	1	0.04	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.7	18030009	San Joaquin River	Upper Dry
1.a	2016 / 2017	047COW01	Canals/D tches	36.6393	-119.7514	0.10	324	On Site	1	56	0.10	0.02	On Site	1	0.02	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.3	18030009	San Joaquin River	Upper Dry
1.a	2016 / 2017	046DOW02	Canals/D tches	36.6436	-119.7507	0.10	558	On Site	1	0	0.10	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.3	18030009	San Joaquin River	Upper Dry
1.a	2016 / 2017	043DOW01	Canals/D tches	36.6499	-119.7504	0.02	205	On Site	1	0	0.02	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.3	18030009	San Joaquin River	Upper Dry
1.a	2016 / 2017	042EOW01	Canals/D tches	36.6525	-119.7519	0.14	414	On Site	1	115	0.14	0.04	On Site	1	0.04	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.3	18030009	San Joaquin River	Upper Dry
TOTAL STREAM CHANNELS						11.16	29,683	On Site	1	3,900	11.16	1.62	On Site	1	1.62					

Table 1																				
Permit Package	Anticipated Year of Construction	Waters Name	Type	Latitude	Longitude	Permanent Acreage Impacts	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed
LAKE / DETENTION BASINS																				
1.a	2016 / 2017	CCE54OW	Detent on Basin	36.2160	-119.6090	0.08	N/A	On Site	1	N/A	0.08	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	1205OW04	Detent on Basin	36.2173	-119.6094	0.45	N/A	On Site	1	N/A	0.45	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	1205OW03	Detention Basin	36.2845	-119.5923	0.22	N/A	On Site	1	N/A	0.22	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	CCE41OW	Detention Basin	36.3623	-119.5918	0.24	N/A	On Site	1	N/A	0.24	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	CCE40OW	Detention Basin	36.3623	-119.5915	0.36	N/A	On Site	1	N/A	0.36	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	CCE39OW	Detention Basin	36.3628	-119.5916	0.16	N/A	On Site	1	N/A	0.16	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	CCE38OW	Detention Basin	36.3629	-119.5916	0.13	N/A	On Site	1	N/A	0.13	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes
1.a	2016 / 2017	061COW01	Detention Basin	36.5792	-119.7463	0.03	N/A	On Site	1	N/A	0.03	0.00	On Site	1	0.00	AGR, IND, PRO, REC-1, REC-2, WARM, WILD, RARE, GWR	551.7	18030009	San Joaquin River	Upper Dry
TOTAL LAKE						1.67	N/A	On Site	Varies	N/A	1.67	0.00	On Site	1	0.00					

Table 2: Impacts to Waters for PP1.b

Anticipated Year of Construction	Waters Name	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect/Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
STREAM / CANALS/DITCHES																						
TBD	CCE320W	Canals/Ditches	36.42989	-119.61	0.00	0	N/A	0	On Site	1	21	0.00	0.01	On Site	1	0.01	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	CCE210W	Canals/Ditches	36.45918	-119.6405	0.15	1 876	N/A	221	On Site	1	203	0.15	0.15	On Site	1	0.15	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	551.2	18030009	San Joaquin River	Upper Dry	CP 2/3
TBD	CCE200W	Canals/Ditches	36.46117	-119.6405	0.31	4 032	N/A	294	On Site	1	196	0.31	0.21	On Site	1	0.21	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	551.2	18030009	San Joaquin River	Upper Dry	CP 2/3
TBD	ACE080W	Canals/Ditches	35.52884	-119.3055	0.00	0	N/A	0	On Site	1	61	0.00	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	ACE090W	Canals/Ditches	35.52929	-119.3061	0.00	0	N/A	0	On Site	1	46	0.00	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	491AO01	Canals/Ditches	35.63759	-119.3308	0.00	0	N/A	0	On Site	1	73	0.00	0.03	On Site	1	0.03	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	490AO01	Canals/Ditches	35.63765	-119.3375	0.50	6 458	N/A	1 127	On Site	1	0	0.50	0.04	On Site	1	0.04	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	AB056BOW01	Canals/Ditches	35.67429	-119.3364	0.12	1 613	N/A	218	On Site	1	120	0.12	0.07	On Site	1	0.07	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper White	CP 4
TBD	AB040BOW01	Canals/Ditches	35.73225	-119.3766	0.00	0	N/A	0	On Site	1	435	0.00	0.46	On Site	1	0.46	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper White	CP 4
TBD	AB037PIOW01	Canals/Ditches	35.74313	-119.3839	0.45	5 867	N/A	602	On Site	1	411	0.45	0.31	On Site	1	0.31	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper White	CP 4

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	385FOW01	Canals/Ditches	35.84051	-119.4094	0.03	380	N/A	208	On Site	1	119	0.03	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	A80188WL01	Canals/Ditches	35.85193	-119.4111	2.43	31 342	N/A	3 048	On Site	1	181	2.43	0.13	On Site	1	0.13	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	WH140OW01	Canals/Ditches	35.86966	-119.4129	0.06	802	N/A	226	On Site	1	80	0.06	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	349FOW03	Canals/Ditches	35.89118	-119.4173	0.11	1 452	N/A	3 108	On Site	1	0	0.11	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	349FOW02	Canals/Ditches	35.8914	-119.4172	0.35	4 508	N/A	3 042	On Site	1	0	0.35	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	349FOW04	Canals/Ditches	35.89149	-119.4172	2.09	26 917	N/A	3 031	On Site	1	59	2.09	0.04	On Site	1	0.04	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	1205OW21	Canals/Ditches	35.90572	-119.4478	0.07	846	N/A	115	On Site	1	0	0.07	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	412OW04	Canals/Ditches	35.91262	-119.4379	0.27	3 453	N/A	419	On Site	1	60	0.27	0.16	On Site	1	0.16	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	412OW12	Canals/Ditches	35.91272	-119.4472	0.07	912	N/A	102	On Site	1	11	0.07	0.01	On Site	1	0.01	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	412OW07	Canals/Ditches	35.91282	-119.439	3.79	48 892	N/A	4 945	On Site	1	0	3.79	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	330EOW02	Canals/Ditches	35.92674	-119.4318	1.60	20 666	N/A	3 189	On Site	1	59	1.60	0.05	On Site	1	0.05	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	1205OW20	Canals/Ditches	35.94902	-119.4516	0.01	183	N/A	36	On Site	1	0	0.01	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	322EOW01	Canals/Ditches	35.95835	-119.4551	11.77	151 940	N/A	4 065	On Site	1	0	11.77	0.01	On Site	1	0.01	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	318DOW02	Canals/Ditches	35.96075	-119.4566	0.00	56	N/A	219	On Site	1	0	0.00	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	318DOW01	Canals/Ditches	35.96236	-119.4582	0.10	1 332	N/A	612	On Site	1	0	0.10	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	315GOW01	Canals/Ditches	35.97032	-119.4654	1.93	24 873	N/A	1 085	On Site	1	746	1.93	1.34	On Site	1	1.34	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	317EOW03	Canals/Ditches	35.9722	-119.4659	0.52	6 686	N/A	1 504	On Site	1	0	0.52	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	309DOW01	Canals/Ditches	35.97984	-119.4707	0.95	12 215	N/A	5 154	On Site	1	0	0.95	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	309GOW01	Canals/Ditches	35.98706	-119.4761	1.16	14 947	N/A	1 065	On Site	1	0	1.16	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306GOW02	Canals/Ditches	35.99264	-119.4853	0.01	124	N/A	52	On Site	1	0	0.01	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	306GOW03	Canals/Ditches	35.99455	-119.4826	0.61	7 905	N/A	1 043	On Site	1	60	0.61	0.04	On Site	1	0.04	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306GOW04	Canals/Ditches	35.99641	-119.48	0.00	0	N/A	0	On Site	1	88	0.00	0.05	On Site	1	0.05	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	301GOW01	Canals/Ditches	36.00738	-119.4955	0.32	4 125	N/A	642	On Site	1	107	0.32	0.05	On Site	1	0.05	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	301GOW02	Canals/Ditches	36.00822	-119.4917	0.34	4 403	N/A	680	On Site	1	85	0.34	0.04	On Site	1	0.04	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	301GOW03	Canals/Ditches	36.00992	-119.4914	0.22	2 854	N/A	491	On Site	1	0	0.22	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	297GOW01	Canals/Ditches	36.02174	-119.5053	0.39	5 084	N/A	811	On Site	1	72	0.39	0.05	On Site	1	0.05	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	290GOW02	Canals/Ditches	36.02624	-119.5045	2.60	33 566	N/A	6 422	On Site	1	2366	2.60	0.92	On Site	1	0.92	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	290GOW01	Canals/Ditches	36.03813	-119.5132	0.31	3 943	N/A	1 514	On Site	1	0	0.31	0.07	On Site	1	0.07	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	2890OW01	Canals/Ditches	36.0399	-119.5144	0.00	33	N/A	0	On Site	1	0	0.00	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	2890OW02	Canals/Ditches	36.04002	-119.5141	0.00	0	N/A	0	On Site	1	36	0.00	0.01	On Site	1	0.01	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	289DOW03	Canals/Ditches	36.04009	-119.5138	0.00	0	N/A	0	On Site	1	57	0.00	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	288BOW02	Canals/Ditches	36.04678	-119.5194	0.37	4716	N/A	2115	On Site	1	0	0.37	0.58	On Site	1	0.58	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030006	San Joaquin River	Upper Tule	CP 2/3
TBD	P104OW	Canals/Ditches	36.06073	-119.5258	0.03	332	N/A	330	On Site	1	121	0.03	0.01	On Site	1	0.01	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	CCE119OW	Canals/Ditches	36.06533	-119.5275	0.20	2574	N/A	434	On Site	1	0	0.20	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	CCE113OW	Canals/Ditches	36.07988	-119.5326	0.13	1632	N/A	232	On Site	1	140	0.13	0.07	On Site	1	0.07	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	412OW02	Canals/Ditches	36.08696	-119.5381	0.13	1716	N/A	847	On Site	1	0	0.13	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.1 / 558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	CCE110OW	Canals/Ditches	36.1083	-119.5542	0.17	2192	N/A	172	On Site	1	334	0.17	0.27	On Site	1	0.27	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	CCE107OW	Canals/Ditches	36.10845	-119.5594	0.01	183	N/A	36	On Site	1	0	0.01	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	CCE105OW	Canals/Ditches	36.10886	-119.5566	0.13	1662	N/A	396	On Site	1	308	0.13	0.12	On Site	1	0.12	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	256GOW02	Canals/Ditches	36.1109	-119.5504	0.23	2926	N/A	483	On Site	1	139	0.23	0.06	On Site	1	0.06	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	CCE1000W	Canals/Ditches	36.11342	-119.5578	2.80	36 110	N/A	1 797	On Site	1	1053	2.80	0.65	On Site	1	0.65	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	6200W01	Canals/Ditches	36.12349	-119.5705	0.15	1 993	N/A	506	On Site	1	169	0.15	0.05	On Site	1	0.05	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	240HOW03	Canals/Ditches	36.13469	-119.5743	0.86	11 145	N/A	646	On Site	1	242	0.86	0.39	On Site	1	0.39	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.1	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	CCE980W	Canals/Ditches	36.13667	-119.5852	0.08	987	N/A	166	On Site	1	52	0.08	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.1	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	CCE940W	Canals/Ditches	36.13776	-119.5875	0.32	4 128	N/A	329	On Site	1	157	0.32	0.16	On Site	1	0.16	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.1 / 558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	CCE890W	Canals/Ditches	36.13913	-119.5848	0.53	6 792	N/A	381	On Site	1	146	0.53	0.21	On Site	1	0.21	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.1	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	CCE870W	Canals/Ditches	36.14971	-119.5922	0.58	7 428	N/A	533	On Site	1	90	0.58	0.09	On Site	1	0.09	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	10290W01	Canals/Ditches	36.15724	-119.5991	0.00	32	N/A	0	On Site	1	248	0.00	0.11	On Site	1	0.11	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	CCE860W	Canals/Ditches	36.15952	-119.601	0.40	5 185	N/A	1 043	On Site	1	166	0.40	0.06	On Site	1	0.06	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	CCE780W	Canals/Ditches	36.18179	-119.6098	0.13	1 708	N/A	248	On Site	1	125	0.13	0.06	On Site	1	0.06	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	CCE690W	Canals/Ditches	36.18199	-119.6097	0.11	1 412	N/A	272	On Site	1	100	0.11	0.05	On Site	1	0.05	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	S130W13	Canals/Ditches	36.18907	-119.6108	0.09	1 202	N/A	225	On Site	1	60	0.09	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	CCE730W	Canals/Ditches	36.18917	-119.6123	0.00	0	N/A	0	On Site	1	42	0.00	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	CCE680W	Canals/Ditches	36.19634	-119.6107	0.05	633	N/A	107	On Site	1	0	0.05	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	CCE650W	Canals/Ditches	36.19637	-119.6133	0.06	820	N/A	135	On Site	1	55	0.06	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	AB018BWL01-2017B	Canals/Ditches	35.85840	-119.41116	0.00	315	N/A	0.00	On Site	1	49.70	0.00	0.01	On Site	1	0.01	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB018BWL01-2017C	Canals/Ditches	35.85768	-119.41116	0.02	367	N/A	286.21	On Site	1	0.00	0.02	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB018BWL01-2017D	Canals/Ditches	35.85716	-119.41115	0.002	43	N/A	35.26	On Site	1	0.00	0.002	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB018BWL01-2017E	Canals/Ditches	35.85662	-119.41113	0.01	171	N/A	241.18	On Site	1	0.00	0.01	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB018BWL01-2017F	Canals/Ditches	35.85593	-119.41114	0.005	46	N/A	217.98	On Site	1	15.63	0.005	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	AB018BWL01-2017G	Canals/Ditches	35.85545	-119.41113	0.004	41	N/A	55.33	On Site	1	0.00	0.004	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB018BWL01-2017H	Canals/Ditches	35.85505	-119.41114	0.01	110	N/A	160.77	On Site	1	0.00	0.01	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB018BWL01-2017I	Canals/Ditches	35.85333	-119.41111	0.05	617	N/A	734.09	On Site	1	0.00	0.05	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB018BWL01-2017J	Canals/Ditches	35.85161	-119.41107	0.03	1 095	N/A	406.55	On Site	1	0.00	0.03	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB018BWL01-2017K	Canals/Ditches	35.84926	-119.41105	0.03	2 072	N/A	422.35	On Site	1	58.93	0.03	0.004	On Site	1	0.004	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB037POW01-2017	Canals/Ditches	35.74144	-119.38391	0.45		N/A	597.06	On Site	1	407.68	0.45	0.31	On Site	1	0.31	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 4
TBD	WH140OW01-2017	Canals/Ditches	35.86965	-119.41273	0.06		N/A	225.68	On Site	1	80.12	0.06	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB2017CD001B	Canals/Ditches	35.85734	-119.41096	0.07	4 052	N/A	770.41	On Site	1	0.00	0.07	0.000	On Site	1	0.000	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB2017CD12	Canals/Ditches	35.85136	-119.41091	0.07	7 453	N/A	1594.70	On Site	1	60.07	0.07	0.003	On Site	1	0.003	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3
TBD	AB2017CP01	Canals/Ditches	35.85453	-119.41112	0.05		N/A	129.66	On Site	1	0.00	0.05	0.000	On Site	1	0.000	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper Wh te	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TOTAL LAKE					53.23	548,175	N/A	96,286	On Site	1	10,171	42.07	7.72	On Site	1	7.72						
WETLAND (EMERGENT WETLAND)																						
TBD	CCE605W	Emergent wetland	36.20248	-119.613	0.01	20	N/A	N/A	TBD Westervelt	TBD	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TOTAL WETLAND					0.01	20	N/A	N/A	TBD	TBD	N/A	TBD	0.00	On Site	1	0.00						
LAKE / DETENTION BASINS																						
TBD	565AOW01	Lacustrine	35.52932	-119.3047	0.05	753	N/A	N/A	On Site	1	N/A	0.05	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	KM008BOW02	Lacustrine	35.55585	-119.3286	0.31	5 037	N/A	N/A	On Site	1	N/A	0.31	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	1205OW15	Lacustrine	35.55771	-119.3295	0.06	890	N/A	N/A	On Site	1	N/A	0.06	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	CCE1330W	Lacustrine	35.56449	-119.3314	0.10	1 581	N/A	N/A	On Site	1	N/A	0.10	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	KM006BOW01	Lacustrine	35.56895	-119.3315	0.00	0	N/A	N/A	On Site	1	N/A	0.00	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	KM006BOW03	Lacustrine	35.57197	-119.3315	0.00	0	N/A	N/A	On Site	1	N/A	0.00	0.24	On Site	1	0.24	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	KM006PIOW01	Lacustrine	35.57219	-119.3327	0.00	0	N/A	N/A	On Site	1	N/A	0.00	0.19	On Site	1	0.19	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	KM006BOW02	Lacustrine	35.57272	-119.3315	0.00	0	N/A	N/A	On Site	1	N/A	0.00	0.12	On Site	1	0.12	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	512PIOW01	Lacustrine	35.58644	-119.3219	0.00	0	N/A	N/A	On Site	1	N/A	0.00	0.87	On Site	1	0.87	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	513OW10	Lacustrine	35.60951	-119.3352	0.00	7	N/A	N/A	On Site	1	N/A	0.00	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	498ASW02	Lacustrine	35.61268	-119.334	0.19	3 037	N/A	N/A	On Site	1	N/A	0.19	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	490ASW01	Lacustrine	35.6372	-119.3394	0.17	2 706	N/A	N/A	On Site	1	N/A	0.17	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	1205OW01	Lacustrine	35.63744	-119.3485	0.04	661	N/A	N/A	On Site	1	N/A	0.04	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	BN162OW01	Lacustrine	35.65408	-119.3318	0.36	5 868	N/A	N/A	On Site	1	N/A	0.36	0.64	On Site	1	0.64	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.8	18030004	San Joaquin River	Upper Poso	CP 4
TBD	CCE130OW	Lacustrine	35.70296	-119.357	0.00	32	N/A	N/A	On Site	1	N/A	0.00	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper White	CP 4
TBD	AB044BOW01	Lacustrine	35.7175	-119.3655	0.15	2 431	N/A	N/A	On Site	1	N/A	0.15	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper White	CP 4
TBD	AB044BOW02	Lacustrine	35.71815	-119.3663	0.00	0	N/A	N/A	On Site	1	N/A	0.00	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper White	CP 4
TBD	1009OW46	Lacustrine	35.73196	-119.3746	0.11	1 699	N/A	N/A	On Site	1	N/A	0.11	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper White	CP 4
TBD	AB040FOW01-2017	Lacustrine	35.73304	-119.3753	0.68	10 895	N/A	N/A	On Site	1	N/A	0.68	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper White	CP 4
TBD	1205OW24	Lacustrine	35.76782	-119.3918	0.00	0	N/A	N/A	On Site	1	N/A	0.00	0.10	On Site	1	0.10	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper White	CP 4
TBD	AB019BOW01	Lacustrine	35.84795	-119.4107	0.03	550	N/A	N/A	On Site	1	N/A	0.03	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	349FOW01	Lacustrine	35.89413	-119.4172	19.83	320 004	N/A	N/A	On Site	1	N/A	19.83	0.30	On Site	1	0.30	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	412OW03	Lacustrine	35.9123	-119.4383	0.00	0	N/A	N/A	On Site	1	N/A	0.00	0.03	On Site	1	0.03	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	336FIOW01	Lacustrine	35.91622	-119.4264	0.90	14 515	N/A	N/A	On Site	1	N/A	0.90	1.93	On Site	1	1.93	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	325EOW01	Lacustrine	35.9495	-119.4472	0.01	205	N/A	N/A	On Site	1	N/A	0.01	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	307GOW01	Lacustrine	35.99167	-119.4793	0.93	14 995	N/A	N/A	On Site	1	N/A	0.93	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	ACE16OW	Lacustrine	36.02982	-119.5075	5.30	85 479	N/A	N/A	On Site	1	N/A	5.30	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	ACE12OW	Lacustrine	36.03176	-119.5094	0.15	2 464	N/A	N/A	On Site	1	N/A	0.15	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	ACE13OW	Lacustrine	36.03193	-119.5089	1.20	19 312	N/A	N/A	On Site	1	N/A	1.20	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	288BOW03	Lacustrine	36.04323	-119.5176	0.00	2	N/A	N/A	On Site	1	N/A	0.00	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030006	San Joaquin River	Upper Tule	CP 2/3
TBD	286BOW01	Lacustrine	36.0503	-119.5209	0.00	24	N/A	N/A	On Site	1	N/A	0.00	0.12	On Site	1	0.12	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030006	San Joaquin River	Upper Tule	CP 2/3
TBD	272PISW01	Lacustrine	36.08683	-119.5397	0.07	1 076	N/A	N/A	On Site	1	N/A	0.07	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	513OW08	Lacustrine	36.09431	-119.5364	0.00	63	N/A	N/A	On Site	1	N/A	0.00	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.1	18030007	San Joaquin River	Upper Kaweah	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	CCE1030W	Lacustrine	36.10924	-119.5524	0.22	3 506	N/A	N/A	On Site	1	N/A	0.22	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	P106WL	Lacustrine	36.15638	-119.5971	2.89	5 034	N/A	N/A	On Site	1	N/A	2.89	6.84	On Site	1	6.84	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TOTAL LAKE					33.75	502,822	N/A	N/A	On Site	1	N/A	33.75	11.40	On Site	1	11.40						
STREAM / SEASONAL RIVERINE																						
TBD	CCE220W	Seasonal riverine	36.45415	-119.6296	0.00	0	N/A	81	TBD Westervelt	TBD Westervelt	20	TBD	0.03	On Site	1	0.03	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	551.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	CCE280W	Seasonal riverine	36.4466	-119.6229	0.00	0	N/A	80	TBD Westervelt	TBD Westervelt	20	TBD	0.08	On Site	1	0.08	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	551.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	CCE300W	Seasonal riverine	36.43109	-119.6117	0.00	12	N/A	207	TBD Westervelt	TBD Westervelt	0	TBD	0.11	On Site	1	0.11	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	551.9	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	CCE550W	Seasonal riverine	36.2116	-119.6199	0.24	786	N/A	88	TBD Westervelt	TBD Westervelt	0	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	CCE580W	Seasonal riverine	36.21056	-119.6202	0.18	572	N/A	84	TBD Westervelt	TBD Westervelt	0	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	CCE61OW	Seasonal riverine	36.20231	-119.6142	1.63	5 272	N/A	1 657	TBD Westervelt	2	0	3.26	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.1	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	CCE79OW	Seasonal riverine	36.17292	-119.6079	0.00	0	N/A	0	TBD Westervelt	2	9.99	0.00	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.3	18030007	San Joaquin River	Upper Kaweah	CP 2/3
TBD	288BOW05	Seasonal riverine	36.04264	-119.5163	0.02	70	N/A	110	TBD Westervelt	TBD Westervelt	25	TBD	0.17	On Site	1	0.17	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030006	San Joaquin River	Upper Tule	CP 2/3
TBD	337EOW01	Seasonal riverine	35.92028	-119.4287	0.00	6	N/A	89	TBD Westervelt	TBD Westervelt	22	TBD	0.06	On Site	1	0.06	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	478AOW01	Seasonal riverine	35.66468	-119.3336	0.12	6	N/A	209	TBD Westervelt	TBD Westervelt	0	TBD	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030004	San Joaquin River	Upper Poso	CP 4
TOTAL STREAM					2.19	6,722	N/A	2,605	TBD	Varies	97	TBD	0.49	On Site	1	0.49						
WETLAND / SEASONAL WETLAND																						
TBD	AB003AWL01	Seasonal wetland	35.9353	-119.4379	0.03	41	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB006AWL01	Seasonal wetland	35.92084	-119.4289	0.39	624	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.03	On Site	1	0.03	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	286JWL01	Seasonal wetland	36.04832	-119.5201	0.01	23	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.28	On Site	1	0.28	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030006	San Joaquin River	Upper Tule	CP 2/3
TBD	288DWL02	Seasonal wetland	36.04777	-119.52	0.01	19	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030006	San Joaquin River	Upper Tule	CP 2/3
TBD	288DWL03	Seasonal wetland	36.04618	-119.5189	0.00	0	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.42	On Site	1	0.42	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030006	San Joaquin River	Upper Tule	CP 2/3
TBD	289DWL04	Seasonal wetland	36.04006	-119.5138	0.00	0	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.01	On Site	1	0.01	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	289DWL02	Seasonal wetland	36.04001	-119.5142	0.00	0	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	289DWL01	Seasonal wetland	36.03993	-119.5143	0.02	37	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	289DWL03	Seasonal wetland	36.03781	-119.5128	0.00	0	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.04	On Site	1	0.04	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	297JWL01	Seasonal wetland	36.02025	-119.4996	0.24	388	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	301RSWL92	Seasonal wetland	36.00988	-119.492	0.03	51	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	301RSWL93	Seasonal wetland	36.00951	-119.4919	0.02	29	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	301RSWL94	Seasonal wetland	36.00908	-119.4914	0.01	15	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	301RSWL95	Seasonal wetland	36.00887	-119.4913	0.00	8	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	301RSWL96	Seasonal wetland	36.00886	-119.4914	0.00	1	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306RSWL88	Seasonal wetland	35.99635	-119.4821	0.00	0	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306RSWL89	Seasonal wetland	35.9962	-119.482	0.00	0	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.01	On Site	1	0.01	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306RSWL90	Seasonal wetland	35.99589	-119.4817	0.00	0	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.02	On Site	1	0.02	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306RSWL92	Seasonal wetland	35.99541	-119.4814	0.00	3	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306RSWL94	Seasonal wetland	35.99531	-119.4813	0.01	9	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306RSWL93	Seasonal wetland	35.99524	-119.4814	0.04	72	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306RSWL95	Seasonal wetland	35.99522	-119.4813	0.01	10	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	306RSWL96	Seasonal wetland	35.99502	-119.4812	0.02	33	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306RSWL97	Seasonal wetland	35.99489	-119.4811	0.01	12	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306RSWL98	Seasonal wetland	35.99471	-119.481	0.03	42	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	306RSWL99	Seasonal wetland	35.99446	-119.4808	0.03	44	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	315DWL01	Seasonal wetland	35.97157	-119.4648	0.32	509	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	315KWL01	Seasonal wetland	35.96838	-119.4618	0.00	0	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.01	On Site	1	0.01	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	318KWL01	Seasonal wetland	35.9613	-119.4566	0.18	298	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.22	On Site	1	0.22	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	318DWL01	Seasonal wetland	35.96094	-119.4569	0.14	220	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	On Site	1	0.00	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	325KWL01	Seasonal wetland	35.94833	-119.4471	0.02	34	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.01	On Site	1	0.01	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TOTAL WETLAND / SEASONAL WETLAND					1.57	2,524	N/A	N/A	TBD	TBD	N/A	TBD	1.09	On Site	1	1.09						

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGSHUC	Receiving Waters	Watershed	Construction Package
VERNAL POOLS AND SWALES																						
TBD	CCE241WL	Vernal Pools and Swales	35.94289	-119.4585	0.03	21	N/A	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030012	San Joaquin River	Tulare-Buena Vista Lakes	CP 2/3
TBD	AB017AWL01-2017	Vernal Pool	35.86601	-119.4122	0.03	109	0.002578465	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB017AWL07-2017	Vernal Pool	35.86077	-119.4119	0.04	229	0.035920366	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB017AWL08-2017	Vernal Pool	35.86041	-119.4121	0.01	486	0.14522	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB018AWL01-2017	Vernal Pool	35.85865	-119.4116	0.06	177	0.00000	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB018AWL04-2017	Vernal swale	35.85788	-119.4120	0.02	1805	0.53831	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB2017V508A	Vernal swale	35.85820	-119.4116	0.04	137	0.00000	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB2017V511	Vernal swale	35.85749	-119.412	0.01	32	0.00000	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	WatersName	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
TBD	AB2017V511A	Vernal swale	35.85637	-119.4116	0.04	250	0.03525	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB2017VP12	Vernal Pool	35.8555	-119.412	0.02	568	0.16064	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB2017VP11	Vernal Pool	35.85587	-119.4115	0.02	57	0	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB2017VP13	Vernal Pool	35.85558	-119.4115	0.08	278	0.00727	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB2017VP26	Vernal Pool	35.85997	-119.4107	0.01	16	0.00000	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB2017VP10ext	Vernal Pool	35.85617	-119.4120	0.01	46	0.00000	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.2	18030005	San Joaquin River	Upper Deer-Upper White	CP 2/3
TBD	AB2017VP03TT	Vernal Pool	35.74336	-119.3837	0.00	28	0.00578	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper White	CP 4
TBD	AB2017VP06	Vernal Pool	35.74123	-119.3826	0.00	13	0.00000	N/A	TBD Westervelt	TBD Westervelt	N/A	TBD	0.00	N/A	N/A	N/A	AGR IND PRO REC-1 REC-2 WARM WILD RARE GWR	558.7	18030005	San Joaquin River	Upper Deer-Upper White	CP 4
TOTAL VERNAL POOLS AND SWALES					0.41	4,252	0.93	N/A	TBD	TBD	N/A	TBD	0.00	On Site	1	0.00						

Table 2 (continued): Impacts to Waters for PP1.b

Anticipated Year of Construction	Waters Name	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Impact - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
Total Section 404/401 Wetland Water Body Type The resources subject to regulation under the CWA Section 404 that comprise the wetland water body type in this certification consist of emergent wetland seasonal					2.92							TBD	1.09	Note: For most features mitigation on acreage for permanent impacts TBD.								
					78.01						TBD	19.61	Note: For some features mitigation on acreage for permanent impacts TBD.									
Total					80.93							0.00	20.70	Total Direct Permanent, Temporary and Indirect Impact							101.62	

**Table 2 (continued): Impacts to Waters for PP 1.b
(Mitigation Site Impacts)**

Anticipated Year of Construction	Waters Name	Type	Latitude	Longitude	Permanent Acreage Impacts	Volume of Fill (cy)	Acreage Indirect Bisect - Vernal Pools	Permanent Linear Foot Impacts	Permanent Mitigation Location	Permanent Mitigation Ratio n:1	Temporary Linear Foot Impacts	Permanent Mitigation Acreage	Temporary Direct Acreage Impacts	Temporary Mitigation Location	Temporary Mitigation Ratio n:1	Temporary Mitigation Acreage	Beneficial Uses	Basin Plan HUC	USGS HUC	Receiving Waters	Watershed	Construction Package
PP 1.b Mitigation Sites - Riverine																						
2018	na	River ne (Seasona)	36.71500	-119.5366	0.00	0	N/A	N/A	On Site	1	115	0.00	1.48	On Site	1	1.48	WARM WILD RARE GWR	551.7	18030009	Kings River	Tulare Lake	CP 2/3 & 4
2018		River ne (Intermittent Drainage)	36.70860	-119.5336	0.00	0	na	na	na	na	na	ba	0.04	Cottonwood Mit gation Site	1	0.04	WARM WILD RARE GWR	558.1	18030007	Cross Creek	Upper Kaweah	CP 2/3 & 4
TOTAL PP 1.b Mitigation Sites - Riverine					0.00	0	N/A	0	On Site	1	115	0.00	1.48	On Site	1	1.48						
PP 1.b Mitigation Sites - Wetlands																						
2018	NA	Wetland (Seasona)	36.7150	-119.5366	0.00	0	N/A	N/A	NA	2	N/A	NA	4.22	K ngs River Mit gation Site	1	4.22	WARM WILD RARE GWR	551.7	18030012	Kings River	Tulare Lake	CP 2/3 & 4
TOTAL WETLAND					0.00	0	N/A	N/A	TBD	2	N/A	0.00	4.22	On Site	1	0.00						
VERNAL POOLS AND SWALES																						
2018	NA	Vernal Pools and Swales	36.70861	-119.5336	0.00	NA	N/A	N/A	NA	NA	N/A	NA	0.290	Cottonwood Creek Mit gation Site	N/A	0.290	WARM WILD RARE GWR	558.1	18030007	Cross Creek	Upper Kaweah	CP 2/3 & 4
TOTAL VERNAL POOLS AND SWALES					0.00	0	0	N/A	TBD	TBD	N/A	0.00	0.290	N/A	1	0.290						

Impacts due to PP 1.b mitigation site development only are reported on this page of Table 2.

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Notice of Determination

Appendix D

To:

Office of Planning and Research
 U.S. Mail: Street Address:
 P.O. Box 3044 1400 Tenth St., Rm 113
 Sacramento, CA 95812-3044 Sacramento, CA 95814

County Clerk
 County of: _____
 Address: _____

From:

Public Agency: Water Resources Control Board
 Address: DWQ, 1001 I St., 15th Floor,
Sacramento, CA 95814

Contact: Cliff Harvey
 Phone: 916-558-1709

Lead Agency (if different from above):
California High Speed Rail Authority

Address: 770 L St., Su. 800
Sacramento, CA 95814

Contact: Mark McLoughlin
 Phone: (916) 403-6934

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2009091126

Project Title: California High Speed Train - Fresno to Bakersfield Permitting Packages 1.a and 1.b

Project Applicant: California High Speed Rail Authority

Project Location (include county): 87 mile-long right of way through Fresno, Kings, Tulare, and Kern Counties

Project Description:

This is the 2nd amendment to the original Order. The Project will construct approximately 87 miles of the overall HST project. The Project includes the HST tracks, structures, stations, traction power substations, maintenance facilities, and train vehicles. The HST would use four different track types: at-grade, elevated by either a structure or on a retained fill platform, and below-grade tracks in a retained cut. The type of bridges that might be built includes full channel spans, large box culverts, or, for some larger river crossings, piers within the ordinary high-water channel. This amendment provides for ecological restoration and enhancement work at approved mitigation sites.

This is to advise that the State Water Resources Control Board has approved the above
 Lead Agency or Responsible Agency)

described project on 10/2/2018 and has made the following determinations regarding the above
 (date)
 described project.

1. The project [will will not] have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
 A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [were were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [was was not] adopted for this project.
5. A statement of Overriding Considerations [was was not] adopted for this project.
6. Findings [were were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:

http://www.hsr.ca.gov/Programs/Environmental_Planning/index.html

Signature (Public Agency): [Signature] Title: Executive Director, Office of Planning & Research

Date: 10/2/18 Date Received for filing at OPR: OCT 02 2018

California High Speed Train – Fresno to Bakersfield CEQA Findings of Fact

A. Environmental Review

On May 7, 2012, the California High Speed Rail Authority (Authority), as lead agency, certified a Final Environmental Impact Report (FEIR) (State Clearinghouse (SCH) No. 2009091126) for the Project and filed a Notice of Determination (NOD) at the SCH on May 8, 2014. The State Water Board is a responsible agency under CEQA (Pub. Resources Code, § 21069) and in making its determinations and findings, must presume that the Authority's certified environmental document comports with the requirements of CEQA and is valid. (Pub. Resources Code, § 21167.3.) The State Water Board has reviewed and considered the environmental document and finds that the environmental document prepared by the Authority addresses the Project's water resource impacts. (Cal. Code Regs., tit. 14, § 15096, subd. (f).) The environmental document includes the mitigation monitoring and reporting program (MMRP) developed by the Authority for all mitigation measures that have been adopted for the Project to reduce potential significant impacts. (Pub. Resources Code, § 21081.6, subd. (a)(1); Cal. Code Regs., tit. 14, § 15091, subd. (d).)

The FEIR described impacts for the entire Fresno to Bakersfield line, extending from the Fresno Station to the Bakersfield Station. The portion of the Preferred Alternative that the Authority approved extends from Monterrey Street in the City of Fresno to 7th Standard Road in Kern County. The northern limit of the approval in the City of Fresno does not include the Fresno Mariposa Station area, which the Authority previously approved in 2012 with Resolution HSRA# 12-20. The southern limit of the approval is at 7th Standard Road in Kern County. The Authority is intentionally reserving a decision on the alignment south of 7th Standard Road in Kern County and into the City of Bakersfield to a future proceeding.

These findings therefore pertain only to those project elements that were approved by the Authority in its CEQA Findings of Fact and Statement of Overriding Considerations, dated May 2014 and also included in its final project description in its application for Certification (i.e., the Project as described in Sections IV and V of this Certification).

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, including:

- The Program Environmental Impact Report (EIR), which includes analyses of broad impacts and serves as a first tier document for the FEIR, is available at: http://www.hsr.ca.gov/Programs/Environmental_Planning/EIR_EIS/index.html
- The Program MMRP was also consulted. It is available at: http://www.hsr.ca.gov/docs/programs/eir-eis/brdmtg1105_item7_8mitigation.pdf

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 inclusive of Volumes 1 – 6 and is available at: http://www.hsr.ca.gov/Programs/Environmental_Planning/final_fresno_bakersfield.html

- The Project Mitigation Monitoring and Reporting Plan (MMRP),¹ which is incorporated herein by reference and available as Appendix C of the Federal Railroad Administration's Record of Decision (ROD) at:
http://www.hsr.ca.gov/docs/programs/fresno-baker-eir/final_ERIS_FresBaker_AppDocs_ROD_Appendices.pdf.
- The *Draft Fresno to Bakersfield Biological Resources and Wetlands Technical Report*, dated July 2012. This report can be accessed at:
http://www.hsr.ca.gov/docs/programs/fresno-baker-eir/RDrft_EIR_FB_TR_BioWetlnds.pdf
- The Authority's application for Certification with all attachments, which include detailed project maps, a detailed project description, copies of information provided to other resource agencies, compensatory mitigation ratio-setting methodologies, technical reports and other supporting information.

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

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

C. Findings

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

1. Findings regarding impacts that will be avoided or mitigated to a less than significant level. (Pub. Resources Code, § 21081, subd. (a)(1); Cal. Code Regs., tit. 14, § 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: F-B BIO Impact #1 – Construction Effects on Special-Status Plant Species.

Special-status plant species, many of which are exclusively found in stream and wetland habitats, have the potential to occur across all Project alternatives. Potential direct and indirect Project impacts to special-status plant species would degrade beneficial uses designated for rare species habitats (RARE) in waters of the state. Direct impacts to special-status plant species may occur as a result of construction crews removing vegetation within temporary impact areas, and from construction vehicles and personnel disturbing vegetation (i.e., trampling, covering, and crushing individual plants, populations, or suitable potential habitat for special-status plant species). Indirect

¹ Appendix C of the ROD provides a *Project Mitigation Monitoring and Enforcement Plan (MMEP)*, dated June, 2014, serves as the MMRP for the Project.

impacts to special-status plant species, including impacts outside the project footprint, could potentially result from the following: erosion, siltation, and runoff into natural and constructed watercourses; soil and water contamination from construction equipment leaks; and construction dust. Invasive plant species or noxious weeds could be introduced through construction activities causing both direct and indirect impacts.

a.ii. Facts in Support of Finding_Mitigation measures F-B BIO-MM 1-7, 9, 11, 15-17, 47-48 and 53 are proposed to address construction effects to special-status species. These measures require implementation of various BMPs that are widely accepted as the feasible and effective for weed control and management, and for protection of special status plant species. Measures include:

- BIO-MM#1. Designate Project Biologist(s), Regulatory Specialist (Waters), Project Botanist, and Project Biological Monitor(s).
- BIO-MM#2. Regulatory Agency Access.
- BIO-MM#3. Prepare and Implement a Worker Environmental Awareness Program.
- BIO-MM#4. Prepare and Implement a Weed Control Plan and Annual Vegetation Management Plan.
- BIO-MM#5. Prepare and Implement a Biological Resources Management Plan.
- BIO-MM#6. Prepare and Implement a Restoration and Revegetation Plan.
- BIO-MM#7. Delineate Environmentally Sensitive Areas and Environmentally Restricted Areas (on plans and in-field).
- BIO-MM#9. Equipment Staging Areas.
- BIO-MM#11. Vehicle Traffic.
- BIO-MM#15. Post-Construction Compliance Reports.
- BIO-MM#16. Conduct Preconstruction Surveys for Special-Status Plant Species and Special-Status Plant Communities.
- BIO-MM#17. Prepare and Implement Plan for Salvage, Relocation, and/or Propagation of Special-Status Plant Species.
- BIO-MM#47: Restore Temporary Riparian Impacts
- BIO-MM#48: Restore Temporary Impacts on Jurisdictional Waters
- BIO-MM#53. Compensate for Impacts on Special-Status Plant Species.

Biological Monitors, Regulatory Specialists for impacts to waters, and other resource specialists would be designated by the Project Environmental Compliance Manager under BIO-MM #1. This measure which includes minimum qualifications for monitors and outlines the monitors' duties.

Regulatory agency access to areas of Project activity, necessary for verification of environmental compliance, is provided in BIO-MM#2.

Training for all project personnel in compliance with project environmental protection measures, including measures protecting waters of the state, is required under BIO-MM#3. The Worker Environmental Awareness Program (WEAP) includes requirements for worker training and documentation of training.

Prevention and control of invasive plants and noxious weeds will be managed through implementation of BIO-MM#4, which calls for development and implementation of a weed control plan that includes pre-project surveys, BMPs for control and prevention, and performance measures.

A Biological Resources Management Plan (BRMP) is required by MM-BIO#5. This BRMP requires that a concise summary of all project biological mitigation measures and permit conditions, including conditions of this certification, be compiled for use by all project personnel, to facilitate easy reference to all applicable mitigation measures and permit conditions.

Restoration of all temporary impacts to upland communities is required under BIO-MM#6. This measure requires preparation and implementation of a Restoration and Revegetation Plan (RRP) for revegetation of disturbed areas, including all areas above the Ordinary High Water Mark, and provides prevention of noxious weeds as required in BIO-MM#4. This measure ensures that potential impacts to waters due to inadequate restoration of uplands are avoided and minimized to the greatest feasible extent.

In addition, BIO-MM#47 requires restoration of temporary riparian impacts and BIO-MM#48 requires restoration of temporary impacts to jurisdictional waters. Restoration of temporary disturbance areas in disturbed valley foothill riparian areas is required under BIO-MM#47. This measure requires that during post-construction, the Contractor, under the direction of the Project Botanist, will revegetate all disturbed valley foothill riparian areas using appropriate plants and seed mixes (other riparian areas in different vegetation classifications, including annual grasslands, would be adequately restored under BIO-MM#6, discussed above).

Restoration of temporary impacts to jurisdictional waters is required under BIO-MM#48. This measure requires that disturbed jurisdictional waters be restored to original topography using stockpiled and segregated soils and appropriate seed mixes. This measure also requires documentation and reporting of compliance.

These three measures, 6, 47 and 48, ensure that restoration of temporary impacts to upland, stream and wetland areas is conducted. These measures require that restoration work generally required by other measures, is appropriately designed and implemented to meet the specialized ecological needs of upland, riparian and jurisdictional water areas.

All environmentally sensitive and restricted areas, including waters, would be delineated (i.e., flagged, fenced, or otherwise clearly marked) under requirements of BIO-MM#7. Compliance with this measure will ensure that project activities avoid all sensitive resources including waters unless specific activities are permitted for those areas.

Requirements for selection of equipment staging areas are provided in BIO-MM#9, so as to avoid potential impacts to special status resources including waters.

Erosion control products that incorporate monofilament netting can entrap wildlife and pollute waterways with trash when washouts occur. Use of "Mono-Filament" (sic) erosion control netting is prohibited by BIO-MM#10, and use of products that are

biodegradable or photodegradable is required. Documentation of compliance with these measures is also required.

Vehicular traffic and movement will be restricted to designated routes or areas of operation under BIO-MM#11. This measure will serve to protect sensitive resources, including waters, from impacts due to vehicular traffic or movement.

To document compliance, BIO-MM#15 requires that the Mitigation Manager, or their designee, will submit post-construction compliance reports consistent with the requirements of the protocols of each appropriate agency, including the Water Boards.

Special-status plant species and populations, including species and populations associated with waters such as vernal pool endemic species and riparian vegetation communities, will be surveyed, mapped and reported under BIO-MM#16 before onset of construction. This measure also provides for identification of plants for salvage and use in revegetation, and for species or population impacts for which compensatory mitigation will be needed.

Implementation of salvage, propagation or relocation of special status plants identified under BIO-MM#16, including species and populations associated with waters such as vernal pool endemic species and riparian vegetation communities, is required under BIO-MM#17. This measure also includes requirements for documentation and reporting of compliance.

Compensation for unavoidable impacts to special status plant species and populations, including species and populations associated with waters such as vernal pool endemic species and riparian vegetation communities, is required under BIO-MM#53. This measure requires compensation as required by the U.S. Fish and Wildlife Service and the Department of Fish and Wildlife, at approved mitigation banks or programs, or through permittee-responsible mitigation site development. Measure BIO-MM#63, discussed below, also provides for compensation for impacts to jurisdictional waters.

b.i. Potential Significant Impact: BIO Impact #3 – Construction Effects on Habitats of Concern: As described in Section 3.7.4 of the Final EIR/EIS, habitats of concern occurring within the study area for the Preferred Alternative include special-status plant communities, jurisdictional waters, conservation areas, and protected trees. These habitats may be subject to direct and indirect impacts due to construction activities. Impacts include removal or disruption (i.e., trampling and crushing) of special-status plant communities by construction vehicles and personnel. Direct construction impacts to jurisdictional waters include the placement of fill during construction in both man-made and natural jurisdictional waters. Construction staging areas are planned adjacent to seasonal riverine features to facilitate construction of elevated structures, and are also planned where bridges are proposed at at-grade crossings. Indirect impacts could include contamination of jurisdictional waters and riparian areas, including outside the Project footprint, from construction equipment leaks; construction dust reducing photosynthetic capability; and an increased risk of fire in adjacent open spaces.

b.ii. Facts in Support of Finding: Mitigation measures F-B BIO-MM 1- 3, 5 – 7, 9, 11, 15, 16, 17, 47, 48 and 53 – discussed above - are proposed to address this impact. In addition, the following measures are also required, and are discussed below: BIO-MM# 49, 61-63 and 65.

- BIO-MM#49. Monitor Construction Activities within Jurisdictional Waters.
- BIO-MM#61. Compensate for Permanent Riparian Impacts.
- BIO-MM#62. Prepare and Implement a Site-Specific Comprehensive Mitigation and Monitoring Plan
- BIO-MM#63. Compensate for Permanent and Temporary Impacts on Jurisdictional Waters
- BIO-MM#65. Offsite Habitat Restoration, Enhancement and Preservation.

These measures require development and implementation of various plans and BMPs that are widely accepted as the feasible and effective for mitigation of construction effects on habitats of concern, and for protection of special status plant species.

As discussed above, restoration of temporary disturbance areas in disturbed valley foothill riparian areas is required under BIO-MM#47. This measure requires that during post-construction, the Contractor, under the direction of the Project Botanist, will revegetate all disturbed valley foothill riparian areas using appropriate plants and seed mixes (other riparian areas in different vegetation classifications, including annual grasslands, would be adequately restored under BIO-MM#6, discussed above).

Also as discussed above, restoration of temporary impacts to jurisdictional waters is required under BIO-MM#48. This measure requires that disturbed jurisdictional waters be restored to original topography using stockpiled and segregated soils and appropriate seed mixes. This measure also requires documentation and reporting of compliance.

Monitoring of ground-disturbing activities in or adjacent to jurisdictional waters is required under BIO-MM#49. Required monitoring will observe and document through regular reporting adherence to measures necessary for protection of waters, including – but not limited to – BIO-MM#5, 7, 8, 10, 12-15, 47 and 48 and conditions of this certification.

Compensation for permanent riparian impacts is required under BIO-MM#61, and is to be implemented under a Comprehensive Mitigation and Monitoring Plan (CMMP). Compensation may be accomplished by purchase of credits from an approved mitigation bank or program, or by development of a permittee-responsible mitigation property. Mitigation ratios will be subject to agency approval, including approval by the State Water Board.

The CMMP (mentioned under BIO-MM#61 above) will be prepared under BIO-MM#62 and implemented under requirements of BIO-MM#62. Appropriate avoidance, minimization, compensatory mitigation, and monitoring measures to be incorporated into the CMMP. The CMMP will outline the intent to mitigate for the lost conditions, functions, and values of impacts to jurisdictional waters and state streambeds consistent with resource agency requirements and conditions presented in Sections 404 and 401 of the CWA and Section 1600 of the CFGC. The CMMP also requires development of detailed mitigation plans for each proposed mitigation site.

Compensatory mitigation for unavoidable permanent and temporary impacts to jurisdictional waters is required under BIO-MM#63. Under this measure, the Authority will mitigate permanent and temporary wetland impacts through compensation determined in consultation the State Water Board and other agencies.

Before site preparation at a mitigation site, the Authority will identify short-term, temporary and/or long-term permanent effects to the natural landscape caused by construction of the mitigation site as required by BIO-MM#65, including effects on the site's hydrology and downstream resources. The authority would then develop and implement steps to avoid impacts to desirable ecological features or functions that should be retained on site, and will report on compliance with this measure.

c.i. Potential Significant Impact: BIO Impact #5 – Project Effects on Special Status Plant Species: Direct and indirect Project impacts to special status plant species, including species characteristic of or endemic to Project area streams and wetlands, could occur as a result of Project operation. Direct impacts to special-status plant species would result from the permanent removal of vegetation from within the Preferred Alternative footprint. Disturbance of individuals, populations, or potential suitable habitat for special-status plant species could occur during ongoing operation and maintenance activities. Indirect impacts to special-status plant species could potentially result from erosion, siltation, and runoff into natural and constructed watercourses; soil and water contamination from construction equipment leaks; construction dust and an increased risk of fire.

c.ii. Facts in Support of Finding: Various measures are proposed to avoid, minimize and compensate for direct and indirect Project effects to special status plant species due to construction and operation of the Project. The proposed measures are based on practices that are widely used and accepted as being capable of providing adequate mitigation for these impacts. Measures include BIO-MM# 1, 2, 3, 5, 6, 7, 9, 11, 14, 15, 16, 17 and 53, discussed above.

d.i. Potential Significant Impact: BIO Impact #7 – Project Effects on Habitats of Concern.

Habitats of concern occurring within the study area for the Preferred Alternative include special-status plant communities, jurisdictional waters, conservation areas, and protected trees. Direct and Indirect impacts to these habitats could occur as a result of Project operation and maintenance. These include the permanent removal of vegetation from within the construction footprint, and the disturbance (i.e., trampling or crushing) of plants due to an increase of pedestrian access/activity in the area during construction and operation of the Project. The contouring and placement of fill in jurisdictional waters would result in the permanent loss of jurisdictional waters; irreversible impacts on the physical, chemical, and biological characteristics of aquatic substrates and food webs; and a potential increase in erosion and sediment transport into adjacent aquatic areas. Permanent impacts to jurisdictional waters would occur during operation of bridges and viaducts over biological resources such as rivers or creeks (e.g., Kings River, Dutch John Slough, Cole Slough, Cross Creek, Tule River, Deer Creek, and Kern River) and wetlands, as well as man-made ditches and basins (including shading, support piers, and removal of vegetation). Impacts due to operations include potential ongoing deposition of fluids, brake lining particles, and other materials that may be discarded or deposited from the trains or the structures. Impacts due to maintenance include potential ongoing deposition of materials and fluids from maintenance equipment, materials, supplies, containers and packaging.

Indirect impacts could include contamination of habitats of concern, including habitats outside of the Project footprint, from increased erosion, sedimentation, siltation, and runoff due to alterations in topography and hydrology; wind erosion effects; an increased risk of fire in adjacent open spaces; and the introduction of noxious plant species from increased human activity/disturbance. Indirect impacts also could include increased risk of introduction or increase of invasive plants or noxious weeds.

d.ii. Facts in Support of Finding:

Impact BIO Impact #7 is similar in nature to the previously discussed impacts, and mitigation measures for impacts to waters due to the installed Project and its operation as described in Impact BIO #7 are therefore generally the same as the measures proposed for temporary and permanent impacts due to project construction described above. Measures MM BIO# 1-7, 11, 15, 43, 47-49, 53, 61-63 and 65, as discussed above, are proposed for this BIO Impact #7. These proposed measures are based on practices that are widely used and accepted as being capable of providing adequate mitigation for these impacts.

2. Findings regarding mitigation measures which are the responsibility of another agency. (Pub. Resources Code, § 21081, subd. (a)(2); Cal. Code Regs., tit. 14, §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 State 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:

BIO IMPACT #2 – Construction Impacts on Special-Status Wildlife Species
BIO IMPACT #6 – Project Effects on Special Status Wildlife Species
BIO IMPACT #8 – Project Effects on Wildlife Movement Corridors

The impacts described for BIO IMPACT #2, BIO IMPACT #6 and BIO IMPACT #8 are similar in nature; Impacts #2 and #8 address impacts during construction and #6 addresses impacts during operation and maintenance, but the actual impacts for each are similar, as are the mitigation measures discussed below.

Wildlife habitat and land cover types in the footprint of the Project have the potential to support a variety of special-status wildlife species, including species that are directly and indirectly dependent on or associated with waters of the state: California tiger salamander, valley elderberry longhorn beetle, vernal pool fairy shrimp and vernal pool tadpole shrimp. Two designated beneficial uses of water require protection of the aquatic habitats used by these species: Rare, Threatened or Endangered Species (RARE) which protects uses of water to support habitats, and Wildlife Habitat (WILD) which protects uses of water that support terrestrial or wetland ecosystems.

Construction activities have the potential to disturb the life cycles of the identified special-status species covered under WILD and RARE through direct impacts resulting from harassment, disturbance, injury, nest abandonment or death of individuals, and through disturbance of suitable habitats. In addition, indirect impacts could occur due to water quality degradation, hydrological modifications, habitat degradation, introduction of

nonnative, invasive or noxious weeds; these indirect impacts can cause reduction in host plant vigor, and in some cases may result in mortality of individuals.

The beneficial use RARE would cover the fifty-four special-status wildlife species that have the potential to occur in and near the Project footprint and that may be directly or indirectly impacted by construction activities in waters of the state. Direct impacts may occur as a result of direct removal of host plants, permanent conversion of occupied habitat to project infrastructure, direct strike during operation and maintenance, trampling or crushing, exposure to contaminants, erosion, and sedimentation. Indirect impacts could result from increased noise, light, visual (motion) and ground disturbance. During operation, maintenance activities could contribute to chemical runoff and pollution of adjacent habitat.

a.ii. Facts in Support of Finding: Mitigation measures are similar for BIO IMPACT #2, which addresses impacts that occur during Project construction, and BIO IMPACT #6 and #8, which address impacts that occur during the operation and maintenance of the Project.

Measures include numerous biological mitigation measures discussed above that are applicable project-wide, (e.g., BIO MM#1-7, 9, 11, 15, 16, 47, 48, 49, 61, 62, 63, and 65.) In addition, measures to protect wildlife in general and species-specific measures are also proposed. Although the Water Boards require compliance with these measures as part of the Water Boards' authorities, these measures would be primarily associated with compliance with the Fish and Game Code as administered and enforced by the Department of Fish and Wildlife. Protection of species listed under the federal Endangered Species Act would also primarily be enforced by the U.S. Fish and Wildlife Service (USFWS). These species-specific measures are widely accepted and in use, and are likely to provide adequate protection of the species of concern for the Project. The measures include:

- **AVR-MM#1b.** Minimize Visual Disruption from Construction Activities.
- **BIO-MM#8.** Wildlife Exclusion Fencing
- **BIO-MM#12.** Entrapment Prevention
- **BIO-MM#13.** Work Stoppage
- **BIO-MM#14.** Take Notification and Reporting.
- **BIO-MM#18.** Conduct Preconstruction Sampling and Assessment for Vernal Pool Fauna.
- **BIO-MM#19.** Seasonal Vernal Pool Work Restriction.
- **BIO-MM#20.** Implement and Monitor Vernal Pool Protection.
- **BIO-MM#21.** Implement Conservation Guidelines for the Valley Elderberry Longhorn Beetle.
- **BIO-MM#22.** Conduct Preconstruction Surveys for Special-Status Reptile and Amphibian Species.
- **BIO-MM#23.** Conduct Special-Status Reptile and Amphibian Monitoring, Avoidance, and Relocation.
- **BIO-MM#24.** Conduct Protocol and Preconstruction Surveys for California Tiger Salamander.
- **BIO-MM#25.** Implement Avoidance and Minimization Measures for California Tiger Salamander.
- **BIO-MM#51.** Install Flashing or Slats within Security Fencing.
- **BIO-MM#52.** Construction in Wildlife Movement Corridors.

- **BIO-MM#54.** Compensate for Impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp.
- **BIO-MM#55.** Implement Conservation Guidelines during project operation for Valley Elderberry Longhorn Beetle.
- **BIO-MM#56.** Compensate for Impacts on California Tiger Salamander.

General wildlife measures include restrictions on construction in wildlife movement corridors found in BIO-MM#52, entrapment prevention measures required by BIO-MM#12, and authority for environmental monitors to order work stoppage as required by BIO-MM#13. Wildlife exclusion fencing, as required under BIO-MM#8, would prevent wildlife from entering construction zones and thus reduce risk of death due to construction activity. These general measures would protect all wildlife species, including species that are directly and indirectly dependent on or associated with waters of the state. Although primarily intended to mitigate for light intrusion to human receptors, compliance with Aesthetics and Visual Resources (AVR)-MM#1b would also reduce light impacts to wildlife during construction.

For vernal pools species, preconstruction surveys to confirm presence or absence of vernal pool fauna would be required by BIO-MM#18. Seasonal work restrictions would be required under BIO-MM#19 when vernal pool fauna are known to be present. Specific monitoring protocols would be implemented through compliance with BIO-MM#20. Under BIO-MM#54, compensation for unavoidable permanent impacts on vernal pool fairy shrimp and vernal pool tadpole shrimp is required. This requirement, primarily enforced by USFWS, would likely be accomplished at sites provided in compliance with BIO-MM#63, discussed above.

Implementation of the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (see: https://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/velb_conservation.pdf) is required by BIO-MM#21. These guidelines, promulgated and enforced by the USFWS, are the accepted standards for protection of this species. Compensatory mitigation as required under the Conservation Guidelines is also required for unavoidable impacts on valley elderberry longhorn beetle by BIO-MM#55.

Protection of reptiles and amphibians is required under BIO-MM#22-25, 51, and 56. Preconstruction surveys are required under BIO-MM#22, and monitoring, avoidance and relocation are required under BIO-MM#23. Security and other fences in reptile and amphibian habitats are required in BIO-MM#5 to include slats, flashing or similar structural elements that allow reptiles and amphibians to pass through the fences unimpeded. In addition, specific requirements for California tiger salamander (CTS) surveys, avoidance, monitoring and relocation are provided in BIO-MM#24 and 25. When avoidance is not feasible, compensatory mitigation for loss of CTS habitats is required under BIO-MM#56.

All of these measures are derived from practices and principles that are widely used and commonly accepted as being adequate to mitigate for the impacts to wildlife that are reported for the Project. Staff finds that these measures are likely to ensure adequate mitigation for Construction and Project direct and indirect impacts to species that are directly and indirectly dependent on or associated with waters of the state, and that CDFW and USFWS hold primary responsibility for enforcement of these measures.

D. Determination

The State 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. (Cal. Code Regs., tit. 14, § 15096, subd. (h).) The State Water Board will file a NOD with the SCH within five (5) working days from the issuance of this Order. (Cal. Code Regs., tit. 14, §§ 15096, subd. (i).)

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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.

Report Submittal Instructions

1. Check the box on the Report and Notification Cover Sheet next to the report or notification you are submitting.
 - **Part A (Annual Report):** This report will be submitted annually on January 31 until a Notice of Project Complete Letter is issued.
 - **Part B (Project Status Notifications):** Used to notify the State 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.
2. Sign the Report and Notification Cover Sheet and attach all information requested for the Report Type.
3. **Electronic Report Submittal Instructions:**
 - Submit signed Report and Notification Cover Sheet and required information via email to: stateboard401@waterboards.ca.gov and cc: Clifford.harvey@waterboards.ca.gov
 - Include in the subject line of the email:
Subject: ATTN: Cliff Harvey; Reg. Measure ID: 395528_Report

Definition of Reporting Terms

1. **Active Discharge Period:** The active discharge period begins with the effective date of this Order and ends on the date that the Permittee receives a Notice of Completion of Discharges Letter or, if no post-construction monitoring is required, a Notice of Project Complete Letter. The Active Discharge Period includes all elements of the Project including site construction and restoration, and any Permittee responsible compensatory mitigation construction.
2. **Request for Notice of Completion of Discharges Letter:** This request by the Permittee to the State 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. State 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.
3. **Request for Notice of Project Complete Letter:** This request by the Permittee to the State 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. State 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.

4. **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 State Water Board staff. The Post-Discharge Monitoring Period includes continued water quality monitoring or compensatory mitigation monitoring.
5. **Effective Date:** Date of Order issuance.

Map/Photo Documentation Information

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

1. **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 (NAD38) 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.

2. **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.

REPORT AND NOTIFICATION COVER SHEET

Project: California High Speed Train – Fresno to Bakersfield
Permittee: California High Speed Rail Authority
Reg. Meas. ID: 395528 **Place ID:** 805103
Order Effective Date: January 27, 2017

Report Type Submitted

Part A – Project Reporting

Report Type 1 **Monthly Report**
Report Type 2 **Annual Report**

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**

Part C - Conditional Notifications and Reports

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

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

Print Name ¹

Affiliation and Job Title

Signature

Date

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

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

Permittee's Signature

Date

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

Part A – Project Reporting

Report Type 2	Annual Report
Report Purpose	Notify the State Water Board staff of Project status during both the active discharge and post-discharge monitoring periods.
When to Submit	Annual reports shall be submitted each year on January 31 of the following year. Annual reports shall continue until a Notice of Project Complete Letter is issued to the Permittee.
Report Contents	<p>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.</p> <p><u>During the Active Discharge Period</u></p> <ul style="list-style-type: none"> • Topic 1: Construction Summary • Topic 2: Mitigation for Temporary Impacts Status • Topic 3: Compensatory Mitigation for Permanent Impacts Status <p><u>During the Post-Discharge Monitoring Period</u></p> <ul style="list-style-type: none"> • Topic 2: Mitigation for Temporary Impacts Status • Topic 3: Compensatory Mitigation for Permanent Impacts Status
Annual Report Topics (1-3)	
Annual Report Topic 1	Construction Summary
When to Submit	With the annual report during the Active Discharge Period.
Report Contents	<ol style="list-style-type: none"> 1. 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. 2. Map showing general Project progress. 3. If applicable: <ol style="list-style-type: none"> 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.
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	<ol style="list-style-type: none"> 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.
Annual Report Topic 3	Compensatory Mitigation for Permanent Impacts Status
When to Submit	With the annual report during both the Active Discharge Period and Post-Discharge Monitoring Period.
Report Contents	<p>*If not applicable report N/A.</p> <p>Part A. Permittee Responsible</p> <ol style="list-style-type: none"> 1. Planned date of initiation of compensatory mitigation site installation. 2. If installation is in progress, a map of what has been completed to date. 3. If the compensatory mitigation site has been installed, provide a final map and information concerning attainment of performance standards contained in the compensatory mitigation plan.

Part B – Project Status Notifications

Report Type 3	Commencement of Construction
Report Purpose	Notify State Water Board staff prior to the start of construction.
When to Submit	Must be received at least seven (7) days prior to start of initial ground disturbance activities.
Report Contents	<ol style="list-style-type: none"> 1. Date of commencement of construction. 2. Anticipated date when discharges to waters of the state will occur. 3. Project schedule milestones including a schedule for onsite compensatory mitigation, if applicable.

Report Type 4	Request for Notice of Completion of Discharges Letter
Report Purpose	Notify State Water Board staff that post-construction monitoring is required and that active Project construction, including any mitigation and permittee responsible compensatory mitigation, is complete.
When to Submit	Must be received by State Water Board staff within thirty (30) days following completion of all Project construction activities.
Report Contents	<ol style="list-style-type: none"> 1. Status of storm water Notice of Termination(s), if applicable. 2. Status of post-construction storm water BMP installation. 3. Pre- and post-photo documentation of all Project activity sites where the discharge of dredge and/or fill/excavation was authorized. 4. Summary of Certification Deviation discharge quantities compared to initial authorized impacts to waters of the state, if applicable. 5. An updated monitoring schedule for mitigation for temporary impacts to waters of the state and permittee responsible compensatory mitigation during the post-discharge monitoring period, if applicable.

Report Type 5	Request for Notice of Project Complete Letter
Report Purpose	Notify State Water Board staff that construction and/or any post-construction monitoring is complete, or is not required, and no further Project activity is planned.
When to Submit	Must be received by State Water Board staff within thirty (30) days following completion of all Project activities.
Report Contents	<p>Part A: Mitigation for Temporary Impacts</p> <ol style="list-style-type: none"> 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.

Part B: Permittee Responsible Compensatory Mitigation

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

Part C: Post-Construction Storm Water BMPs

7. Date of storm water Notice of Termination(s), if applicable.
8. Report status and functionality of all post-construction BMPs.

Part C – Conditional Notifications and Reports

Report Type 6	Accidental Discharge of Hazardous Material Report
Report Purpose	Notifies State Water Board staff that an accidental discharge of hazardous material has occurred.
When to Submit	Within five (5) working days following the date of an accidental discharge. Continue reporting as required by State Water Board staff.
Report Contents	<ol style="list-style-type: none"> 1. 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. 2. 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. 3. Locations and construction specifications of any barriers, including silt curtains or diverting structures, and any associated trenching or anchoring.

Report Type 7	Violation of Compliance with Water Quality Standards Report
Report Purpose	Notifies State Water Board staff that a violation of compliance with water quality standards has occurred.
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 State Water Board staff.
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 State Water Board staff.

Report Type 8	In-Water Work and Diversions Water Quality Monitoring Report
Report Purpose	Notifies State Water Board staff of the completion of in-water work.
When to Submit	Within three (3) working days following the completion of in-water work. Continue reporting in accordance with the approved water quality monitoring plan.
Report Contents	As required by the approved water quality monitoring plan.

Report Type 9	Modifications to Project Report
Report Purpose	Notifies State 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.
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.
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.

Report Type 10	Transfer of Property Ownership Report
Report Purpose	Notifies State Water Board staff of change in ownership of the Project or Permittee-responsible mitigation area.
When to Submit	At least 10 working days prior to the transfer of ownership.
Report Contents	<ol style="list-style-type: none"> 1. A statement that the Permittee has provided the purchaser with a copy of this Order and that the purchaser understands and accepts: <ol style="list-style-type: none"> a. 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 b. responsibility for compliance with any long-term BMP¹ maintenance plan requirements in this Order. 2. A statement that the Permittee has informed the purchaser to submit a written request to the State Water Board to be named as the permittee in a revised order.

Report Type 11	Transfer of Long-Term BMP Maintenance Report
Report Purpose	Notifies State Water Board staff of transfer of long-term BMP maintenance responsibility.
When to Submit	At least 10 working days prior to the transfer of BMP maintenance responsibility.
Report Contents	A copy of the legal document transferring maintenance responsibility of post-construction BMPs.

¹ Best Management Practices (BMPs) is a term used to describe a type of water pollution or environmental control.

Attachment E
Signatory Requirements

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SIGNATORY REQUIREMENTS

*All Documents Submitted In Compliance With This Order
Shall Meet The Following Signatory Requirements:*

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

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

3. 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.”

Financial Assurances for Implementation and Maintenance of Mitigation.

To reasonably assure implementation of the approved Permittee Responsible Mitigation Plan (PRMP) for the California High Speed Rail Project Fresno to Bakersfield Section permitting phase 1.b (PP 1.b) as required by this Certification, the California High Speed Rail Authority (CHSRA) shall provide to the State Water Resources Control Board State Water Board] for approval a form of financial assurance as soon as possible, but no later one year (12 months) after the issuance of this amended Certification. The financial assurance instrument(s) shall set forth written documentation that:

1. CHSRA has proper legal authority to spend an appropriate amount of mitigation funding necessary to implement and maintain the mitigation as required by the PRMP and this Certification.
2. CHSRA has approved the expenditure of that amount of mitigation funding necessary for implementing and maintain the mitigation required by the PRMP and this Certification.
3. CHSRA has entered into a covenant or is otherwise obligated to spend that amount of mitigation funding necessary for implementing and maintaining the mitigation required by the PRMP and this Certification. At the election of the State Water Board, prior to submission of the financial assurance instrument(s) to the State Water Board for review, the State Water Board may specify that the document creating CHSRA's covenant or obligation shall include a provision that names the State Water Board as a third party beneficiary entitled to act, in the sole discretion of the State Water Board, to enforce CHSRA's covenant or obligation to expend the mitigation funding necessary for implementing and maintaining the mitigation required by the PRMP and this Certification.
4. The term and contingency measures of the financial assurance instrument(s) shall be sufficient to assure that the financial assurances shall not expire prior to completion of the mitigation and satisfaction of mitigation performance standards pursuant to the PRMP and this Certification.

Long-Term Management Financial Assurances. To reasonably assure long-term management and protection of the compensatory mitigation areas conserved in perpetuity by a dedicated conservation easement pursuant to the PRMP and this Certification, CHSRA shall provide the following documentation to the State Water Board for approval as soon as possible, but no later than one year (12 months) months after the issuance of this amended Certification:

1. A Property Analysis Record ("PAR") that determines an appropriate endowment value for purposes of funding long-term management and protection of the compensatory mitigation sites in perpetuity as required by the PRMP; and

2. Appropriate financial assurance instrument(s), which shall set forth written documentation that CHSRA has provided endowment or future annuity principle sufficient to fund the long-term management of the compensatory mitigation sites satisfying the following conditions:
 - a. The endowment shall provide the sum determined pursuant to the PAR to be sufficient to fund long term management and protection of the compensatory mitigation sites;
 - b. The endowment shall be provided by CHSRA to an entity qualified to receive the endowment under California Government Code Section 65968; and
 - c. The endowment holder shall be obligated to hold, manage and expend the endowment in perpetuity for long term management and protection of the compensatory mitigation sites as specified in the PRMP.

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Certification Deviation Procedures

Introduction

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

Process Steps

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

How to apply: By letter or email to the 401 staff designated as the contact for this Order.

Certification Deviation Request: The Permittee will request verification from the State 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.)

Action by State Water Board on Request: State Water Board staff will make a determination on the Certification Deviation request within 10 working days from receipt of a complete request and notify the Permittee via email of the staff determination. Determination of whether a Certification Deviation request is complete is at the discretion of State Water Board staff.

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.

Action by Water Board on Post-Discharge Activity Report: State Water Board staff will review the post-discharge Certification Deviation Report within 15 working days from receipt of a complete report. State Water Board staff will determine, in consultation with the Permittee and other regulatory agencies, if applicable, whether additional mitigation will be required. If additional mitigation is required, State Water Board staff will inform the Permittee within the 15-day review period. Determination of whether a post-discharge activity report is complete is at the discretion of State Water Board staff.

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;
 - g. Mitigation to be provided (approved mitigation ratio and amount).

Action by State Water Board on Annual Certification Deviation Report: Following issuance of a Notice of Completion of Discharges Letter or Notice of Project Complete Letter, the State Water Board will amend the Order to reflect all approved Certification Deviations and the amended Order will serve as a record of actual Project activities.