

Cosumnes River Bridge Replacement Project

Sacramento County
03-Sac-99-PM: 7.1/9.4
EA: 0F280
EFIS: 0312000069

Initial Study with Negative Declaration/Section 4(f) De Minimis Determination



Prepared by the
State of California, Department of Transportation



May 2019

General Information about This Document

The California Department of Transportation (Department), as assigned by the Federal Highway Administration (FHWA), has prepared this Initial Study with Negative Declaration for the proposed project located in Sacramento County, CA. The Department is the lead agency under the California Environmental Quality Act (CEQA) and under the National Environmental Policy Act (NEPA). The document tells you why the project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures. The Initial Study circulated to the public for 30 days between March 18, 2019 and April 16, 2019. Comments received during this period are included in Chapter 5. Elsewhere throughout this document, a vertical line in the margin indicates a change made since the draft document circulation. Minor editorial changes and clarifications have not been so indicated. Additional copies of this document and the related technical studies are available for review at the Caltrans District 3 office at 703 B Street, Marysville, CA 95901. This document may be downloaded at the following website <http://www.dot.ca.gov/dist3/departments/envinternet/envdoc.htm>.

Alternative Formats: The Final Environmental Document can be made available for individuals with sensory disabilities, in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, District 3, Attn: Deanna Shoopman, 703 B Street, Marysville, CA 95901, 530-741-4572, or use the California Relay Service TTY number, 1-800-735-2929.

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Cosumnes River Bridge Replacement Project
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INITIAL STUDY with (Proposed) Negative Declaration

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

2/8/2019
Date of Approval

Suzanne Melim
Suzanne Melim
Office Chief
California Department of Transportation
CEQA Lead Agency

NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (the Department) proposes a bridge replacement project on SR 99 between post miles 7.1 to 9.4 near the City of Elk Grove in Sacramento County, from 0.3 miles south of Dillard Road overcrossing (OC) to 0.6 miles south of Grant Line Road. (See Figure 1-1). The scope of work will include:

- Replacing four bridge structures with two bridge structures spanning the entire width of the roadway including the median; the Cosumnes River Bridges (Br Nos. 24-0020R and 24-0020L) and the Cosumnes River Overflow Bridges (Br Nos. 24-0021R and 24-0021L),
- Improving the Dillard Road Overcrossing,
- Relinquishing the McConnell Underpass (Br. No. 24-0048L) under the Union Pacific Railroad (UPRR) rail line,
- Constructing a southbound (SB) McConnell OH structure adjacent to the existing McConnell OH northbound (NB) structure or replacing the existing NB McConnell OH structure with a single McConnell OH for both NB and SB SR 99,
- Realigning the Southbound (SB) lanes of SR 99 at to align with the northbound (NB) SR 99 lanes,
- Access to southbound (SB) SR 99 at Eschinger Road will be maintained with the exception of a temporary closure from approximately fall of 2019 to winter of 2022 during construction. Eschinger Road on and off ramps for access to SR 99 SB will be reconstructed to connect to realigned SB SR 99. The project design will not preclude improvements to the connection in the future.

Determination

This proposed Negative Declaration [ND] is included to give notice to interested agencies and the public that it is the Caltrans' intent to adopt an ND for this project. This does not mean that the Department's decision regarding the project is final. This ND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project, and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on agriculture and forest resources, cultural resources, geology/soils/seismic, land use and planning, mineral resources, population and

housing, public services, transportation and traffic, tribal cultural resources, recreation and utilities and service systems.

In addition, the proposed project would have less than significant effects to visual/aesthetics, water quality, floodplain/hydrology, paleontology, hazardous waste, air quality, noise and biology.

Suzanne Melim

Suzanne Melim, Chief
North Region Environmental Services, South

5/20/19

Date

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Chapter 1. Proposed Project

Introduction

The California Department of Transportation (Caltrans) proposes a bridge replacement project on SR 99 between post miles 7.1 to 9.4 near the City of Elk Grove in Sacramento County, from 0.3 miles south of Dillard Road overcrossing (OC) to 0.6 miles south of Grant Line Road. (See Figure 1 Project Location and Vicinity Map). The proposed project would replace four bridge structures, the Cosumnes River Bridges (Br Nos. 24-0020R and 24-0020L) and the Cosumnes River Overflow Bridges (Br Nos. 2400021R and 24-0021L) with two new bridge structures. The new bridge structures will span the width of the roadway supporting all travel lanes and provide a median.

Additionally, the project would improve the Dillard Road Overcrossing, relinquish the SB McConnell Underpass (UP) (Br. No. 24-0048L) under the Union Pacific Railroad (UPRR) rail line, construct a new southbound (SB) McConnell Overhead (OH) structure adjacent to the existing McConnell OH northbound (NB) structure or replace the existing NB McConnell OH structure with a single McConnell OH for both NB and SB SR 99, and realign the Southbound (SB) lanes of SR 99 at to align with the northbound (NB) SR 99 lanes. Given concerns raised with regard to eliminating access to southbound (SB) SR 99 at Eschinger Road during the environmental document review process and public workshops, access to southbound (SB) SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future. See Appendix E for Eschinger Road layout plan sheet.

Project Funding

The project is funded in the SHOPP Program for delivery in the 19/20 fiscal year.

Purpose and Need

The purpose of this project is to address the current structural and seismic deficiencies of the four Cosumnes River bridges, the non-standard horizontal and vertical clearances of the existing SB McConnell UP, and the structural deficiencies of the Dillard Road Overcrossing as well as improve freight mobility and safety along this segment of SB SR 99.

The need for this project is multifaceted; first, to remedy the structural and seismic deficiencies of the bridges because of scour and non-standard design. Structurally, all four of the Cosumnes River Bridges are scour critical. A load rating analysis indicates that if calculated scour occurs, live loads from permit vehicles would exceed the design capacity of a majority of the piles for each structure. The existing bridges are too old and structurally deficient for rehabilitation. Additionally, the existing bridges are below the current flood standard and require soffit elevations at least 3' above the 100 year flood level to satisfy requirements of the Central Valley Flood Protection Board (CVFPB).

Also, the two SB Cosumnes River bridges (Br No. 24-0020L and 24-0021L) have sub-standard freeway/expressway bridge shoulder widths that may contribute to collisions. The latest collision history for this section of SR 99 is higher than the statewide average. See Table 1 for collision data for both NB and SB SR 99 directions.

Table 1. TASAS Collision Summary Three Year Collision History (2013-2015)

Co	Rte	PM	Dir	Tot	Fat	Inj	F + I	Actual			Average		
Sac	99	7.1/9.4	Both	125	2	30	32	0.01	0.16	0.61	0.008	0.18	0.52

The accident rate total in this segment is higher than the statewide average. The number of accidents increased each year from 2013 to 2015. Most of the accidents appear to be attributed to traveling too fast for conditions and making improper turns. This project is anticipated to reduce the collision rate due to improved clearance at bridge rails and approach rails by replacing the two SB bridges to include consistent freeway/expressway bridge shoulder widths to current standards (Br No. 24-0020L and 24-0021L)

Additionally, the existing SB McConnell UP has non-standard horizontal and vertical clearances per UPRR rail line requirements as well as sight distance and super-elevation deficiencies. Sight distance and super-elevation deficiencies of the McConnell SB UP make it more difficult for drivers to react to unexpected situations with other vehicles. Moreover, the existing SB McConnell UP constrains freight mobility since the non-standard vertical clearance limits the types of loads that can use the roadway. Further, the Dillard Road Overcrossing has a deficient, non-standard bridge railing that does not comply with current safety standards.

Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project. The alternatives include two build alternatives and a No-Build Alternative.

The California Department of Transportation proposes a bridge replacement project on SR 99 between post miles 7.1 and 9.4 near the City of Elk Grove in Sacramento County. The proposed project would replace four bridge structures with two bridge structures, each spanning the entire width of the roadway including the median; relinquish the McConnell Underpass (Br No. 24-0048L) under the UPRR rail line, construct a southbound (SB) McConnell OH structure adjacent to the existing McConnell OH northbound (NB) structure or replace the existing NB McConnell OH structure with a single McConnell OH for both NB and SB SR 99, realign the SB lanes of SR 99 at McConnell to align with the NB SR 99 lanes, improve the Dillard Road Overcrossing and maintain the access to southbound (SB) Eschinger Road on and off ramps from SB SR99 with the exception of a temporary closure during construction. Two build alternatives; Alternative 1 and Alternative 2, and a no-build alternative are being considered for the proposed project. The two build alternatives include common design features.

Common Design Features of the Build Alternatives (Alternative 1 and Alternative 2)

The build alternatives will include the following shared design features:

Cosumnes River Bridges, Cosumnes Overflow Bridges

- Replace the Cosumnes River Bridges (Br Nos. 24-0020R and 24-0020L)

- Replace the Cosumnes River Overflow Bridges (Br Nos. 24-0021R and 24-0021L)

The project proposes to replace the four Cosumnes River Bridges with two bridge structures, each spanning the entire width of the roadway including the median. The proposed design of these two bridge structures will satisfy the requirements of the Central Valley Flood Protection Board (CVFPB); namely that the two new bridges must have soffit elevations at a minimum of 3 feet above the 100-year flood level.

SB McConnell Underpass (UP)

The project proposes to relinquish the existing southbound (SB) McConnell Underpass (UP) (Br No. 24-0048L).

Realignment of SB SR 99

The SB lanes of SR 99 will be aligned with the NB SR 99 lanes.

Maintaining Eschinger Road SB SR 99 On-Off Ramps

Given concerns raised with regard to eliminating access to southbound (SB) SR 99 at Eschinger Road during the environmental document review process and public workshop, access to southbound (SB) SR 99 at Eschinger Road will be maintained with the exception of a temporary closure from approximately fall 2019 to winter 2022 during construction. Eschinger Road on and off ramps for access to SR 99 SB will be reconstructed to connect to realigned SB SR 99. The project design will not preclude improvements to the SR 99 connection in the future. See Appendix E for layout mapping of Eschinger Road on and off ramps.

Dillard Road Overcrossing (OC)

The project proposes to replace the non-standard bridge rails with type 842 bridge rail and strengthen the existing bridge deck to withstand the higher impact load of the new 842 bridge rail. The existing AC deck surfacing will be replaced with a polyester concrete deck overlay as well as reconstruct the overcrossing (OC) approaches and ramps. Additionally, a Roadway Informational System (RWIS) will be installed on the freeway and ramps, just north and south of the Dillard Road OC.

Project activities will also include utility relocation, equipment staging areas, borrow sites, grinding, constructing access roads, traffic striping and metal beam guard railing removal and replacement, upgrading the existing lighting, installing fiber optic cable along the freeway, reconstructing the existing 2:1 slope of the roadway embankment where it has eroded and upgrading drainage as needed. The project could also include recycling road base.

Stage construction, Traffic Management Plans and Lane Closure Charts will be developed to minimize public impacts during construction. Construction is estimated to take a maximum of four construction seasons. Right of way acquisition and Temporary Construction Easements will be required for the two build alternatives. See Figure 2 and Appendix B for Environmental Study Limit (ESL mapping).

Unique Features of Build Alternatives

Alternative 1

McConnell Overhead

Alternative 1 proposes to construct a SB McConnell OH structure closely parallel to the existing NB McConnell Overhead. The proposed McConnell SB OH structure must keep minimum side and overhead clearances per Union Pacific Rail Road (UPRR) requirements.

Alternative 2

McConnell Overhead

Alternative 2 proposes to demolish the existing northbound (NB) McConnell OH structure and replace it with a single bridge structure for both NB and SB spanning the entire width of the roadway (both NB and SB lanes, including the median). The proposed NB and SB McConnell OH structure must keep a minimum side and overhead clearances per Union Pacific Rail Road (UPRR) requirement.

No-Build (No-Action) Alternative

With the No-Build Alternative, Caltrans would not replace the Cosumnes River Bridges, Cosumnes River Overflow Bridges, relinquish the McConnell Underpass under the UPRR rail line, construct a SB McConnell OH structure or replace the existing McConnell OH structure for both NB and SB, realign the SB lanes of SR99 at McConnell to align with the NB SR 99 lanes, or improve the Dillard Road Overcrossing.

This alternative would not meet the purpose of the current project, which is to address the current structural and seismic deficiencies of the four bridges, the non-standard horizontal and vertical clearances of the existing McConnell UP structure, and the deficiencies of the Dillard Road Overcrossing as well as improve freight mobility and safety along this segment of SB SR 99.

Alternatives Considered But Eliminated From Further Discussion

None

Identification of Preferred Alternative

The PDT identified Alternative 2 as the preferred alternative after receiving Union Pacific Railroad's (UPRR) response to Caltrans' policy variance request allowing the new McConnell OH structure to encroach within UPRR right of way. In short, UPRR conditionally approved Caltrans' request for the variance with the requirement that the existing NB McConnell OH structure is removed and reconstructed to meet the minimum vertical and horizontal clearances standards for the existing rail alignment, and a future rail alignment within the UPRR corridor. It is less expensive for Caltrans to use UPRR's right of way to construct a shorter McConnell OH span for both NB and SB SR 99 traffic than to construct a longer, approximately 500+ ft. single McConnell OH span outside of UPRR right of way carrying SB SR 99 traffic only.

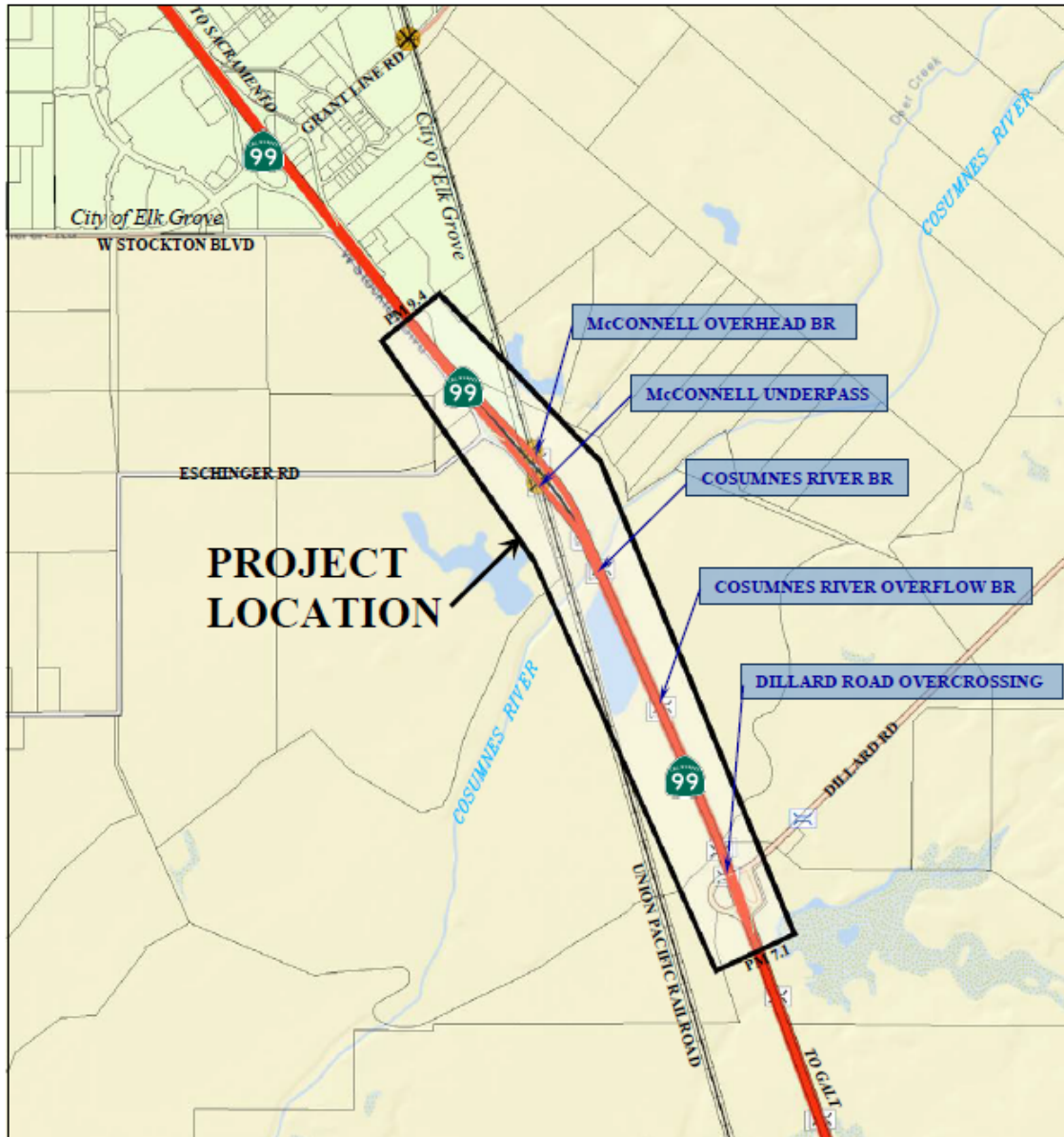
Permits and Approvals Needed

The following permits and other agency approvals are required:

Agency	Permits/Approvals	Status
Regional Water Quality Control Board	Section 401 Water Quality Certification	To be obtained prior to construction
US Army Corps of Engineers	Section 404 Nationwide Permit	To be obtained prior to construction
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	To be obtained prior to construction
Central Valley Flood Protection Board	Floodplain Encroachment Permit	To be obtained prior to construction
California Department of Fish and Wildlife	Temporary Access Permit for Dillard Unit of Cosumnes Ecological Reserve	To be obtained prior to construction

**Project Location Map
&
Environmental Study Limits (ESL) Mapping**

Figure 1. Project Location Map – Cosumnes River Bridge Replacement Project



IN SACRAMENTO COUNTY
03-0F280, PM 7.1/9.4

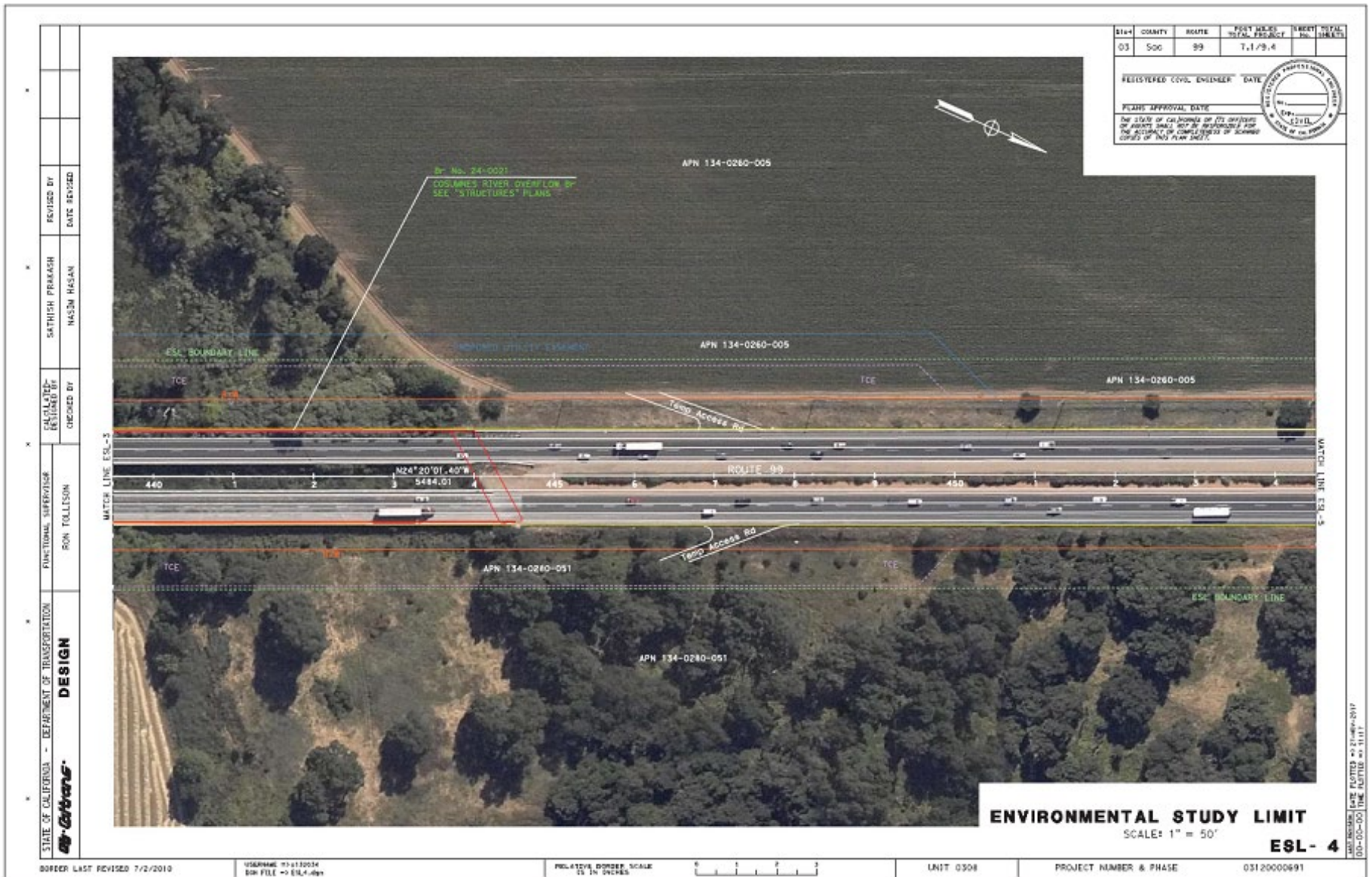
PROJECT LOCATION & VICINITY MAP

Figure 2. Environmental Study Limit (ESL) Mapping





BORDER LAST REVISED 7/2/2010	UTMZONE 11S12E54 SAC FILE => EML2.dgn	RELATIVE BORDER SCALE IS IN INCHES	UNIT 0308 PROJECT NUMBER & PHASE 03120000891
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STA#	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Sac	99	7.1/9.4		

REGISTERED CIVIL ENGINEER DATE _____
 PLEASE APPROVAL DATE _____

The State of California on its approval of these plans, does not warrant or represent the accuracy or completeness or scaling of any of the sheets.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

FUNCTIONAL SUPERVISOR: RON TOLLESON
 CHECKED BY: [blank]
 REVISIONS BY: SATHISH PRAKASH, HASM HASAN
 DATE REVISED: [blank]

BORDER LAST REVISED 7/2/2010 USERNAME: r1132034 RELATIVE BORDER SCALE: 1/8" = 1' UNIT: 0308 PROJECT NUMBER & PHASE: 03120000691



Blk	County	Route	POST NO. 12	SHEET TOTAL
03	Sac	99	7.1/9.4	14/14

REGISTERED CIVIL ENGINEER DATE: _____
 PROFESSIONAL SEAL NO. _____
 EXPIRES _____
 STATE OF CALIFORNIA
 PLANS APPROVAL DATE: _____
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DESIGNED BY	SAFIJAH FRAKASH
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FUNCTIONAL SUPERVISOR	RON TOLLESON
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DESIGNED BY	SAFIJAH FRAKASH
CHECKED BY	MUSIM HASAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
 cosumnes

ENVIRONMENTAL STUDY LIMIT
 SCALE: 1" = 50'
ESL - 6

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Chapter 2. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project as indicated by the checklist on the following pages

X	Aesthetics		Agriculture and Forestry	X	Air Quality
X	Biological Resources	X	Cultural Resources		Geology/Soils
	Greenhouse Gas Emissions	X	Hazardous Materials and Emissions	X	Hydrology/Water Quality
	Land Use Planning		Mineral Resources	X	Noise
	Population/Housing		Public Services		Recreation
	Transportation/Traffic		Tribal Cultural Resources		Utilities/Service Systems
X	Mandatory Findings of significance				

Chapter 3. California Environmental Quality Act (CEQA) Evaluation

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans. The Department is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Dist.-Co.-Rte.

P.M/P.M.

E.A.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation for a-d: "Less than Significant Impact" determinations in this section are based on the project scope, field reviews, and the Visual Impact Assessment (VIA) prepared on October 12, 2018. This segment of SR 99 is currently not designated as an Eligible State Scenic Highway or Officially Designated State Scenic Highway. Overall, the vegetation removal will result in a minimal change to the visual quality and character of the project corridor. Over time, new native vegetation planting that will be implemented as part of the project to offset the loss of riparian vegetation will mature and fill in affected areas along the project corridor. This project would create temporary visual impacts from lights due to nighttime construction work. However, these impacts are considered "Less than Significant" and will be further offset through the project's adherence to the 2018 Caltrans Standard Specifications during construction.

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation for a-e: “No Impact” determinations in this section are based on the project scope and field reviews.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation for a and c: “No Impact” determinations are based on the project scope, field reviews, and information provided in the Air Quality Report prepared on 10/18/18. The proposed project would not result in changes to capacity or traffic volumes and would not increase operational emission above existing conditions.

Explanation for b, d, and e: “Less Than Significant Impact” determinations in this section are based on the project scope, field reviews, and information provided in the Air Quality Report prepared on 10/18/18. Temporary emissions would occur during construction, but the project would comply with Caltrans Standards Specifications Section 14-9 “Air Quality”, Section 10-5 “Dust Control”, and Section 18 “Dust Palliatives” which include preventing and alleviating dust and complying with applicable air-pollution control rules, regulations, ordinances, and statutes. Refer to Chapter 4 – Construction Impacts for additional information about temporary construction emissions.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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IV. BIOLOGICAL RESOURCES: Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Pending completion of tech study.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation for a, b and c: The “Less than Significant” determinations in this section are based on the project scope, field reviews, and information provided in the Natural Environmental Study prepared November 2018. The project will result in less than significant impacts to migratory corridors, migratory birds, bats, Swainson’s Hawk, giant garter snake, vernal pool fairy shrimp, central valley steelhead, and Essential Fish Habitat (EFH) for fall-run Chinook salmon. The proposed project will result in 3.46 acres of impacts to riparian habitat. Although the 3.46 acres of impact to riparian habitat is considered less than significant, through consultation, the California Department of Fish and Wildlife requires that riparian impacts be offset by the purchase of credits at a CDFW approved mitigation bank or by on-site restoration. The proposed project will result in the permanent impacts of 0.69 acres of jurisdictional wetlands and 0.01 acre gain of jurisdictional waters of the United States and State. Although impacts to wetlands and waters of the U.S. and State are considered less than significant, through consultation with USACE it was required that the permanent loss of 0.69 acres of jurisdictional wetlands be offset by the purchase of credits through USACE’s “In-lieu-fee” program. The proposed project will temporarily impact 0.33 acres of waters of the U.S. and State if water is present in the channel (work pad/trestle). While this temporary impact to waters is considered less than significant, through consultation with USACE, temporary impacts will be mitigated through restoration. The proposed project will result in less than significant impacts to VELB. Although the temporary and permanent impacts to riparian elderberry habitat and non-riparian elderberry shrubs are considered less than significant pursuant to CEQA, through consultation with USFWS, it was required that impacts be offset by the purchase of credits at a USFWS approved mitigation bank. Refer to Chapter 4– Biological Environment for additional information.

Explanations for e and f: “No Impact” determinations in this section are based on the project scope, field reviews, and information provided in the Natural Environmental Study prepared November 2018. The proposed project would not conflict with any local plans/policies protecting biological resources. Refer to Chapter 4 – Biological Environment for additional information.

V. CULTURAL RESOURCES: Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation for a, b, d: The “No Impact” determinations in this section are based on the project scope, field reviews, and information provided in the Historic Property Survey Report and Archaeological Survey Report, prepared December 2018. The inventory effort consisted of (1) a literature and records research at the North Central Information Center and Northeast Information Center and a records search of Caltrans project files, (2) consultation with the Native American Heritage Commission, including a search of the Sacred Lands Files, as well as with local Native American tribes and individuals, (3) consultation with local historic societies, (4) field surveys of the project area conducted by professional archaeologists who meet the Secretary of Interior’s qualification standards, and (5) Extended Phase I and Geoarchaeological Testing in the form of trenching with a backhoe to identify any archaeological resources in the project area. The Studies resulted in a Finding of No Adverse Effect with Standard Conditions as two archaeological resources were identified within the project limits, however, these resources can be protected in their entirety with the establishment of Environmentally Sensitive Areas. The only cultural resources that are considered to be exempt from evaluation per Attachment 4 of the First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act (January 1, 2014) (PA) were identified in the project area. No other cultural resources were found within the project limits.

Explanation for c: The “Less than Significant Impact” determination was based on the project scope and best available information documented in the Paleontological Identification Report (PIR), prepared November 7, 2018. Although the PIR indicates that the area underlying the proposed project area meets the criteria for having high sensitivity for paleontological resources, there are no paleontological resources that have been identified and documented in the project area. The following measures will further reduce any potential impacts during construction:

1) Preparation of a Paleontological Evaluation Report (PER) and Paleontological Mitigation Plan (PMP). A California licensed geologist, or qualified staff under the direction of a licensed geologist, should prepare a PER and PMP prior to construction. These documents, along with refined design plans/layouts, will outline where and when paleontological monitoring will be required on the job site and the protocol to following in the event fossils are discovered. Generally, excavation and ground-disturbing activities (including drilling holes for CIDH piles) should be monitored by a qualified paleontological monitor. Excavation tailing piles will be inspected by the monitor, and if fossils are discovered the monitor would initiate stop-work protocol outlined in SSP 14-7.04 (below). The PMP would detail the protocol for fossil evaluation, when to begin work again in the area around a discovery and identify and secure a curation facility to house any fossils discovered on the project.

2) Construction Personnel Paleontological Awareness Training – Prior to any ground-disturbing activities, all construction personnel, including the contractor site supervisor and the Caltrans Resident Engineer (RE)/Site Supervisor, should attend an awareness raining delivered by a qualified paleontological specialist. This training would include education about the types of fossils which could be discovered (stop work within protective radius, notification of RE and supervising paleontologist, etc.)

3) Stop Work Protocol – Caltrans Standard Specification 14.7.04 should be included in the specification/bid package as a requirement for the project. It requires any paleontological resources discovered at the job site to not be disturbed, all ground-disturbing work to stop within the vicinity (usually a 60-foot radius) of the discovery, and immediate notification of the resident engineer, site supervisor, and supervising paleontologist. The discovery would then be assessed, and an appropriate treatment identified. Treatment may include preparation and recovery of fossil material, so they may be housed in a curation facility (museum, university, etc.), and will include preparation of a report for publication describing the discovery. The Paleontological Mitigation Plan will outline the exact protocol to follow in the event discovery of significant paleontological resources occurs.

VI. GEOLOGY AND SOILS: Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation for a-e: “No Impact” determinations in this section are based on the project scope and field reviews. No faults, unstable geologic units or soil, or expansive soil was identified within the project limits.

VII. GREENHOUSE GAS EMISSIONS: Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Caltrans has used the best available information based to the extent possible on scientific and factual information, to describe, calculate, or estimate the amount of greenhouse gas emissions that may occur related to this project. The analysis included in the climate change section of this document provides the public and decision-makers as much information about the project as possible. It is Caltrans' determination that in the absence of statewide-adopted thresholds or GHG emissions limits, it is too speculative to make a significance determination regarding an individual project's direct and indirect impacts with respect to global climate change. Caltrans remains committed to implementing measures to reduce the potential effects of the project. These measures are outlined in the climate change section of the document.

Explanation: Please refer to Chapter 4 – Climate Change for additional information.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation for (a): This “Less than Significant Impact” determination was based on the project scope and Initial Site Assessment (ISA), prepared March 23, 2018. Lead contaminated soil may exist within and near the project’s right-of-way due to the historical use of leaded gasoline. An ADL site investigation was conducted on August 8, 2016 site investigation report concluded that between PM 7.3 and PM 7.43 site soil is Non-hazardous. Any excess soil within these project limits shall be disposed of in accordance with Standard Special Provision (SSP) 7-1.02K(60)(j)(iii) Earth Material Containing Lead. Between PM 8.288 and PM 8.65, soil excavated from the surface to a depth of 1 foot is identified as a California hazardous waste and shall be managed and disposed of in accordance with SSP 701.02K(60)(j)(iii) Earth Material Containing Lead with Soil Management. Between PM 8.288 and PM 8.65, excavated soil from underlying depth intervals of 1 to 3 feet can be reused without restrictions or disposed of as non-hazardous soil with respect to lead content. Hazardous chemicals are known to exist in the wood posts associated with guardrail and sign posts. If wood posts are to be removed, they shall be disposed of in accordance with Standard Special Provision (SSP) 14-11.14 (Treated Wood Waste). Asbestos may be present in cement pipe in the ground. If the project involves any asbestos pipe, removal and disposal of the asbestos pipe shall be in accordance with N-SSP 14-11.11 (Management or Asbestos Cement Pipe in the Ground). Per National Emission Standards for Hazardous Air Pollutants (NESHAP) regulation, the contractor must perform demolition activities in accordance with SSP 14-9.02 Asbestos NESHAP Notification. Hazardous levels of lead and chromium are known to exist in the yellow color traffic stripes. Since traffic stripes and pavement marking will be removed while grinding the pavement surface, removal shall be in accordance with Standards Special Provision (SSP) 36-4 (Residue Containing Lead from Paints) which requires a Lead Compliance Plan (LCP). For removal of new yellow and other colors of paint, removal must be in accordance with SSP-84-9.03C Removal of Traffic Stripe and Pavement Markings Containing Lead.

Explanation for (b) – (h): The “No Impact” determinations are based on project scope and Initial Site Assessment (ISA) prepared March 23, 2018. The proposed project scope would not create a hazard to the public or environment through the release of hazardous materials.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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IX. HYDROLOGY AND WATER QUALITY: Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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Explanation for b-e, g, i-j: The “No Impact” determinations are based on the project scope and the Water Quality Assessment Report prepared August 15, 2018. Due to the nature of the proposed project, no impacts to Water Quality are anticipated.

Explanation for h: The “Less than Significant Impact” determination is based on project scope and the Floodplain Hydraulic Study prepared April 2, 2018 which determined that the project as proposed is expected to have a less than significant impact on the floodplain. The risk of any additional flooding associated with the proposed project is low.

Explanation for a, f: The “Less than Significant Impact” determinations are based on the project scope and Water Quality Assessment Report. The proposed project would comply with the conditions of the Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order No. 2012-0011-DWQ, NPDES Permit No. CAS000003) and statewide NPDES General Permit For Storm Water Discharges Associated With Construction And Land Disturbance Activities (CGP) Order No. 2009-0009-DWQ, NPDES No. CAS000002 and all adopted amendments to this General Permit is required for projects that disturb one or more acres of land surface. All applicable guidelines and requirements in the 2015 Caltrans Standard Specifications (CSS) Section 13 regarding water pollution control and general specifications for preventing, controlling, and abating water pollution in streams, waterways, water conveyance systems, and other bodies of water would be implemented. Batch plants and/or rock crushing activities within Caltrans right-of-way (ROW) will require the preparation of an Air Space Lease Agreement prior to mobilization. The Lessee shall obtain an Industrial Storm Water General Permit Order 97-03-DWQ (General Industrial Permit) from the State Water Resource Control Board (SWRCB). The Lessee shall submit a copy of the Notice of Intent (NOI) to comply with the terms of the General Industrial Permit, a copy of the receipt letter with the Waste Discharge Identification (WDID) Number from the SWRCB, an approved Storm Water Pollution Prevention Plan (SWPPP) and a monitoring plan when filing for a Caltrans Encroachment Permit. The Lessee shall submit any amendments to the SWPPP, copies of any sampling/monitoring results, a copy of the annual report, and any reporting requirements covered by the General Industrial Permit. Batch plant or rock crushing activities outside of Caltrans ROW will require additional coordination.

X. LAND USE AND PLANNING: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Explanation for a, b, c: The “No Impacts” determinations are based on the project scope and field reviews. The proposed project scope would not physically divide and established community or conflict with any applicable habitat or natural community conservation plan. Given concerns raised with regard to eliminating access to southbound (SB) SR 99 at Eschinger Road during the environmental document review process and public workshops, access to southbound (SB) SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future. See Appendix E for Eschinger Road layout plan sheet. Per the Elk Grove General Plan Public Review Draft, the City of Elk Grove has identified potential infill areas along Eschinger Road for study, South Study Area and West Study Area. These areas have neither been annexed by the City of Elk Grove nor are there planned developments.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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XI. MINERAL RESOURCES: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Explanation a-b: The “No Impacts” determinations are based on the project scope and field reviews. The proposed project scope would not result in the loss of availability of a known or locally-important mineral resource.

XII. NOISE: Would the project result in:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Explanation a-c, e-f: The “No Impacts” determinations are based on the project scope and field reviews. The proposed project scope would not result in the exposure of persons to of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, excessive ground Bourne vibration or ground borne noise levels, substantial permanent increase in ambient noise levels in project vicinity and the project is not within the vicinity of a public airport or private airstrip.

Explanation d: The “Less Than Significant” determination is based the Noise Study dated September 20, 2018. During construction, noise may be generated from the contractors’ equipment and vehicles. The proposed project will comply with Caltrans Standard Specification 14-8.02 Noise Control.

Refer to Chapter 4 – Construction Impacts for additional information about temporary noise impacts.

XIII. POPULATION AND HOUSING: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation for a-c: The “No Impacts” determinations are based on project scope and field reviews. The proposed project scope would not induce substantial population growth, displace substantial numbers of existing housing, or displace substantial numbers of people necessitating the construction of replacement house elsewhere.

XIV. PUBLIC SERVICES:

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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Explanation: The “No Impact” determinations for schools and parks are based on project scope and field reviews. The proposed project scope would not result in the need for new or physically altered governmental facilities nor affect acceptable response times for emergency services will be maintained to maintain acceptable service response times, or other performance objectives.

Utilities

Utility relocation is necessary as part of the project to accommodate construction activities. SMUD 60kv lines with Comcast service will be relocated to an easement roughly 100 feet from edge of SB 99 bridge deck. A Kinder Morgan petroleum pipeline is within the project limits and will be protected in place. Additionally, temporary relocation of up to three Frontier fiber poles adjacent to the east side of NB SR99 may be required during construction as well as permanent relocation of one SMUD pole. Caltrans will coordinate with the utility providers before relocation of any utilities to ensure that potentially affected utility customers are notified of potential service disruptions before relocations.

Emergency Services

Under post-construction conditions, the proposed project could benefit the public services in the project area, including law enforcement, fire, and emergency services, because both the NB and SB bridge structures will have standard shoulder width which facilitates travel along SR 99. Currently, SB 99 has sub-standard shoulder width. All emergency response agencies in the project area will be notified of the project construction schedule and will have access to SR 99 throughout the construction period. Additionally, a TMP implemented during construction would ensure uninterrupted access to emergency vehicle and school bus routes and minimize traffic delays.

XV. RECREATION:

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Explanations for a-b: The “No Impact” determinations are based on the project scope and field reviews. The project would neither increase the use of existing neighborhood and regional parks or other recreational facilities so that substantial physical deterioration of the facility would occur or be accelerated nor require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

XVI. TRANSPORTATION/TRAFFIC: Would the project:

- a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?
- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanations a-f: The “No Impact” determinations are based on the project scope and field reviews.

XVII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Explanations a-b: The “No Impact” determinations in this section are based on information provided in the Historic Property Survey Report and Archaeological Survey Report prepared December 2018 which includes consultation with the Native American Heritage Commission and local Native American tribes and individuals. No Tribal Cultural Resources were identified within the project limits.

XVIII. UTILITIES AND SERVICE SYSTEMS: Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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g) Comply with federal, state, and local statutes and regulations related to solid waste?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Explanations a-g: The “No Impacts” determinations are based on project scope and field reviews.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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XIX. MANDATORY FINDINGS OF SIGNIFICANCE

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Explanation for a: The "Less than Significant" determination is based on the project scope, field reviews and technical studies. The proposed project would result in less than significant impacts to riparian habitat, wetlands and waters of the United States, VELB.

Explanation for b-c: The "No Impact" determinations are based on the project scope, field reviews, and technical studies. The proposed project will not have any cumulative impacts or environmental effects on human beings.

Chapter 4. Affected Environment, Environmental Impacts, and Avoidance, Minimization, and/or Mitigation Measures

4.1. Human Environment

4.1.1. LAND USE

The purpose of this project is to replace four structurally and seismically deficient bridge structures with a single bridge structure spanning the entire width of the roadway including the median; the Cosumnes River Bridges (Br. Nos. 24-0020R and 24-0020L) and the Cosumnes River Overflow Bridges (Br Nos. 24-0021R and 24-0021L). Additionally, the project will relinquish the existing SB McConnell Underpass (UP) (Br. No. 24-0048L), which crosses under the Union Pacific Railroad (UPRR) rail line. The SB McConnell UP will be replaced with a new, realigned SB McConnell Overhead structure since the existing SB McConnell UP has non-standard horizontal and vertical clearances. Given concerns raised with regard to eliminating access to southbound (SB) SR 99 at Eschinger Road during the environmental document review process and public workshops, access to southbound (SB) SR 99 at Eschinger Road will be maintained with the exception of a temporary closure from approximately fall 2019 to winter 2022 during construction. Eschinger Road on and off ramps for access to SR 99 SB will be reconstructed to connect to realigned SB SR 99. Furthermore, the project design will not preclude improvements to the SR 99 connection in the future. See Appendix E for layout mapping of Eschinger Road on and off ramps.

Existing and Future Land Use

Existing Land Use

The project area is located in Sacramento County near the City of Elk Grove, from the Dillard Road Overcrossing to 0.6 miles south of Grant Line Road. Presently, land use in the project area is rural and zoned either Agricultural or designated as a Natural Preserve according to the Sacramento County General Plan. Within the project limits, on the easterly side of NB SR 99 extending north from approximately Dillard Road to Eschinger Road, land use is designated as a Natural Preserve and comprises a portion of California Department of Fish And Wildlife's Cosumnes River Preserve. To the west of SB SR 99, land is zoned Agricultural and is largely comprised of crop land and cattle facilities along with a few, scattered rural residential properties. Additionally, several businesses, including Elk Grove Milling, Inc., a horse and animal feed milling company and Scotts Company, a fertilizer facility, are located approximately 3 miles southwest from the Eschinger Road on/off ramp.

Along SB SR 99, the on/off ramp at Eschinger Road currently provides access to property along the west side of the project area. The SB SR 99 on and off ramps at Eschinger Road have the following Average Daily Traffic (ADT) counts from August 2018:

Eschinger Rd Offramp from SB SR 99		Eschinger Rd Onramp to SB SR 99	
Weekday Avg. Vol.	Weekend Avg. Vol.	Weekday Avg. Vol.	Weekend Avg. Vol.
194 ADT	134 ADT	139 ADT	103 ADT

By comparison, the Kammerer Road SR 99 on and off ramps for both NB and SB SR 99, located approximately 1 mile north of the Eschinger Road, have the following Average Daily Traffic counts from Spring 2018.

Kammerer Rd Offramp from SB SR 99 Spring 2018	Kammerer Rd Slip Onramp to SB SR 99 Spring 2018
Average Volume	Average Volume
3,685 ADT	1,954 ADT

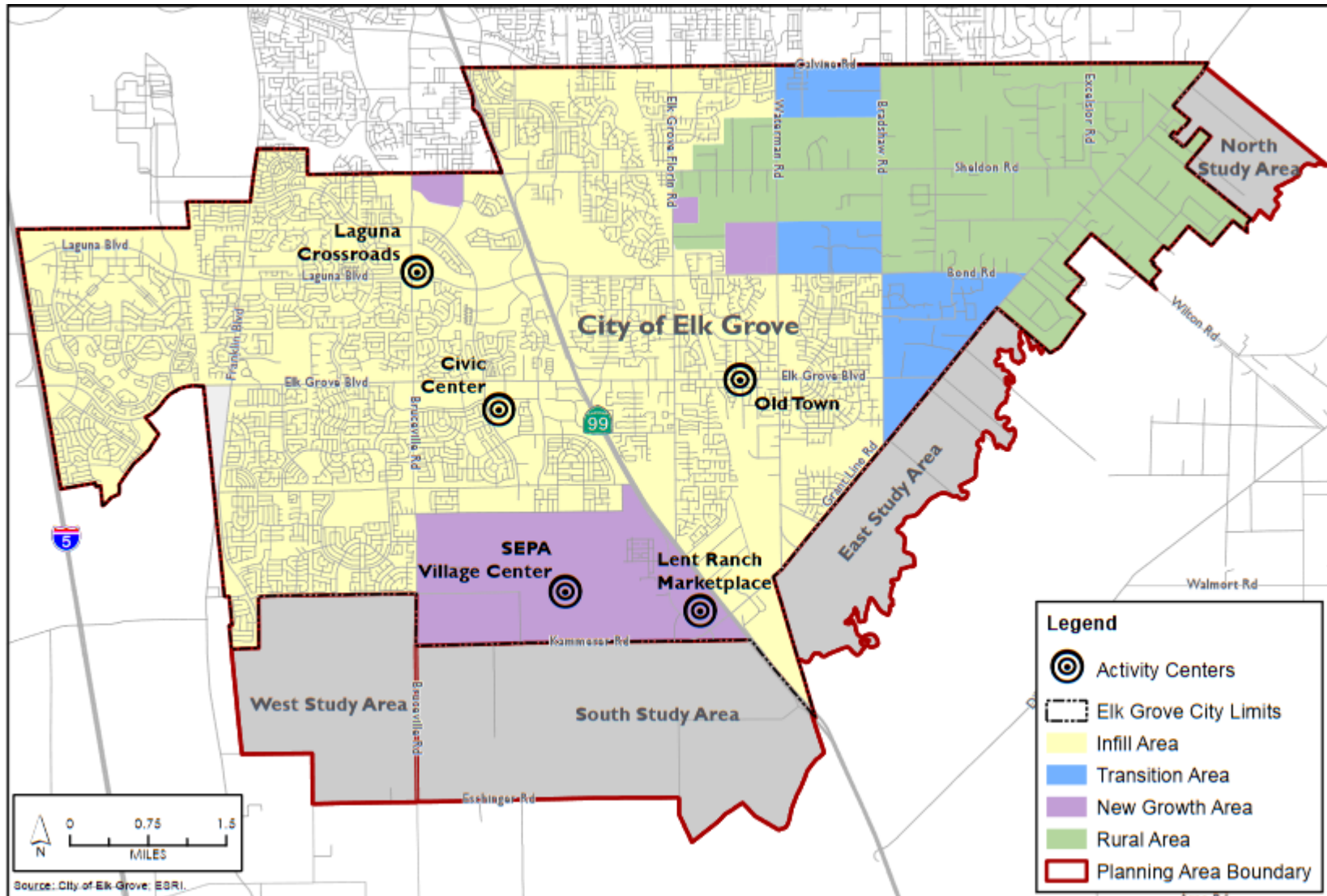
SR 99 ramp hourly and daily volumes at Eschinger Road are low, especially when compared to the Kammerer Road ramps, located in close proximity approximately 1 mile north of the Eschinger Road on and off ramps. The Kammerer Road/SR 99 ramps have the capacity to absorb the Eschinger Road ramp volumes during the temporary closure during construction activities from approximately fall 2019 to winter 2022. Moreover, local intersections (Promenade Parkway/W. Stockton Blvd. and Eschinger Road/W. Stockton Blvd.) also have the capacity to absorb the Eschinger Road ramp volumes during the temporary closure.

Elk Grove Unified School District (EGUSD) reports that Eschinger Road is currently used for a school bus stop for one student in the District. EGUSD transportation staff report that closure of Eschinger Road on/off ramp would not impact this school bus stop since the driver would use West Stockton Boulevard as an alternate route. Temporary closure of Eschinger Road on/off ramp would not affect City of Elk Grove public transit since, currently, there are no City public transit routes that require use of Eschinger Road.

Future Land Use

In terms of future land use, the *City of Elk Grove Public Review Draft July 2018 General Plan* identifies four Study Areas as new growth areas that may accommodate future development beyond the current City limits west of the project area (See Figure 3) Two of these areas; the South and West Study areas, lie along Eschinger Road which presently provides connection to SB SR 99. However, currently there are neither any planned developments nor a formal request for annexation to the City.

Figure 3. Potential Activity and Infill Areas In Elk Grove



Environmental Consequences

Avoidance, Minimization, and Mitigation Measures

No potential conflicts with current or planned land uses in the study area are anticipated. Therefore, no measures are proposed to reduce impacts related to land use.

CEQA Significance

The project as proposed is expected to have no impacts related to land use pursuant to CEQA.

4.2. Physical Environment

4.2.1. Hydrology and Floodplain

Regulatory Setting

Executive Order (EO) 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration (FHWA) requirements for compliance are outlined in 23 Code of Federal Regulations (CFR) 650 Subpart A.

To comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments.
- Risks of the action.
- Impacts on natural and beneficial floodplain values.
- Support of incompatible floodplain development.
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

Affected Environment

The floodplain impact of proposed project was evaluated through Floodplain Hydraulic Study completed on April 2, 2018. The entire project area is within the Federal Emergency Management Agency (FEMA) Floodplain Insurance Rate Map (FIRM) No. 0602620475E dated July 6, 1998. The project is within Flood Zone A, AE and Zone X of the Cosumnes River 100-year floodplain (Figure 4).

Environmental Consequences

The bridge replacements of BR No. 24-0020R/L and Br. No. 2424-0021/L, the section of SR 99 embankment to be elevated, and the improvements at Dillard Road OC (Br. No. 24-0163) project lay within critical floodplain (Zone A and AE). These improvements are encroaching in transverse directions of the 100-year floodplain of the Cosumnes River and its Overflow. McConnell Underpass (Br. No. 24-0048) to be relinquished, the new McConnell Overhead (Br No. 24-73L) to be constructed, and the proposed work at Eschinger Road are within Flood Zone X with no impact to critical floodplains. The project also proposes to upgrade existing freeway lights and communication system by installing fiber optic cable along the project area using trenching method. These activities will also have no impact on critical floodplains.

The 100-year floodplain surrounding the project is incorporating the Cosumnes River and its overflow structures. The proposed encroachment crosses the 100-year floodplain of the Cosumnes River in transverse directions, but it is expected to have a less than significant impact to the existing floodplain. The encroachment will not likely alter the hydraulics of the study area considering that the project is mostly replacing and upgrading the existing facilities with minor changes to current configuration.

The four bridge replacements (Br. No. 24-0020R/L & Br. No. 2424-0021 R/L) will result in less of a footprint within the floodplain given that the net cross-section areas of the new bridge supports will be less than the current bridge supports' area. In addition, the new bridge decks will be placed at a higher elevation allowing for additional freeboard.

The sections of SR99 embankment to be elevated from STA 430+00 to 516+00, as a result of the new southbound realignments, will have no significant impact on the current 100-year floodplain given that the current ground surfaces to be elevated are already above the 100-year floodplain elevations. The only section of SR99 that is likely to remain below the 100-year flood plain is a small portion near Dillard Road at STA 410+00, where the embankment will not be elevated or altered as part of this project.

The proposed improvements at Dillard Road OC (Br. No. 24-0163) that includes replacing the non-standard bridge railings on and beneath the OC and replacing the road surfaces of the OC approaches and deck will have no impact on the floodplain as most of the work will be performed above the 100-year floodplain elevation.

McConnell UP (Br. No. 24-0048) to be relinquished, the new McConnell Overhead (Br. No. 24-73L) to be constructed and the proposed work at Eschinger Road are within Flood Zone X with no impact to critical floodplains.

The project also proposes to upgrade existing freeway lights and communication system by installing fiber optic cable along the project area using trenching method. This work will have no impact on critical floodplain and the work will be performed underground without adding fill to the floodplain.

Avoidance, Minimization and/or Mitigation Measures

No avoidance, minimization and/or mitigation measures are required. The project as proposed is expected to have a less than significant impact on the floodplain. The risk of any additional flooding associated with the project is low.

CEQA Significance

The project as proposed is expected to have less than significant impacts to hydrology and floodplain pursuant to CEQA.

4.3. Biological Environment

4.3.1. Natural Communities

Regulatory Setting

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Riparian woodlands consist of trees and other vegetation and physical features normally found on the stream banks and floodplains associated with streams, lakes, or other bodies of water. Riparian woodland habitat can range from a dense thicket of shrubs to a closed canopy of large mature trees covered by vines. Activities within riparian habitat are regulated under Sections 1600-1616 of the California Fish and Game Code. The areas regulated by Sections 1600-1616 include the bed, channel, and bank of any river, stream, or lake in which there is at any time an existing fish or wildlife resource, or from which these resources derive benefit. The limits of this jurisdiction typically extend to the outer edge of riparian vegetation, or to the top of the bank for areas with little or no riparian habitat.

Affected Environment

Riparian Habitat

A Natural Environmental Study (NES) was completed in November 2018. Field surveys were conducted by Caltrans biologists on numerous occasions which are detailed in the NES. The river within the Biological Study Area (BSA) is surrounded by an approximate 300 foot wide riparian corridor.

Environmental Consequences

The following project feature would reduce impacts to riparian habitat:

- **Riparian habitat will be avoided to the greatest extent practicable.**

Although project impacts to 3.46 acres of riparian habitat are considered less than significant, through consultation, the California Department of Fish and Wildlife requires that riparian impacts be offset by the purchase of credits at a California Department of Fish and Wildlife approved mitigation bank or by on-site restoration.

Although the project temporarily impacts 3.46 acres of riparian habitat, the Cosumnes River corridor is surrounded by riparian habitat along the entire course of the river for many miles east and west of the project area. Thus, 3.46 acres of temporary impacts is small in comparison to

the larger riparian corridor within the Cosumnes River watershed. Additionally, this 3.46 acres of riparian habitat temporarily impacted will be replanted with similar native species following project completion. The project has been designed to avoid impacts to riparian habitat to the greatest extent practicable.

Mitigation Measures

No mitigation measures are proposed.

CEQA Significance

The proposed project would result in less than significant impact to riparian habitat.

Migration Corridors

Affected Environment

The Cosumnes River corridor acts as a migration corridor for wildlife in the area, providing access under the existing roadway facility free from vehicular disturbance. Periodic flooding provides this corridor nutrients that allows for the density and structural diversity that support upland and aquatic species. The bridge structures provide a safe migration corridor for the dispersal of wildlife.

Environmental Consequences

Avoidance and Minimization Measures

Although the project impacts are considered less than significant, the following project avoidance and minimization measures would further reduce impacts to migration corridors:

- The construction activities for the project are temporary so any impacts to wildlife migrations associated with project construction would also be temporary. Once the project has been completed, full usage of the channel as a migration corridor would be restored.
- Pile driving shall not be conducted at night to allow fish quiet, unobstructed passage during night time migratory hours.
- All construction work that will take place in the live channel shall occur between June 1 – October 15 during the summer low flow period to minimize potential exposure of juvenile fish to pile driving noise/vibration, and to minimize fish entrapment within cofferdams.

Mitigation Measures

No mitigation measures are proposed

CEQA Significance

The proposed project would result in less than significant impacts to migration corridors.

4.3.2. Wetlands and Other Waters

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. The lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary high water mark (OHWM), in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the U.S. Environmental Protection Agency (U.S. EPA).

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (40 Code of Federal Regulations [CFR] 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a "least environmentally damaging practicable alternative" (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, EO 11990 states that a federal agency, such as FHWA and/or the Department, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no

practicable alternative to the construction and (2) the proposed project includes all practicable measures to minimize harm. A Wetlands Only Practicable Alternative Finding must be made.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or the Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see the [Water Quality section](#) for more details.

Affected Environment

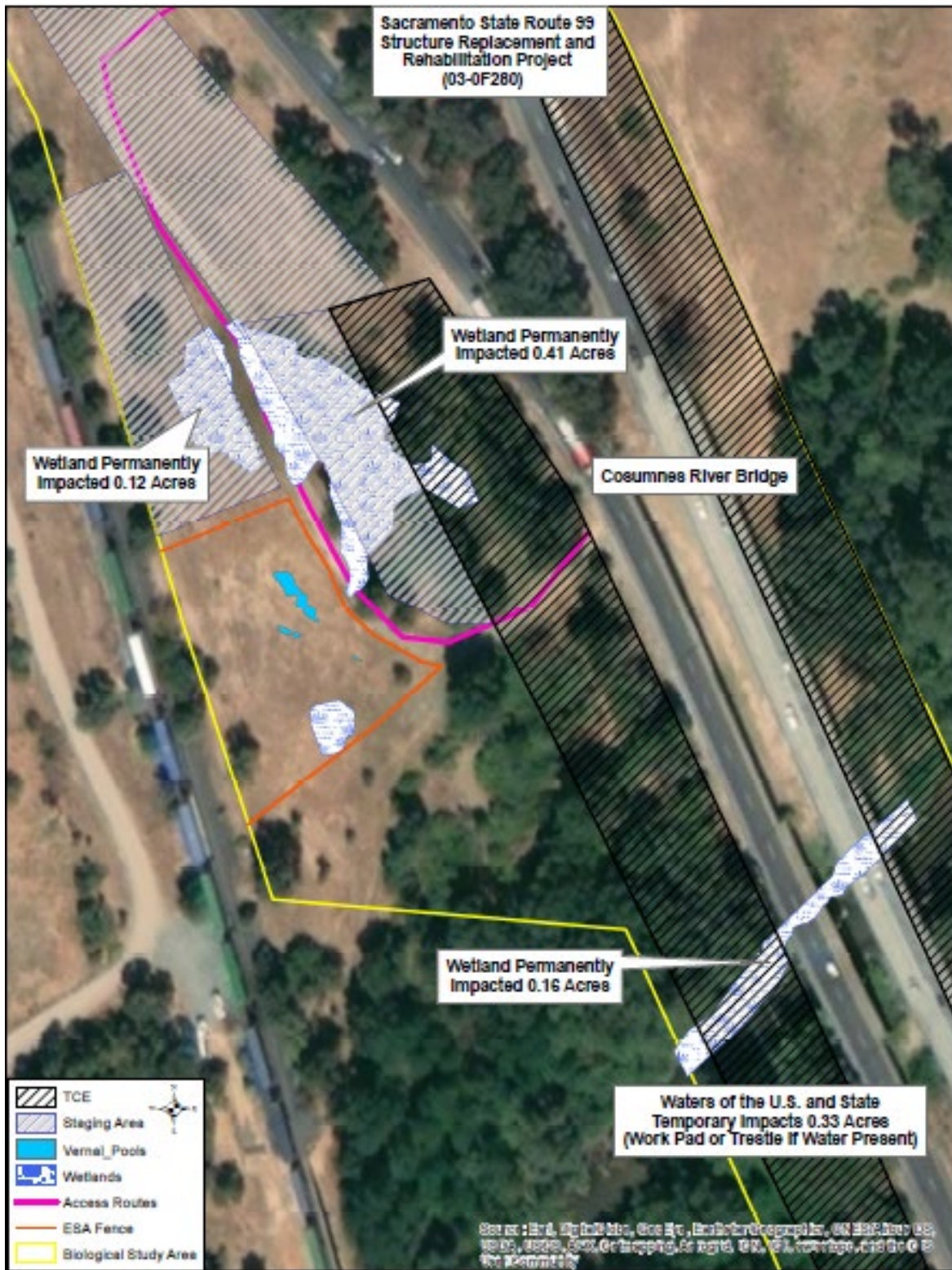
Jurisdictional wetlands and waters are present within the project limits. The term “jurisdictional wetlands” refers to areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Jurisdictional wetlands generally include swamps, marches, bogs, natural drainage channels, and seasonal wetlands.

Jurisdictional waters of the United States are defined as those waters that are currently used, or were used in the past, or may be susceptible to use in interstate commerce, including all waters subject to the ebb and flow of the tide and all interstate waters including interstate wetlands. This definition includes interstate lakes, rivers, streams (including intermittent and ephemeral), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds where the use degradation or destruction of which could affect interstate or foreign commerce.

A Natural Environmental Study (NES) was completed in November 2018. In October 2013 Caltrans biologists delineated one potentially jurisdictional waters and seven potentially jurisdictional wetlands within the BSA. A Wetland Delineation was completed in December 2013 and a Preliminary Jurisdictional Determination was issued on April 17, 2014. No vernal pools or depressional features were identified at that time. A follow-up botanical survey was conducted on April 24, 2014 and May 29, 2018 (for special-status plants). The April 2014 survey identified a vernal pool complex located at the northern most extent of the project within an area that has been identified as a potential staging area for equipment and material during the construction of the project. No grading or excavation near or adjacent to this feature is

being proposed. This is an isolated feature and is located directly adjacent to an access road that is regularly used by the current landowners to access the surrounding agricultural fields. A map showing the extent and location of this feature is located in Figure 5 - Permanent and Temporary Impacts to Wetlands and Waters of the U.S. and State.

Figure 5. Permanent and Temporary Impacts to Wetlands and Waters of the U.S. and State



Environmental Consequences

Temporary and permanent impacts are anticipated to occur within the Cosumnes River channel. However, the project has been designed to minimize temporary and permanent impacts to the Cosumnes River as it has been identified as a Water of the U.S. and the State. Use of best management practices (BMPs) and compensatory mitigation required by USACE would offset project related cumulative impacts to jurisdictional waters. Prior to the start of construction activities, Caltrans will obtain all necessary regulatory permits for this project. These permits are expected to include a CWA Section 401 Water Quality Certification from the RWQCB, a CWA Section 404 Nationwide Permit from the USACE, a Fish and Game Code 1602 Streambed Alteration Agreement from CDFW and a Floodplain Encroachment Permit from the Central Valley Flood Protection Board.

Avoidance and Minimization Measures

The following project avoidance and minimization measures would reduce/avoid impacts to wetlands/waters:

- Best management practices will be implemented to guarantee the smallest practical footprint to minimize temporary and permanent impacts to jurisdictional waters of the United States and State.
- Vernal pools will be fenced with ESA fencing to prevent any impacts from the proposed project.

Permanent Impacts

The Project will permanently affect approximately 0.69 acres of jurisdictional wetlands. Removal of the two larger piers and replacement of them with smaller piers will result in a net gain of 0.01 acres of jurisdictional waters of the U.S. and State (Cosumnes River).

Temporary Impacts

The proposed project will temporarily impact 0.33 acres of waters of the U.S. and the State if there is water present in the channel and a work pad or trestle is required.

Although the impacts to wetlands and waters of the U.S. and State are considered to be less than significant, through consultation with USACE it was required that impacts be offset by the purchase of credits for a 0.69 acre loss of jurisdictional wetlands through USACE' "In-lieu-fee" program.

Mitigation Measures

No mitigation measures are proposed.

CEQA Significance

The proposed project would result in less than significant impacts to wetlands and other waters.

4.3.3. Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA).

This section of the document discusses all other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), found at California Public Resources Code, Sections 21000-21177.

Affected Environment

Botanical surveys were conducted on August 6, 2013, April 24, 2014 and April 27, 2018. Various special status species were evaluated for potential occurrence within the project limits. No special plant species were observed within the Biological Study Area (BSA)

Environmental Consequences

No special status plant species were observed within the project limits. Therefore, no impact to special-status plant species is anticipated.

Mitigation Measure

No mitigation measures are proposed

CEQA Significance

The proposed project would result in no impact to special-status plant species.

4.3.4. Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NOAA Fisheries Service), and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and

permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed further below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

Affected Environment

Migratory Birds

All migratory birds, including feathers or other parts, nests, eggs or products are protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16USC 703-712). The Migratory Bird Treaty Act makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, except as allowed by implementing regulations (50 CFR21). Disturbance that causes nest abandonment or loss of nest productivity (e.g., killing of abandonment of eggs or young) may be considered a “take” and is potentially punishable by fines and imprisonment.

Naïve birds, protected under the MBTA and similar provisions under CDFW code, currently nest or have the potential to nest within the Biological Study Area (BSA) and the project impact area. During biological surveys, both the NB and SB Cosumnes River Bridges contain swallow nests. There are no swallows on the Cosumnes River Overflow Bridge or the McConnell OHN Bridge.

Environmental Consequences

Avoidance and Minimization Measures

The following project avoidance and minimization measures would reduce/avoid impacts to migratory birds:

- Prior to construction, swallows will be excluded from nesting on the structure by either installation of exclusion devices prior to the nesting season, use of nesting-prevention measures or removal and disposal of partially constructed and unoccupied nests of migratory and nongame birds on a regular basis to prevent their occupation.

- The proposed project would remove shrubs that provide potential nesting habitat for nesting birds that are protected under the Migratory Bird Treaty Act. Standard special provisions would be included in the construction contract to allow the removal of trees and shrubs during the non-nesting season. The nesting season is defined as February 1 to September 30, therefore, trees will be removed October 1 to January 31st. Shrubs may also be removed during the nesting season after being cleared by a qualified Caltrans biologist. If a nesting bird is found, the tree/shrub would not be removed until the qualified Caltrans biologist confirms that all birds have fledged. Swallows nests will be removed and bats will be excluded during the non-nesting season also (October 1 to January 31).

Mitigation Measures

No mitigation measures are proposed.

CEQA Significance

The proposed project would result in no impact to special-status animal species.

Bats

Affected Environment

Approximately 15 to 20 Mexican free-tailed bats (*Tadarida braseliensis*) were observed in a hinge joint of the NB Cosumnes River Bridge near the Cosumnes River (northern side of the Cosumnes River). The Mexican re-tailed bat or Brazilian free-tailed bat is a medium-sized bat that is native to the Americas, regarded as one of the most abundant mammals in North America. Its proclivity towards roosting in large numbers at relatively few locations makes it vulnerable to habitat destruction in spite of its abundance. Caltrans has been monitoring the

Cosumnes River Bridge to determine the dates that these bats migrate. Bats migrate at different times of the year depending on various factors such as bat species, temperature, etc.

Environmental Consequences

Avoidance and Minimization Measures

The following project avoidance and minimization measures would further reduce/avoid impacts to bats:

Caltrans will direct the contractor to fill the hinge joint with foam, or some other exclusionary device, in order to prevent the bats from returning to the hinge joint during that time period. This will ensure no impacts to bats since they will not be present when construction begins.

Mitigation Measures

No mitigation measures are proposed.

CEQA Significance

The proposed project would result in no impact to bats.

4.3.5. Threatened and Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA) (and the Department, as assigned), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement or a Letter of Concurrence. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue,

catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFW. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

Affected Environment

Swainson's Hawk

The Swainson's Hawk (*Buteo swainsoni*) is a state threatened species and federal species of concern. The Swainson's hawk is a summer migrant in the Central Valley that breeds in riparian and oak savannah habitat and forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. The hawk roosts in large trees but will roost on the ground if no trees area available. Breeding occurs from late March to late August, with peak activity occurring in late April through July.

SWHA typically nest in tall, densely covered trees located adjacent to suitable foraging habitat. Trees most commonly used in the Central Valley include valley oak, Fremont cottonwood, walnut, and large willows (*Salix* sp.) (Estep 1989). Nesting trees are most commonly located in riparian woodlands adjacent to open grassland or agricultural lands. Nests may also be located in roadside trees and in isolated trees or clumps of trees in open terrain. The location of the nest site adjacent to suitable foraging habitat appears to be one of the most important criteria for occupancy of the nest territory (Estep 1989). SWHA exhibit a high rate of nest territory re-occupancy. However, use of alternative nests within the territory is common. SWHA may use an alternate nest in a different tree or, less often, may construct a new nest in the same tree.

Breeding occurs from late March to late August, with peak activity occurring in late April through July. Nests are stick, bark, and fresh leaf platforms built in a tree or bush, or on a utility pole. Nests occur in open riparian habitat, in scattered trees, or in small groves in sparsely vegetated flatlands. Nests are usually found near water in the Central Valley, but they can also be found in arid regions. Clutch size is 2 to 4 eggs, with an incubation period of 25 to 28 days.

SWHA breed from southern Canada, through the western U.S., and into northern Mexico. In California, SWHA were once found throughout lowland California and were absent from only the Sierra Nevada, north coast ranges, Klamath Mountains, and portions of the desert region of the state (Grinnell and Miller 1986). Nesting pairs of SWHA have been greatly reduced throughout much of this historic range. Currently, nesting territories are restricted to portions of the Central Valley and Great Basin regions of the state (Estep 1989). SWHA arrive in California between early and mid-March to begin breeding activities.

The selection of foraging habitat by the SWHA is considered to be a function of prey density as well as prey availability. Alfalfa is considered to be one of the more favorable cultivated foraging habitats, largely due to the sequence of monthly mowing and weekly flood irrigation that makes it a crop type of high prey availability for the duration of the breeding season. Newly disked fields, fallow fields, dry-land pasture, beets, tomatoes, and irrigated pasture have also been identified as preferred cover types. Rangelands, riparian systems, vineyards, orchards, oak woodlands, cotton, asparagus, onion fields, and developed areas are seldom used for foraging.

Giant Garter Snake

The giant garter snake (GGS)(*Thamnophis gigas*) is a federal and State threatened species. Giant garter snakes inhabit marshes, sloughs, ponds, small lakes, low gradient streams and other waterways. This species also frequents agricultural wetlands such as irrigation and drainage canals and rice fields, and their adjacent uplands. The breeding season extends through March and April, and females give birth to live young from late July through early September. Current threats that contribute to the decline of GGS throughout its range are habitat loss, habitat fragmentation, predation by introduced species, parasites, and water pollution. Habitat loss and fragmentation are commonly caused by flood control activities and changes in agricultural and other land management practices.

Essential habitat components consist of the following elements: 1) adequate water during the snake's active period (i.e., early spring through mid-fall) to provide a prey base and cover, 2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat; 3) upland habitat for basking, cover, and retreat sites; and 4) higher elevation uplands for cover and refuge from flood waters.

Vernal Pool Fairy Shrimp (VPFS) (*Branchinecta lynchi*)

Vernal pool Fairy Shrimp (*Branchinecta lynchi*) is a federal and state threatened species. VPFS are distributed from southern Oregon to southern California in a wide variety of habitat types (Eriksen and Belk 1999). Soil types associated with vernal pool fairy shrimp vary greatly with geography and influence the ecology of the species. This species is usually associated with vernal pools (79%) but can also be found in association with other ephemeral habitats including alkali pools, seasonal drainages, stock ponds, vernal swales and rock outcrops (Vollmar 2001).

Vernal pools are subject to seasonal variations, and vernal pool fairy shrimp are dependent on the ecological characteristics of such variations. These characteristics include duration of inundation and presence or absence of water at specific times of the year (U.S. Fish and Wildlife Service 1994). The vernal pool fairy shrimp is capable of living in Central Valley vernal pools of relatively short duration (pond 6 to 7 weeks in winter and 3 weeks in spring) (Eriksen and Belk 1999). Other factors contributing to the suitability of pools for vernal pool fairy shrimp include alkalinity, total dissolved solids (TDS), and pH (U.S. Fish and Wildlife Service 1994; Eriksen and Belk 1999).

Valley Elderberry Longhorn Beetle (VELB)

The Valley Elderberry Longhorn Beetle (VELB) is listed as a federally threatened species. Elderberry shrubs are hosts for VELB larvae. The VELB's range has been reduced and greatly fragmented due to a loss of elderberry inhabited communities, most especially riparian habitat

loss. Habitat loss is derived from agricultural development, urbanization, levee maintenance and pesticide drift where aerial application or fogging of crops occurs near riparian habitats.

Adult VELB feed on elderberry foliage and are present from March through early June. During this time, adults mate within the canopy and females lay their eggs, either singularly or in small clusters, in living elderberry bark crevices or at the junction of stem/trunk or leaf petiole/stem. After eggs hatch, the first instar larvae burrow into the host elderberry stems to feed on pith for one to two years. As the larvae becomes ready to pupate, it chews outward from the center of the stem through the bark. After the larvae plugs the newly constructed emergent hole with shavings, it returns to the pupal chamber to metamorphose, and will emerge from the stem or trunk in mid-March through June as adults.

Central Valley Steelhead

Central Valley Steelhead is listed as a Federally Threatened Species. The Cosumnes River has been documented to contain hatchery raised fish as well as wild populations of steelhead. However, due to the river being seasonally intermittent, the proposed project area can only be utilized as an adult migration corridor and juvenile emigration corridor. The timing in which the Cosumnes River dries varies from year to year but generally occurs from June to December (DWR 2018). Historically groundwater has supported flows during late summer and early fall months. However, due to heavy agriculture use the lowered water table has created an extended period of low-flow and dry conditions (Moyle et al, 2003).

The winter of 2016/2017 was an exceptionally wet year and the Cosumnes River held water for most of the year; however, during field visits during the summer of 2017 the water was very low (approximately 1-3 feet), warm, stagnant and not optimal conditions for migratory movement of steelhead. There was water present into the month of July in the year of 2018. However, the water was only 1-2 feet deep, very warm, murky and very slow velocity. If there is water present, Caltrans intends to adhere to a work window from June 15 to October 15th when steelhead would most likely not be present due to the water conditions. Steelhead are generally favored by cooler temperatures and permanent flows (Marchetti & Moyle 2001).

Another factor that can preclude steelhead from utilizing the project limits as habitat is the high percentage of invasive predator fish species in the alluvial river segment where the project is located. Spotted bass and largemouth bass were common in the warm, low-elevation pool habitats (Moyle et al, 2003). The reduction of native fish in the Cosumnes River is believed to be caused by the predation on early life history stages by non-native fish and by competitive interactions by size classes (Moyle et al, 2003).

Based upon the information presented above, it is not likely that Central Valley steelhead will occupy the project limits during construction.

Essential Fish Habitat (EFH) for fall-run Chinook salmon

EFH consists of all waters currently or historically accessible to salmon. Through consultation with CDFW fisheries biologist Mike Healy and NMFS biologist Dylan Van Dyne, the seasonal presence of fall-run Chinook salmon is known to occur within the project area. See Table 2

Table 2. Generalized Life History Timing for fall-run Chinook Salmon (Yoshiyama et al. 1998)

Sacramento River Basin	Migration Period	Peak Migration	Spawning Period	Peak Spawning	Juvenile Emergence Period	Juvenile Stream Residency
Fall run Chinook	June-December	September-October	Late September-December	October-November	December-March	1-7 months

Although salmon are present in the Sacramento Basin for the entire year at different stages of its life cycle, year-round occurrence is not expected in the project area because of dry summer conditions that preclude juvenile residency and over-summer rearing. Due to the river being seasonally intermittent the proposed project area can only be utilized as an adult migration corridor and juvenile emigration corridor. The presence of fall-run Chinook would be dependent on suitable water conditions that occur in the project area during winter months, when precipitation maintains appropriate water temperature and volume.

Environmental Consequences

Swainson's Hawk

CNDDDB records indicates there are multiple known occurrences of SWHA within one mile of the proposed project dated between 1991 to 2003. See Figure 6 for known occurrences within the project area. The South Sacramento Habitat Conservation Plan also has a list of known SWHA occurrences within Sacramento County. See figure 7 for Range of SWHA in the South Sacramento Habitat Conservation Plan Area.

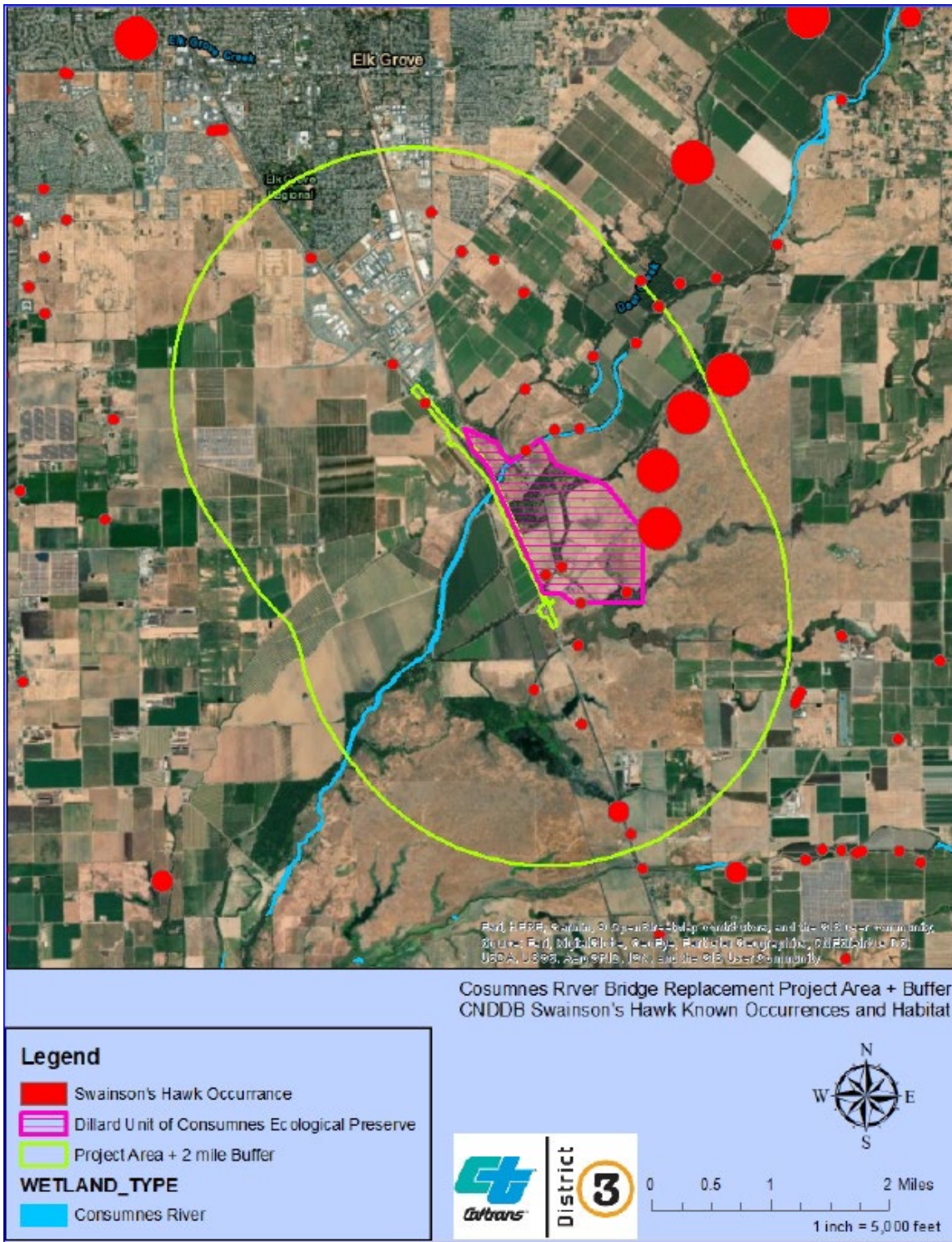


Figure 6: CNDDDB known occurrences in project area for Range of SWHA in the South Sacramento Habitat Conservation Plan Area.

Discussion of Survey Results

Table 3 lists all SWHA surveys conducted for the project, along with dates and personnel. All of the contracted personnel are professionals with biology and wildlife management degrees with various years of experience.

Table 3: Personnel and Survey Dates

Survey Description	Date	Personnel
General bird reconnaissance	7/12/2013	Caltrans Biologists: Kelli Angel and Hanna Harrell
Bird nest survey within proposed project limits	12/30/2013	Caltrans Biologist: Kelli Angel and Hanna Harrell
SWHA general survey	2/20/2019	Caltrans Biologist: Kelli Angell and David Moore.
SWHA protocol level survey	May 2, 2019	LSA (Consultant)
SWHA protocol level survey	May 3, 2019	LSA (Consultant)
Ambient noise level surveys	5/6/2019	Granite

The general bird reconnaissance survey, completed on 7/12/2013, was conducted to get preliminary data concerning the broad range of bird species in the general area of the proposed project. The data collected from this survey concluded that large birds of prey, or raptor, nests were present within the project limits. Vultures and other hawks were witnessed during this survey. No SWHA were identified at that time.

The nest survey (12/30/2013) that was conducted during the inactive season identified ten potential raptor nests within 500 feet and another 16 nests within a half mile of the Cosumnes River Bridge and the Cosumnes River Overflow Bridge. No raptors or SWHA were observed at the nest locations or general area.

A general survey (2/20/2019) was conducted to verify presence of SWHA within the project limits. Large birds of prey were seen during this survey at high elevations including three SWHA. SWHA were spotted approximately one-half mile away from Cosumnes River Bridge and three quarters of a mile from the Cosumnes River Overflow Bridge. It appeared the soaring hawks were forging in the greater vicinity of the project near the newly disturbed agricultural fields. No SWHA were witnessed within the immediate project limits.

Due to SWHA presence during the survey on 2/20/2019, protocol level surveys were deemed necessary. These surveys will be completed in accordance with the recommendations by the *Swainson's Hawk Technical Advisory Committee's (TAC) Recommended Timing and Methodology for Swainson's hawk Nesting Surveys in California's Central Valley, 1994*. Protocol level surveys are a set of guidelines describing proper procedures to maximize the potential for locating nesting SWHA and thus reducing the potential for nest failures because of project activities and disturbances.

As a result of the protocol level surveys for nesting SWHA, completed on 5/2/2019 and 5/3/2019 by Caltrans consultant, no active nests (e.g., adult brooding eggs or young on nest) were observed at the project site or within one half mile from the project limits. No other active raptor nests were observed.

Caltrans' project consultant (LSA) observed 12+ individual SWHA within the project limits, and up to one half mile beyond the project limits. Over the course of the protocol level surveys, the SWHA exhibited territorial, pair bonding and nest site selection behaviors. LSA observed two pair of SWHA showing interest in nesting in the group of trees located adjacent to the Cosumnes River. A third pair of SWHA showed interest in nesting in the group of trees along the drainage feature located north of Dillard Road. LSA observed SWHA foraging over the limits of the Cosumnes River Overflow.

Noise

Existing sound levels

Caltrans conducted noise level surveys to identify ambient noise levels for the surrounding area and within the project limits. The following noise levels were measured at the roadway shoulder on the Cosumnes River Bridge and at 47 feet from the edge of the paved roadway in the project limits. Steady traffic volume showed the average ambient sound levels remained between 80 - 85dB while the Semi-truck traffic caused noise levels to spike to a high of 91 dB at the edge of the roadway. At 47 feet from edge of paved roadway shoulder (where a majority of work will take place) steady traffic sound levels were at 65-70 dB, with the Semi-truck traffic causing noise levels to spike to a high of 74 dB.

Project Related Sound Levels

Typical equipment necessary for this type of project includes a backhoe, front end loader, dump truck, diesel generator, bull dozer, dump trucks, and other smaller equipment. With this construction equipment, the project-related sound levels will vary between 81 and 96 dB at 50 feet. Table 4 lists the Heavy Machinery Reported Decibel Value. The sound from the equipment will result in relative sound levels that are High to Very High according to the USFWS Guidance.

Sound Level Difference – Existing Sound Level to Project-Related Sound Level

- The sound level due to the proposed construction activities will be slightly greater than the ambient sound level resulting in an increase of approximately 10 -15 dB from construction activities compared to the existing ambient sound levels of SR 99 traffic. This is a less than a significant impact. To further minimize potential sound level disturbance, construction equipment with high decibel levels will be operating

intermittently and in accordance with the *Swainson's Hawk Technical Advisory Committee's (TAC) Recommended Timing and Methodology for Swainson's hawk Nesting Surveys in California's Central Valley, 1994*. This advisory recommends no heavy machinery activities working within 50 yards of an active nest with nestlings less than ten days old. No proposed activity generating sound levels above ambient sound levels may occur within 200 yards of an active nest with nestlings less than ten days old.

Table 4: Heavy Machinery Reported Decibel Value

Measured Sound Source	Reported Decibel Value @ 50ft
Backhow (high end)	84
Generator (High end)	84
Auger Drill Rig	85
Concrete Mixer and Truck (High end)	85
Dump truck	63 @200m
Roader Grader (High end)	85
Chain Saw (High end)	86
Gradeall (High end)	86
Front end loaded (High end)	87
Crane and Dozer (High end)	88
Drill Rig (High end)	88
Jackhammer	89
Paver and scraper (High end)	89
Compressor (High end)	90
Mounter Impact Hammer Hoe-Ram (High end)	90
Circular saw (hand held)	91
Vibrator (Sonic) Pile Driver	96

Habitat Nesting and Foraging Impact

The bridge replacement project is expected to impact 3.46 acres of nesting and foraging habitat alongside the Cosumnes River bridge. Within a two-mile radius surrounding the project, but outside the project limits, lies over 14,388 acres of prime SWHA nesting and foraging habitat. Thus, the project-related impact to suitable SWHA nesting/foraging habitat equates to approximately 0.02% of habitat impacts to the surrounding area. Additionally, the project will impact 7.21 acres of the Dillard Unit of Cosumnes Ecological Preserve which is made up of 553 acres of SWHA nesting and foraging habitat. This impact equates to approximately 1.3% of the overall Ecological Preserve. The temporary impacts to SWHA habitat due to vegetation removal will be offset due to revegetation through the Project permitting process. Thus, the project impacts to SWHA nesting and foraging habitat in relation to the available prime habitat in the area surrounding the project site is fractional, temporary and results in a less than significant impact. Within the 7.21 acres being impacted at the Preserve, a total of 69 trees will be removed outside of the nesting season. These trees consist of various species including large Box Elder, Cottonwood, Live Oak, Walnut, Valley Oak and Eucalyptus. Although the impacts are considered less than significant, through coordination with CDFW the trees removed on CDFW property will be replanted at a ratio agreed upon by CDFW. This will result in additional nesting habitat for SWHA and other bird species and an enhancement to the Preserve property.

Avoidance and Minimization Measures

Although the impacts to SWHA are considered less than significant, the following measures would be implemented to further avoid and minimize impacts to SWHA

- Protocol level surveys will be continued in accordance with the recommendations of the Swainson's Hawk Technical Advisory Committee and CDFW.
- Removal of native vegetation would be confined to the minimal area necessary to facilitate construction activities. Tree removal should be limited to work windows for nesting, migratory and resident birds and should occur outside of the nesting season (Feb. 1 - Sept. 30).
- Before initiating ground- or vegetation-disturbing Project activities, Caltrans will designate a representative (Designated Representative-DR) responsible for communications with the Department of Fish and Game (DFW) and for overseeing compliance. Caltrans will notify DFW in writing of the DR's contact information, prior to commencement of ground or vegetation disturbing activities, and will notify DFW in writing if a substitute DR is selected or identified at any time.
- A qualified biologist(s) ((biologist(s)) will be designated to conduct preconstruction surveys and monitoring for Swainson's hawks (SWHA). The biologist will conduct preconstruction surveys for SWHA during the SWHA nesting season (March 1 through September 15), prior to initiating any Project activities. The biologist will survey within 0.5 mile of all construction and ground or vegetation disturbing areas. The biologist will provide the survey results to DFW in a written report, within 2 weeks prior to commencement of construction and ground or vegetation disturbing activities.

- The biologist will conduct an education program for all persons employed or otherwise working on the Project site, prior to performing any work on-site that includes a discussion of the biology and general behavior of the SWHA, information about the distribution and habitat needs of the species, sensitivity of the species to human activities, its status under CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures. The biologist will prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry on-site, and /or hardhat stickers, as verification of receipt of training. Upon completion of the program, employees will also sign a form stating they attended the program and understand all protection measures. These forms will be submitted to DFW.
- Caltrans will restrict removal of woody vegetation (trees and shrubs) to between September 16 and the end of February of any construction year to avoid impacts to nesting SWHA, unless pre-construction surveys are conducted by the biologist and active raptor nests are determined to be absent from the trees and/or shrubs to be removed. If active raptor nests are present, Caltrans will not remove vegetation. DFW will be notified of survey results prior to any vegetation removal.
- During the SWHA nesting season (March 1 through September 15), the biologist will be present daily (if active nests are present) on site, monitoring the behavior of any SWHA nesting within 0.25 miles of the Project. The biologist will have authority, in coordination with the Engineer, to order the cessation of all construction activities within 0.25 miles of any SWHA nest if the birds exhibit abnormal nesting behavior. Construction will not resume until the biologist has consulted with DFW and both the biologist and DFW confirm that the bird's behavior has normalized. The active nest will be monitored regularly by the biologist and a determination made that the nest has fledged. DFW will be notified of monitoring results.

Mitigation Measures

No mitigation measures are proposed for Swainson's Hawk.

CEQA Significance

The project will result in less than significant impact to Swainson's Hawk. Additionally, since the project will not result in 'Take' of SWHA, coordination with the California Department of Fish and Wildlife (CDFW) concerning an ITP for SWHA is not necessary in accordance with legal requirements set forth under the California Fish and Game Code.

Giant Garter Snake (GGS)

No essential GGS habitat components occur within the BSA per survey results:

- The Cosumnes River, within the project area, is dry during the majority of the GGS active season. On average, the Cosumnes River is dry from June to December. The river is intermittent and cannot provide GGS a consistent source of aquatic prey.

- The Cosumnes River does not have a consistent enough source of water to support emergent herbaceous wetland vegetation that is essential for GGS cover.
- The river within the BSA is surrounded by an approximate 300-foot-wide riparian corridor which is unusable for GGS basking. GGS rarely travel more than 200 ft. from an aquatic water source for upland habitat (USFWS 1999b).
- GGS are absent from large rivers with sand substrate, which is present within the BSA (USFWS 1999b).

Within 5 miles of the project, there are 6 observed occurrences of GGS according to the CNDDDB. While habitat for the species lies 900 feet south of the project area, there is no connectivity between the project area and the nearest habitat. Since there is no habitat for GGS within the project area, it is anticipated that there will be no impacts to the species. The avoidance and minimization measures outlined below will further ensure no impacts to GGS.

Avoidance and Minimization Measures

Although the impacts to GGS are considered less than significant, the following measures would be implemented to further avoid and minimize impacts to GGS:

- Implementation of Caltrans' standard BMPs throughout the proposed project for the duration of construction, including erosion and sediment control.
- On-site monitoring during all ground disturbing activities of the proposed project will be conducted using a U.S Fish and Wildlife Service-approved biologist during both the snake's active and inactive season.
- A Worker Environmental Awareness Training Program for construction personnel will be conducted by a Service-approved biologist for all construction workers including contractors, prior to the start of construction activities. This training instructs workers to recognize the snake and its habitat.
- Twenty-four hours prior to construction activities, the project area will be surveyed for the snake by a Service-approved biologist. Surveys will be repeated if a two-week or greater lapse in construction activity occurs.
- Disturbed soil areas within the action area that are outside the active channel of the Cosumnes River will be seeded using native plant species.
- After completion of construction activities, any temporary fill and construction debris will be removed and disturbed areas will be restored to pre-project conditions.

Mitigation Measures

No mitigation measures are proposed for GGS.

CEQA Significance

The project would result in less than significant impacts to GGS.

Vernal Pool Fairy Shrimp (VPFS)

Small vernal pools (0.01 acres) were identified as occurring in the project area. Although the habitat is not ideal, Caltrans will assume presence of the VPFS. Refer to figure 6 below identifying the locations of the vernal pools. Within 5 miles of the project area there are approximately 6 observed occurrences of VPFS within vernal pool habitat according to the CNDDDB. These vernal pool complexes provide more ideal habitat conditions than the very small, isolated and disturbed pools in the project area. The avoidance and minimization measures outlined below, which include fencing to exclude construction equipment, personnel and materials out of the sensitive area, will further ensure no impacts to VPFS.

Figure 8. Vernal Pool Locations and Acreage



Avoidance and Minimization Measures

Although the impacts to VPFS are considered less than significant, the following avoidance and minimization measures would be implemented to further avoid and minimize direct and indirect impacts to VPFS:

- Install orange construction fencing between the construction area and vernal pool branchiopod habitat. The protected areas will be designated as environmentally sensitive areas (ESAs) and clearly identified on the construction plans and described in the specifications.
- Caltrans will require its contractor to avoid and minimize the introduction of new invasive plants and the spread of invasive plants previously documented in the project area.
- Upon project completion, Caltrans will require the contractor to restore all temporarily disturbed grassland to pre-project or better conditions. To the extent feasible, native grasses and forbs will be used to reseed disturbed areas.
- Caltrans will retain a qualified biologist to conduct environmental awareness training for construction crews before project implementation. The awareness training will be provided to all construction personnel and will brief them on the need to avoid effects on listed, threatened, and candidate species and vernal pool.

Mitigation Measures

No mitigation measures are proposed for VPFS.

CEQA Significance

The project would result in less than significant impacts to VPFS.

Valley Elderberry Longhorn Beetle (VELB)

Surveys for elderberry shrubs within the BSA were conducted November 3, 2017, January 22, 2018, April 18, 2018, May 29, 2018, June 1, 2018 and July 6, 2018. All shrubs with at least one stem greater than one inch at ground level were mapped with GPS units. Within the BSA there are 68 elderberry shrubs located in both riparian and non-riparian habitat. Mature riparian habitats occur along the Cosumnes River corridor and a smaller band of riparian occurs at the Cosumnes River Overflow bridge. The majority of elderberry shrubs mapped within the BSA were mature with a few that were very large and arborescent.

Due to the size of the project and the amount of elderberries present, Caltrans separated the analysis of VELB within the BSA into 8 groups determined by location. Group 1 consists of the elderberries located on the north side of the Cosumnes River. Group 2 consists of elderberries located on the south side of the Cosumnes River. Group 3 consists of elderberries located just south of group 2, south of the Cosumnes River, east of SR-99. Group 4 consists of elderberries located next to the Cosumnes River Overflow Bridge. Group 5 is just south of the Cosumnes River Overflow Bridge on the east side of SR-99. Groups 6 through 8 are elderberries that parallel SR-99 on the west side in between SR-99 and an agriculture field. A map showing the locations of the shrubs (groups) is located below **Figure 7**.

Although the project will impact elderberry shrubs within the project area, the Cosumnes River corridor is predominately surrounded by riparian habitat intermixed with elderberry shrubs along the entire corridor. Moreover, the Cosumnes River Preserve lies east of the project area and serves to protect various native habitat types, including elderberry shrubs. Also, within the larger Sacramento Valley area, there are many riparian areas that have suitable habitat to support elderberry shrubs as well. The project has been designed to avoid elderberry shrubs to the greatest extent practicable. Since elderberry shrubs will be transplanted, as determined through consultation with USFWS, impacts to elderberry shrubs (host for VELB) will be temporary in nature. Thus, the temporary impacts to elderberry shrubs as a result of the project are anticipated to be minimal in comparison to the larger population of elderberry shrubs in the surrounding area.

Permanent Direct Impacts

Due to the historic occurrence of VELB along the Cosumnes River and the presence of elderberry shrubs, VELB are inferred to be present in the BSA. The direct effects of this project will be the relocation of 49 of the 68 elderberry shrubs, including stems which may contain larvae, resulting in potential direct “take” of VELB. The project *may affect and is likely to adversely affect* VELB; therefore, through the consultation process, the United States Fish and Wildlife Service requires compensatory mitigation. The proposed project work window also includes three months of the adult flight period, increasing the chances of adult mortality.

Temporary Direct Impacts

Temporary direct impacts include the transplanting of the elderberry and the temporary disturbance of the elderberries original habitat for 3 years or less.

Indirect Impacts

Indirect impacts that would result from the proximity to construction may include impacts from construction dust, changes in hydrology, shading, soil compaction, and removal of associated riparian woodland species.

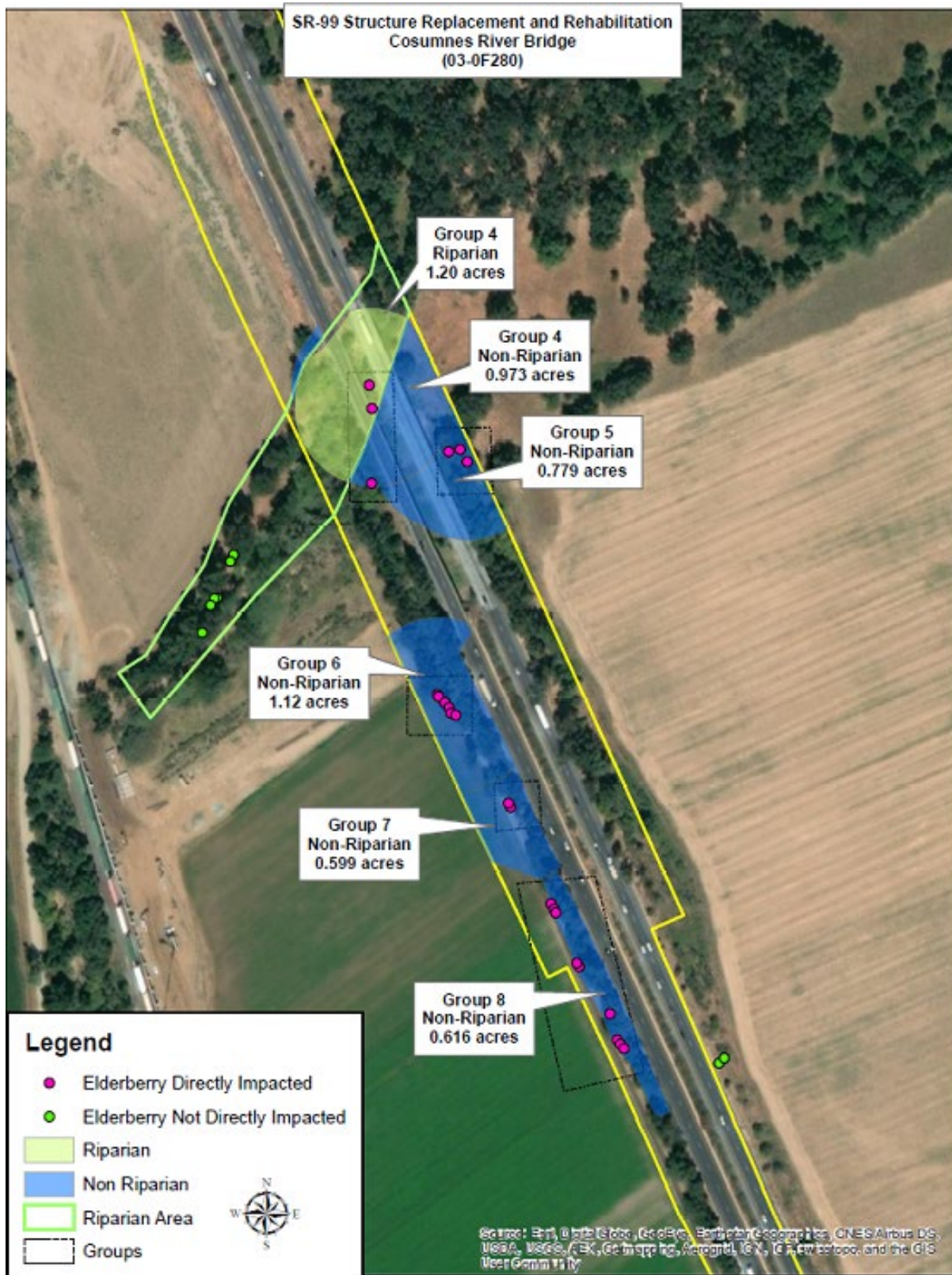
With the exception of the slightly larger bridge, there will be no permanent structures built in VELB habitat. Some elderberry were located alongside the bridges but none were located directly under the existing bridges. Additionally, all stockpiling and staging will occur outside of VELB habitat.

Due to the size of the project and the amount of elderberries present, Caltrans separated the analysis of VELB within the BSA into 8 groups determined by location. Group 1 consists of the elderberries located on the north side of the Cosumnes River. Group 2 consists of elderberries located on the south side of the Cosumnes River. Group 3 consists of elderberries located just south of group 2, south of the Cosumnes River, east of SR-99. Group 4 consists of elderberries located next to the Cosumnes River Overflow Bridge. Group 5 is just south of the Cosumnes River Overflow Bridge on the east side of SR-99. Group 6 through 8 are elderberries that parallel SR-99 on the west side in between SR-99 and an agriculture field. Refer to figures 8 and 9 below for maps of groups 1 through 3 and groups 4 through 8, respectively, and to table 3 for a summary of the habitat level compensation for all groups.

Figure 10. Elderberry Groups 1 through 3



Figure 11. Elderberry Groups 4 through 8



Group 1 consists of 15 elderberries within a riparian area. No exit holes were identified in any of these elderberry shrubs; however, exit holes are difficult to detect so it is conceivable that exit holes may have been present and not detected. They are all located within riparian habitat. All elderberries within group 1 will be permanently directly impacted because they will be transplanted and they will be impacted for more than one year. All permanently impacted elderberry shrubs will be transplanted to a USFWS-approved mitigation bank. Caltrans proposes to mitigate for 2.33 acres of riparian habitat and 0.21 acres of non-riparian habitat.

Group 2 consists of 8 elderberries; 6 are within a riparian area and 2 are located in a non-riparian area. No exit holes were identified; however, exit holes are difficult to detect so it is conceivable that exit holes may have been present and not detected. All elderberries within group 2 will be permanently directly impacted because they will be transplanted and they will be impacted by the project for more than one year. All permanently impacted elderberry shrubs will be transplanted to a USFWS-approved mitigation bank. Caltrans proposes to mitigate for 1.53 acres of riparian habitat and 1.12 acres of non-riparian habitat.

Group 3 consists of 3 elderberries; all 3 are in non-riparian habitat. No exit holes were identified; however, exit holes are difficult to detect so it is conceivable that exit holes may have been present and not detected. All elderberries within group 3 will be permanently directly impacted because they will be transplanted and they will be impacted by the project for greater than one year. All permanently impacted elderberry shrubs will be transplanted to a USFWS-approved mitigation bank. Caltrans proposes to mitigate for 0.578 acres of non-riparian habitat.

Group 4 consists of 3 elderberries; 2 are located within riparian habitat and one is located in non-riparian habitat. No exit holes were identified; however, exit holes are difficult to detect so it is conceivable that exit holes may have been present and not detected. All elderberries within group 4 will be permanently directly impacted because they will be transplanted and they will be impacted by the project for greater than one year. All permanently impacted elderberry shrubs will be transplanted to a USFWS-approved mitigation bank. Caltrans proposes to mitigate for 1.20 acres of riparian habitat and 0.97 acres of non-riparian habitat.

Group 5 consists of 3 elderberry shrubs all within non-riparian habitat. No exit holes were identified; however, exit holes are difficult to detect so it is conceivable that exit holes may have been present and not detected. All elderberry shrubs within group 5 will be permanently directly impacted because they will be transplanted and will be impacted for greater than one year. All permanently impacted elderberry shrubs will be transplanted to a USFWS-approved mitigation bank. Caltrans proposes to mitigate for 0.78 acres of non-riparian habitat.

Group 6 consists of 6 elderberry shrubs within non-riparian habitat. No exit holes were identified; however, exit holes are difficult to detect so it is conceivable that exit holes may have been present and not detected. All elderberry shrubs within group 6 will be permanently directly impacted because they will be transplanted and will be impacted for greater than one year. All

permanently impacted elderberry shrubs will be transplanted to a USFWS-approved mitigation bank. Caltrans proposes to mitigate for 1.12 acres of non-riparian habitat.

Group 7 consists of 2 elderberry shrubs within non-riparian habitat. No exit holes were identified; however, exit holes are difficult to detect so it is conceivable that exit holes may have been present and not detected. All elderberry shrubs within group 7 will be permanently directly impacted because they will be transplanted and will be impacted for greater than one year. All permanently impacted elderberry shrubs will be transplanted to a USFWS-approved mitigation bank. Caltrans proposes to mitigate for 0.60 acres of non-riparian habitat.

Group 8 consist of 9 elderberry shrubs within non-riparian habitat. No exit holes were identified; however, exit holes are difficult to detect so it is conceivable that exit holes may have been present and not detected. All elderberry shrubs within group 8 will be permanently directly impacted because they will be transplanted and will be impacted for greater than one year. All permanently impacted elderberry shrubs will be transplanted to a USFWS-approved mitigation bank. Caltrans proposes to mitigate for 0.62 acres of non-riparian habitat.

Table 5. Proposed Habitat Level Compensation VELB

Habitat Level Compensation								
	Riparian				Non Riparian			
Group #	acre	sqft	Credit	3:1 ratio	acre	sqft	Credit	1:1 Ratio
Group 1	2.332457	101601.4	56.44522	169.33567	0.206752	9006.068	5.003371	5.003371
Group 2	1.535416	66882.72	37.156925	111.47077	1.117651	48684.69	27.04705	27.04705
Group 3					0.577816	25169.55	13.98308	13.98308
Group 4	1.199364	52244.08	29.02449	87.073462	0.97364	42411.61	23.562	23.562
Group 5					0.779793	33967.63	18.8709	18.8709
Group 6					1.121468	48850.96	27.13942	27.13942
Group 7					0.599607	26118.79	14.51044	14.51044
Group 8					0.616673	26862.15	14.92342	14.92342
Total	5.067237	220728.2	122.6266	367.87991	5.9934	261071.4	145.0397	145.0397

Avoidance and Minimization Measures:

Although the temporary and permanent impacts to riparian elderberry habitat and non-riparian elderberry shrubs are considered less than significant, the following avoidance and minimization measures would be implemented to further avoid and minimize direct and indirect impacts to VELB:

- All areas to be avoided during construction activities will be fenced and/or flagged as close to construction limits as feasible.
- Fencing will be inspected daily by the contract biologist and maintained by construction under the biologist's supervision.
- A USFWS qualified biologist will provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance.
- A USFWS qualified biologist will monitor the work area at project appropriate intervals to assure that all avoidance and minimization measures are implemented.
- In order to avoid and minimize adverse effects to VELB when trimming, trimming will occur between November and February and will avoid the removal of any branches that are ≥ 1 inch in diameter.
- Erosion control will be implemented and the affected area will be re-vegetated where feasible with appropriate native plants
- All elderberry shrubs with stems greater than one inch in diameter that cannot be avoided will be transplanted following the most current version of the ANSI A300 guidelines for transplanting. They are voluntary industry consensus standards developed by Tree Care Industry Association and written by a committee called the Accredited Standards Committee (ASC) A300, whose mission is to develop consensus performance standards based on current research and sound practice for writing specifications to manage trees, shrubs, and other woody plants.
- Dust control measures will be implemented for all ground-disturbing activities in the project area. These measures may include applying water to graded and disturbed areas that are unvegetated. To avoid attracting ants, water will not be sprayed within the driplines of elderberry shrubs at any time.

Mitigation

No mitigation measures are proposed for VELB.

CEQA Significance

Although the temporary and permanent impacts to riparian elderberry habitat and non-riparian elderberry shrubs are considered less than significant pursuant to CEQA, through consultation with USFWS, in addition to transplanting elderberry shrubs with stems greater than one inch in diameter that cannot be avoided, it was required that impacts be offset by the purchase of credits at a USFWS approved mitigation bank. Caltrans proposes to compensate for permanent losses using habitat level compensation. Permanent riparian impacts will be compensated at a 3:1 acreage ratio and permanent non-riparian impacts will be mitigated at a 1:1 acreage ratio as follows:

- Caltrans proposes to compensate for 5.07 acres (123 credits) of permanent impacts to riparian elderberry habitat and compensate for 5.99 acres (145 credits) of permanent impacts to non-riparian elderberry shrubs. In total, per Caltrans consultation with USFWS, Caltrans proposes to further reduce impacts to VELB with purchase of 513 credits at a USFWS approved mitigation bank.

Central Valley Steelhead

The majority of the construction impacts to Central Valley Steelhead are temporary in nature and would occur at a time when the river is dry and they are not present (DWR 2018). The proposed project involves constructing the new median bridge structure and the NB and SB bridges which will result in one bridge structure when complete. There will be 5 Cast-In-Drilled-Hole (CIDH) piles located within the river channel. These piles include one 84-inch pile for the median bridge structure, two 66-inch piles for the SB bridge, and two 66-inch piles for the NB bridge. This will result in approximately 0.01 acres (484 square feet) of permanent fill into the river. However, there are two existing piers within the river channel at the SB bridge and two piers within the channel at the NB bridge that are four feet by 52 feet which will be removed. This removal of the existing piers will result in approximately 0.02 acres (832 square feet) of impacts. Removing the larger piers and replacing them with smaller CIDH piles will result in an additional 0.01 acres (348 square feet) of Steelhead habitat.

Caltrans is not proposing to compensate for installing the smaller CIDH piles within the river channel since there is a gain of Steelhead habitat from removing the larger piers. Additionally, it is very likely there will be no water present within the river channel.'

Temporary Impacts from Construction Methods

Timing of construction will likely occur when the river is dry; however, it is possible that water will be present. If water is present, the contractor may require work pads or trestles to facilitate construction. Cofferdams or 13-foot diameter steel hollow casings would also be required to isolate the CIDH piles from water. Caltrans construction personnel have been consulted and believe the contractor would most likely use work pads if water is present since the water would be very shallow in summer, even if it was an unusually wet year. Caltrans only included the trestle in this analysis as a worst case scenario; trestles would not likely be used.

Work pad: *If water is present* and the contractor decides to utilize a work pad, it would be approximately 40 feet wide by 120 feet long. Three work pads would be required; one for

the median bridge structure, the SB bridge, and the NB bridge. There would be approximately 14,400 square feet (0.33 acres) of temporary impacts to steelhead.

Trestle: *If water is present*, the contractor may utilize a trestle to access the bridge construction area. Each construction stage (each of the 3 bridges) would require its own trestle. Trestles are typically designed by the contractor at the time of construction; therefore, specific details about the trestle are not known currently. The following information is based on the engineer's best estimate on where the piles would be located, how the piles would be installed, how many piles are required, and the type of pile that would be used to span the active 120-foot river channel. Assuming the water levels are low in the summer months, the contractor should be able to install the trestle piles outside of the Cosumnes River. The trestle would be approximately 40 feet wide by 120 feet long. The trestle would be able to span approximately 120 feet which would result in approximately four temporary piers spaced at approximately 30 to 40 feet. Each pier would need approximately four to six 24-inch steel pipe piles. There would be three trestles constructed requiring approximately 16 to 24 piles per trestle.

The contractor would most likely install the piles with an impact hammer. There could be up to six piles installed per day and it is estimated that each pile would require approximately 200 blows. If a trestle is constructed, the falsework needed for the bridge would use the same supports as the trestle. The remaining falsework for the bridge would be located outside of the active channel and be constructed out of timber on flat ground. There will be three trestles constructed requiring approximately 16 to 24 piles per trestle. Assuming the worst-case scenario of 72 piles (24-inch steel piles), there would be approximately 1,500 square feet (0.034 acres) of temporary impacts to steelhead. The contractor would most likely install the piles with an impact hammer.

Cofferdams or 13-Foot Diameter Dewatered Casings: *If water is present*, a cofferdam or 13-foot dewatered casing may be required to isolate the construction area for the CIDH piles in the river channel. The cofferdam to isolate the 84-inch CIDH pile for the new median bridge structure will be approximately 12 feet by 12 feet resulting in approximately 144 square feet (0.003 acres) of temporary impacts to Essential Fish Habitat (EFH). Four cofferdams would be required for the SB and NB bridges since there are two CIDH piles within the channel per bridge. The cofferdams required for the 66-inch CIDH piles will be approximately 10 feet by 10 feet resulting in approximately 400 square feet (0.009 acres) of temporary impacts to EFH.

One 13-foot diameter dewater casing to isolate the 84-inch CIDH pile for the new median bridge structure and four 13-foot diameter dewatered casings to isolate the four 66-inch CIDH piles would be required for the SB and NB bridges. The total temporary impacts for the 5 dewatered casings would be 132.73 square feet per casing, totaling 663.65 square feet (0.01 acres). Refer to table 4 below.

Table 6. Temporary In-water Impacts to Steelhead

Temporary In-water Impacts	Square Feet	Acres
72 Trestle Piles at 24 inches	1,500 square feet	(0.03 acres)
If Work-pad utilized by Contractor (3 Work-pads) 40 feet by 120	14,400 square feet	(0.33 acres)
One Cofferdam for 84-inch CIDH Piles at 12 feet by 12 feet	144 square feet	(0.003 acres)
Four Cofferdams for 66-inch CIDH Piles at 10 feet by 10 feet	400 square feet	(0.009 acres)
13-Foot Dewatered Casings (5 total)	664 square feet	(0.015 acres)
Total Temporary In-water Impacts if Trestle Used	2,708 square feet	(0.05 acres)
Total Temporary In-water Impacts if Work-pad Used	15,608 square feet	(0.33 acres)

Removing the larger piers and replacing them with smaller CIDH piles will result in an additional 348 square feet (0.01 acres) of Steelhead habitat. If temporary trestles are utilized there would be approximately 1,500 square feet (0.33 acres) of temporary impacts to Steelhead habitat. If work pads were utilized there would be approximately 14,400 square feet (0.33 acres) of temporary impacts to Steelhead habitat. If the channel is wet, cofferdams would be required resulting in approximately 400 square feet (0.009 acres) of temporary impacts to Steelhead habitat.

Based on the information presented above it is not likely that Central Valley steelhead will occupy the project limits during construction.

Temporary Project Impacts From Construction Activities

The types of impacts that could result from construction activities include; increased erosion, sedimentation and turbidity; loss of shaded riverine area; decreased water quality due to a potential for hazardous materials and chemical spills, and physiological effects associated with production of hydraulic pressure waves and noise during potential in-river pile driving activities.

Erosion, Sedimentation and Turbidity

Increased sediment, primarily in the form of fine sediment, has been reported to lead to changes in spawning bed composition, decreased benthic vertebrate abundance, increase stress responses in fish, and increased fish mortality (Burns 1970; Cordone and Kelly 1961; Moyle 2002; Redding et al. 1987; Reid and Anderson 1999).

The construction window (June 15- October 15) occurs during the summer months when the dry river precludes the presence of Central Valley steelhead (DWR 2018). Nevertheless, appropriate erosion control measures will be implemented during construction (e.g., hay bales, filter fences, vegetative buffer strips) to reduce siltation and contaminated runoff from the construction site. Additionally, construction activities will comply with Federal and State water quality standards (e.g., Sections 401 and 404 of the Clean Water Act).

Loss of Shaded Riverine Habitat/ Streamside Vegetation

Activities associated with stream channel alterations may include the removal of riparian vegetation and large woody debris (LWD). Riparian vegetation is critical to salmonid habitat. Riparian vegetation stabilizes stream banks, creates shade that provides temperature control, and increases the complexity of fish habitat providing fish refuge and prey habitat.

Widening of the bridge would result in the loss of some shaded riverine habitat and streamside vegetation. Currently, there is a riparian corridor that surrounds the Cosumnes River Bridge. Implementation of the proposed project would result in the temporary loss of approximately 340 linear feet (0.69 acres - 30,056 square feet) of exposed shoreline. Construction of the widened bridge (median bridge structure) will create shaded riverine habitat totaling approximately 5,663 square feet (0.13 acres). There will be a temporary loss of 0.56 acres (24,393 square feet) of shaded riverine area. This loss of shaded riverine is not expected to adversely affect steelhead dispersing through the BSA. All temporarily impacted areas will be restored to pre-construction conditions and replaced at a 1:1 ratio.

Hazardous Material and Chemical Spills

Activities associated with bridge construction could potentially impair water quality if chemicals (e.g., hydrocarbon-based fuels and lubricants) or other construction materials are spilled or enter waterways. Construction-related chemical spills could affect fisheries resources by increasing physiological stress, reducing biodiversity, altering primary and secondary production, and possibly causing direct mortality (NMFS and USFWS 1998).

Based on the implementation of BMPs, the potential for a hazardous material or chemical spill to occur is unlikely. Adherence to predetermined criteria identified during the permitting process is expected to prevent potential effects on fish or habitat. Additionally, the construction window occurs during the summer months when the dry river will preclude the presence of Central Valley steelhead in the construction area (DWR 2018).

Hydraulic Pressure Waves and Noise

Pile driving will only occur within the salmonid work window (June 15-October 15) when the dry river will prevent the presence of Central Valley steelhead (DWR 2018). Thus, there will likely be no effect to steelhead from pile driving.

If the Cosumnes River is not dry during construction, pile driving may be necessary to install approximately 72 trestle piles (24-inch). Additionally, the steel hollow casings used to stabilize

the drilled shaft excavation for the CIDH piles may require pile driving depending on geotechnical investigations; but it is very unlikely the casings would require pile driving. The casings will most likely be installed using vibratory methods. If pile driving of the steel hollow casings is necessary, the pile driving is not expected to exceed fish injury thresholds since the steel hollow casings have shallow tip elevations and the probable presence of soft soils in the river channel. However, if pile driving is necessary there could be impacts to steelhead which is analyzed in a Hydroacoustics Assessment.

Timing of construction will likely occur when the river is dry, thus there will be no affects to steelhead from pile driving. There will likely be no impact pile driving required for the project unless it is an unusually wet winter season and the contractor chooses to use a trestle; this is unlikely since it is predicted by Caltrans construction that a work pad would be utilized instead. Therefore, there will be no permanent impacts to steelhead. Even if water is present, steelhead would not likely be present during construction due to the warm, shallow, and low flow conditions of the Cosumnes River during summer months.

Avoidance and Minimization Measures

Although the project impacts to Central Valley Steelhead are considered in less than significant, the following project avoidance and minimization measures would further reduce/avoid impacts to Central Valley Steelhead.

- All in-water work shall be restricted to when the Cosumnes River is dry and/or within the Salmonid work window (June 15- October 15). This is a period when no listed salmonids will be present.
- Clearing will be confined to the minimal area necessary within 200 feet of aquatic habitat to facilitate construction activities.
- Standard construction BMPs will be implemented throughout construction, in order to avoid and minimize adverse effects to the future water quality within the project impact area. All disturbed soils will undergo erosion control treatment immediately after construction is terminated. Appropriate erosion control measures will be used (e.g., hay bales, filter fences, vegetative buffer strips or other accepted equivalents) to reduce siltation and contaminated runoff from project sites.
- Construction by-products and pollutants such as petroleum products, chemicals, or other deleterious materials will not be allowed to enter the river. A plan for the emergency clean up of any spills of fuel or other material will be available when construction equipment is in use.
- Equipment will be refueled and serviced at designated construction staging areas. All construction material and fill will be stored and contained in a designated area that is located away from channel to prevent transport of materials into adjacent streams. The preferred distance is 100 feet from the wetted width of a stream. In addition, a silt fence

should be installed to collect any discharge, and adequate materials for spill clean-up and during storm events.

- Construction vehicles and equipment will be maintained to prevent contamination of soil or water from external grease, oil, leaking hydraulic fluid, or fuel.
- Building material storage areas containing hazardous or potentially toxic materials such as herbicides and petroleum products will be located outside of the 100 year flood zone, have an impermeable membrane between the ground and the hazardous material, and be bermed to prevent the discharge of pollutants to ground water and runoff water.
- Shaded riverine area or natural woody riparian habitat will be avoided or preserved to the maximum extent practicable. Any disturbed riparian vegetation should be replanted at a 1:1 ratio with native trees and shrubs, with appropriate irrigation, care, and monitoring to ensure that healthy riparian and shaded riverine area is fully established. Successful replanting is measured as 80 percent or greater replacement of original habitat function after three years.
- Rapidly sprouting plants, such as willows, will be cut off at ground level and root systems left intact, where possible.
- Upon completion of construction, disturbed areas will be re-vegetated with native grasses.
- Construction personnel will participate in a NMFS-approved worker environmental awareness program. A qualified biologist will inform all construction personnel about the life history of Central Valley steelhead and its potential presence in the project area as well as explain the state and federal laws pertaining to protecting this species and its habitat.

There will be a temporary loss of 0.56 acres (24,393 square feet) of shaded riverine area. This loss of shaded riverine is not expected to adversely affect steelhead dispersing through the BSA. All temporarily impacted areas will be restored to pre-construction conditions and replaced at a 1:1 ratio. Additionally, the construction window occurs during the summer months when the dry river would preclude the presence of steelhead in the construction area (CDWR 2018). For these reasons, no compensatory mitigation is proposed for steelhead.

Given that the existing, large piers will be replaced with smaller piers, work will occur when the river is dry and the avoidance and minimization measures described above will be implemented, the potential for impacts to fish is minimal to none.

Mitigation

No mitigation measures are proposed for Central Valley Steelhead.

CEQA Significance

The project would result in less than significant impacts to Central Valley Steelhead.

Essential Fish Habitat (EFH) for Fall-run Chinook Salmon

Permanent Impacts

The construction of the proposed project involves constructing the new median bridge structure and the northbound and southbound bridges which cross the Cosumnes River within the BSA. There will be 5 CIDH piles located within the river channel. These include one 84-inch pile for the median bridge structure, two 66-inch piles for the SB bridge, and two 66-inch piles for the NB bridge. This will result in approximately 0.01 acres (484 square feet) of permanent fill into the river. However, there are two existing piers within the river channel at the SB bridge and two piers within the channel at the NB bridge that are four feet by 52 feet which will be removed. This removal of the existing piers will result in approximately 832 square feet (0.02 acres) of EFH. Removing the larger piers and replacing them with smaller CIDH piles will result in an additional 348 square feet (0.01 acres) of EFH. See table 5 – Permanent Impacts to EFH.

Table 7. Permanent Impacts to EFH

Permanent In-Water Impacts	Square Feet	Acres
Removal of Four Existing Piers	-832	(0.020)
One 84-inch CIDH Pile - Median Bridge Structure	+84	(0.002)
Two 66-inch CIDH Piles - SB Bridge	+200	(0.004)
Two 66-inch CIDH Piles - NB Bridge	+200	(0.004)
Total Gain of EFH	+348	(0.010)

Temporary EFH Impacts:

Timing of construction will likely occur when the river is dry; however, it is possible that water may be present. If water is present, the contractor may require work pads or trestles to facilitate construction and cofferdams or 13-foot diameter steel hollow casings to isolate the CIDH piles. Caltrans Construction personnel believe the contractor would likely use work pads since the water would be very shallow during summer months, even if it was a very wet year. Caltrans only included the trestle in this analysis as a worst-case scenario; trestles would not likely be used.

Work-pad: *If water is present*, the contractor may decide to utilize a work pad. It would be approximately 40 feet wide by 120 feet long. Three work pads will be required; one for the median bridge structure and one each for the SB/NB bridge structures. There would be approximately 14,400 square feet (0.33 acres) of temporary impacts to EFH.

Trestle: *If water is present*, the contractor may utilize a trestle to access the bridge construction area. Each construction stage (each of the 3 bridges) would require its own trestle. Trestles are typically designed by the contractor at the time of construction; therefore, specific details about the trestle are not known currently. The following information is based on the engineer's best estimate on where the piles would be located, how the piles would be installed, how many piles are required, and the type of pile that would be used. It is assumed that the trestle would be

used to span the active 120-foot river channel. Assuming the water levels are low in the summer months, the contractor should be able to install the trestle piles outside of the Cosumnes River. The trestle would be approximately 40 feet wide by 120 feet long. The trestle would be able to span approximately 120 feet which would result in approximately four temporary piers spaced at approximately 30 to 40 feet. Each pier would need approximately four to six 24-inch steel pipe piles. There would be three trestles constructed requiring approximately 16 to 24 piles per trestle. The contractor would most likely install the piles with an impact hammer. There could be up to six piles installed per day and it is estimated that each pile would require approximately 200 blows. If a trestle is constructed, the falsework needed for the bridge would use the same supports as the trestle. The remaining falsework for the bridge would be located outside of the active channel and be constructed out of timber on flat ground.

Cofferdams or 13-Foot Diameter Dewatered Casings: *If water is present*, a cofferdam or 13-foot dewatered casings may be required to isolate the construction area for the CIDH piles. The cofferdam to isolate the 84-inch CIDH pile for the new median bridge structure will be approximately 12 feet by 12 feet resulting in approximately 144 square feet (0.003 acres) of temporary impacts to EFH. Four cofferdams would be required for the SB and NB bridges since there are two CIDH piles within the channel per bridge. The cofferdams required for the 66-inch CIDH piles will be approximately 10 feet by 10 feet resulting in approximately 400 square feet (0.009 acres) of temporary impacts to EFH.

One 13-foot diameter dewatered casing to isolate the 84-inch CIDH pile for the new median bridge structure and four 13-foot diameter dewatered casings to isolate the four 66-inch CIDH piles would be required for the SB and NB bridges. The total temporary impacts for the 5 dewatered casings would be approximately 132.73 square feet per casing, totaling 663.65 square feet (0.01 acres). See Table 6 – Temporary EFH Impacts.

Table 8. Temporary EFH Impacts

Temporary In-water Impacts	Square Feet	Acres
72 Trestle Piles at 24 inches	1,500 square feet	(0.034 acres)
If Work-pad utilized by Contractor (3 Work-pads) 40 feet by 120	14,400 square feet	(0.33 acres)
One Cofferdam for 84-inch CIDH Piles at 12 feet by 12 feet	144 square feet	(0.003 acres)
Four Cofferdams for 66-inch CIDH Piles at 10 feet by 10 feet	400 square feet	(0.009 acres)
13-Foot Dewatered Casings (5 total)	663.65 square feet	(0.015 acres)
Total Temporary In-water Impacts if Trestle Used	2,044 square feet	(0.05 acres)
Total Temporary In-water Impacts if Work-pad Used	14,944 square feet	(0.33 acres)

Temporary Impacts to Shaded Riverine Area: There will be approximately 0.69 acres of riparian habitat removed from the eastern and western sides of the bridges, and in between the bridges, to facilitate construction (**figure 3**). However, the expanded bridge deck will provide additional shade over the Cosumnes River. The area between the NB and SB bridges (0.13 acres) will provide shade since a new median bridge will fill in this area. The area of the new median bridge structure providing shade over the river is approximately 0.13 acres. There will be a total temporary loss of shaded riverine area of 24,393 square feet (0.56 acres) (**table 7**). Caltrans will restore shaded riverine habitat with on-site restoration at a 1 to 1 ratio.

Table 9. Temporary Impacts to Shaded Riverine Area

Temporary Impacts to Shaded Riverine Area	Square Feet	Acres
Shaded Riverine Habitat Removal	30,056	(0.69 acres)
Shade Provided from New Median Bridge Structure	5,663	(0.13 acres)
Total Temporary Loss	24,393	(0.56 acres)

Removing the larger piers and replacing them with smaller CIDH piles will result in an additional 348 square feet (0.01 acres) of EFH. The temporary loss of shaded riverine area totaling approximately 24,393 square feet (0.56 acres) from construction related activities will be mitigated with on-site restoration at a 1 to 1 ratio. If trestles are utilized there would be approximately 1,500 square feet (0.034 acres) of temporary impacts to EFH. If work pads were utilized there would be approximately 14,400 square feet (0.33 acres) of temporary impacts to EFH. If the channel is wet, cofferdams or 13-foot diameter dewatered casings would be required resulting in approximately 400 square feet (0.009 acres) or 663.65 square feet (0.01 acres) of temporary impacts to EFH.

Timing of construction will likely occur when the river is dry, thus there will be no affects to fall-run chinook salmon. There will likely be no impact pile driving required for the project unless it is an unusually wet winter season and the contractor chooses to use a trestle; this is unlikely since it is predicted that a work pad would be utilized instead. And, depending on upcoming geo-tech investigations, the steel hollow casings used to stabilize the drilled shaft excavation for the CIDH piles may require pile driving; but very unlikely. The casings will most likely be installed using vibratory methods. If pile driving of the steel hollow casings is necessary the pile driving is not expected to exceed fish injury thresholds since the steel hollow casings have shallow tip elevations and the presence of soft soils in the river channel. The project will result in additional EFH habitat by reducing the existing pier size. Additionally, shaded riverine habitat will be restored. Therefore, there will be no permanent impacts to EFH.

Mitigation Measures

No mitigation measures are proposed for Essential Fish Habitat for Chinook Salmon. The project will result in additional EFH habitat by reducing the existing pier size. Additionally, shaded riverine habitat will be restored.

CEQA Significance

The proposed project would result in less than significant impacts to Essential Fish Habitat for Chinook Salmon.

4.4. Construction Impacts

Temporary Air Quality and Noise Impacts During Construction

The construction of roadway improvements could generate temporary visual air quality impacts (e.g., increase in diesel fumes and dust) and noise impacts from heavy equipment operations. From a human environment perspective, the impacts would be most pronounced in parts of the project area where developed land uses are adjacent to or near the project site. The project site is situated in a rural and semi-rural area with only the northern limits of the project in closer proximity to developed land uses.

4.4.1. Air Quality

The proposed project may result in the generation of short-term construction-related air emissions, including fugitive dust and exhaust emissions from construction equipment. Fugitive dust, sometimes referred to as windblown dust or PM 10, would be the primary short-term construction impact, and may be generated during excavation, grading and hauling activities. However, both fugitive dust and construction equipment exhaust emissions would be temporary and transitory in nature and minimized with the following measures:

- Caltrans Standard Specifications Section 14-9.02 will be included in the construction contract for Contractor compliance with all applicable laws and regulations related to air quality including the Sacramento Metropolitan Air Quality Management District regulations and local ordinances.
- Water or a dust palliative will be applied to the site and equipment as often as necessary to control dust emissions.
- Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CA Code of Regulations Title 17, Section 93114.
- A dust control plan will be developed documenting sprinkling, temporary paving, speed limits, and timely re-vegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Equipment and materials storage sites will be located as far away from residential and park used as practicable. Construction areas will be kept clean and orderly.
- Environmentally sensitive areas will be established near sensitive air receptors. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible.

- Track-out reduction measures, such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic will be used.
- All transported loads of soils and wet materials will be covered before transport, or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation.
- Dust and mud that are deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce PM emissions.
- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak times.

Mitigation Measures

No mitigation measures are proposed for temporary Air Quality impacts.

CEQA Significance

The proposed project would result in less than significant impacts to Air Quality..

4.4.2. Noise

During construction, noise may be generated from the contractors' equipment and vehicles. To minimize temporary noise impacts from construction, Caltrans requires the contractor to conform to the provisions of Caltrans Standard Specification, Section 14-8 "Noise Control":

- Control and monitor noise from work activities
- Do not exceed noise levels of 86dBA LMax at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m.

Mitigation Measures

No mitigation measures are proposed for temporary Noise impacts.

CEQA Significance

The proposed project would result in less than significant Noise impacts.

4.5. Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 has led to increased efforts devoted to GHG emissions

reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), HFC-23 (fluoroform), HFC-134a (1,1,1, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of GHG emissions is electricity generation, followed by transportation.¹ In California, however, transportation sources (including passenger cars, light-duty trucks, other trucks, buses, and motorcycles) are the largest contributors of GHG emissions.² The dominant GHG emitted is CO₂, mostly from fossil fuel combustion.

Two terms are typically used when discussing how we address the impacts of climate change: “greenhouse gas mitigation” and “adaptation.” “Greenhouse gas mitigation” covers the activities and policies aimed at reducing GHG emissions to limit or “mitigate” the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels).

Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices.³ This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—“the triple bottom line of sustainability.”⁴ Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life. Addressing these factors up front in the planning process will assist in decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project-level decision-making.

¹ <https://www.epa.gov/ghgemissions/us-greenhouse-gas-inventory-report-1990-2014>

² <https://www.arb.ca.gov/cc/inventory/data/data.htm>

³ <https://www.fhwa.dot.gov/environment/sustainability/resilience/>

⁴ <https://www.sustainablehighways.dot.gov/overview.aspx>

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

The Energy Policy Act of 1992 (EPACT92, 102nd Congress H.R.776.ENR): With this act, Congress set goals, created mandates, and amended utility laws to increase clean energy use and improve overall energy efficiency in the United States. EPACT92 consists of 27 titles detailing various measures designed to lessen the nation's dependence on imported energy, provide incentives for clean and renewable energy, and promote energy conservation in buildings. Title III of EPACT92 addresses alternative fuels. It gave the U.S. Department of Energy administrative power to regulate the minimum number of light-duty alternative fuel vehicles required in certain federal fleets beginning in fiscal year 1993. The primary goal of the Program is to cut petroleum use in the United States by 2.5 billion gallons per year by 2020.

Energy Policy Act of 2005 (109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Standards: This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the Corporate Average Fuel Economy (CAFE) program on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

U.S. EPA's authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and EPA's assessment of the scientific evidence that form the basis for EPA's regulatory actions.

U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010⁵ and significantly increased the fuel economy of all new passenger cars and light trucks sold in the United States. The standards required these vehicles to meet an average fuel economy of 34.1 miles per gallon by 2016. In August 2012, the federal government adopted the second rule that increases fuel economy for the fleet of passenger cars, light-duty trucks, and medium-duty passenger vehicles for model years 2017 and beyond to average fuel economy of 54.5 miles per gallon by 2025. Because NHTSA cannot set standards beyond model year 2021 due to statutory obligations and the rules' long timeframe, a mid-term evaluation is included in the rule. The Mid-Term Evaluation is the overarching process by which NHTSA, EPA, and ARB will decide on CAFE and GHG emissions standard stringency for model years 2022–2025. NHTSA has not formally adopted standards for model years 2022 through 2025. However, the

⁵ | <http://www.c2es.org/federal/executive/epa/greenhouse-gas-regulation-faq>

EPA finalized its mid-term review in January 2017, affirming that the target fleet average of at least 54.5 miles per gallon by 2025 was appropriate. In March 2017, President Trump ordered EPA to reopen the review and reconsider the mileage target.⁶

NHTSA and EPA issued a Final Rule for “Phase 2” for medium- and heavy-duty vehicles to improve fuel efficiency and cut carbon pollution in October 2016. The agencies estimate that the standards will save up to 2 billion barrels of oil and reduce CO₂ emissions by up to 1.1 billion metric tons over the lifetimes of model year 2018–2027 vehicles.

State

With the passage of legislation including State Senate and Assembly bills and executive orders, California has been innovative and proactive in addressing GHG emissions and climate change.

Assembly Bill 1493, Pavley Vehicular Emissions: Greenhouse Gases, 2002: This bill requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year.

Executive Order S-3-05 (June 1, 2005): The goal of this executive order (EO) is to reduce California’s GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill 32 in 2006 and SB 32 in 2016.

Assembly Bill 32 (AB 32), Chapter 488, 2006: Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that ARB create a scoping plan and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

Executive Order S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor’s 2030 and 2050 GHG reduction goals.

Senate Bill 97 (SB 97), Chapter 185, 2007, Greenhouse Gas Emissions: This bill requires the Governor’s Office of Planning and Research (OPR) to develop recommended amendments to the California Environmental Quality Act (CEQA) Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Senate Bill 375 (SB 375), Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The

⁶ <https://www.federalregister.gov/documents/2017/03/22/2017-05316/notice-of-intention-to-reconsider-the-final-determination-of-the-mid-term-evaluation-of-greenhouse>

Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

Senate Bill 391 (SB 391), Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to meet California's climate change goals under AB 32.

Executive Order B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

Executive Order B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMT_{CO₂e}). Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

Senate Bill 32, (SB 32) Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

Environmental Setting

In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 (AB 32), which created a comprehensive, multi-year program to reduce GHG emissions in California. AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020. The Scoping Plan was first approved by ARB in 2008 and must be updated every 5 years. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32.

The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the Draft Scoping Plan, ARB released the GHG inventory for California.⁷ ARB is responsible for maintaining and updating California's GHG Inventory per H&SC Section 39607.4. The associated forecast/projection is an estimate of the emissions anticipated to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented.

An emissions projection estimates future emissions based on current emissions, expected regulatory implementation, and other technological, social, economic, and behavioral patterns. The projected 2020 emissions provided in Figure 10 represent a business-as-usual (BAU) scenario assuming none of the Scoping Plan measures are implemented. The 2020 BAU

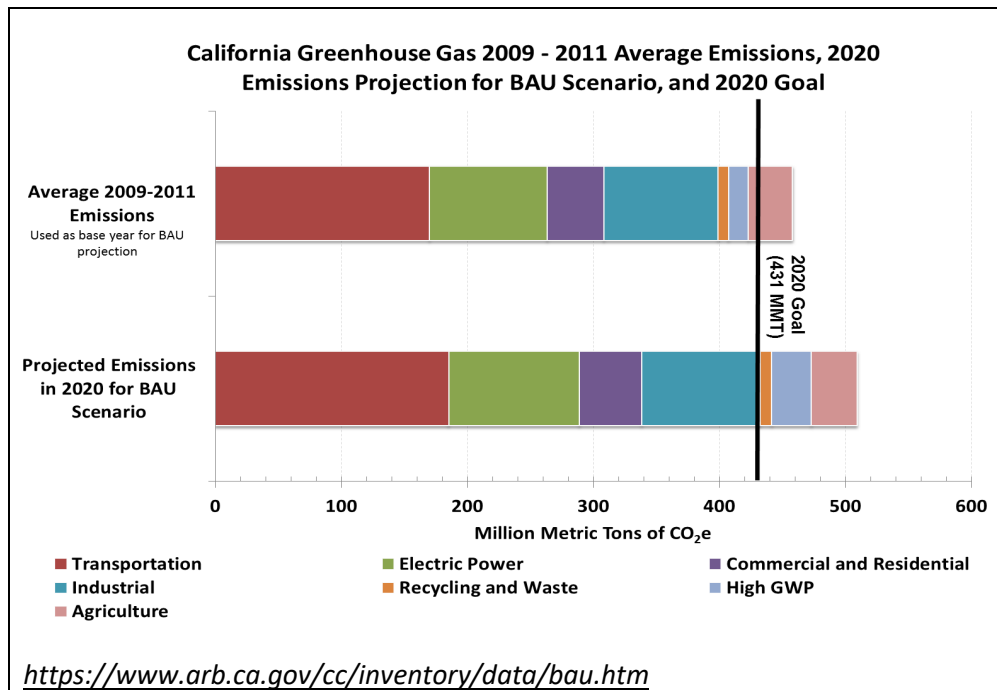
⁷ 2016 Edition of the GHG Emission Inventory Released (June 2016):
<https://www.arb.ca.gov/cc/inventory/data/data.htm>

emissions estimate assists ARB in demonstrating progress toward meeting the 2020 goal of 431 MMTCO_{2e}⁸. The 2018 edition of the GHG emissions inventory found total California emissions of 429 MMTCO_{2e} for 2016.

The 2020 BAU emissions projection was revisited in support of the First Update to the Scoping Plan (2014). This projection accounts for updates to the economic forecasts of fuel and energy demand as well as other factors. It also accounts for the effects of the 2008 economic recession and the projected recovery. The total emissions expected in the 2020 BAU scenario include reductions anticipated from Pavley I and the Renewable Electricity Standard (30 MMTCO_{2e} total). With these reductions in the baseline, estimated 2020 statewide BAU emissions are 509 MMTCO_{2e}.

⁸ The revised target using Global Warming Potentials (GWP) from the IPCC Fourth Assessment Report (AR4)

Figure 12. 2020 Business as Usual (BAU) Emissions Projection 2014 Edition



Project Analysis

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.⁹ In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130). To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects to make this determination is a difficult, if not impossible, task.

GHG emissions for transportation projects can be divided into those produced during operations and those produced during construction. The following represents a best faith effort to describe the potential GHG emissions related to the proposed project.

Operational Emissions

The purpose of this project is to address the current structural and seismic deficiencies of the four Cosumnes River bridges, the non-standard horizontal and vertical clearances of the existing SB McConnell UP and NB McConnell OH structures, and the structural deficiencies of the Dillard Road Overcrossing. The project is also intended to improve freight mobility and

⁹ This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

safety along this segment of SB SR 99. These improvements would not increase the roadways' capacity, increase vehicle miles travelled, or reduce congestion. Therefore, there would be no increase in operational emissions.

Construction Emissions

Construction GHG emissions would result from material processing, onsite construction equipment and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

The average daily construction exhaust emissions were estimated using the Sacramento Metropolitan Air Quality Management District Road Construction Emissions Model (V8.1.0). Inputs to the model included the construction year, total expected duration and project length. Other model inputs such as area of disturbance and material imported/exported on a daily basis were estimated based on conservative and reasonable assumptions provided by the project engineer. Table 8 shows the maximum construction emissions for the project over the 20 month construction period.

Table 10. Construction Emissions

Construction Year 2021	CO₂ (Metric Tons)	CH₄ (US Tons)	N₂O (US Tons)	CO₂e (US Tons)
Total:	5445	0.10	<1	41

*CO₂e=carbon dioxide equivalent. CO₂e expresses emissions of multiple greenhouse gases in terms of their global warming potential (GWP) relative to CO₂, the most prevalent greenhouse gas, which is assigned a GWP of 1. The Road Construction Emissions Model includes only CO₂, CH₄, and N₂o in CO₂e.

Caltrans Standard Specifications, a required part of all construction contracts, should reduce and control emissions, including GHG emissions during construction under the provisions of Section 7-1.02C "Emissions Reduction" and Provision 14-9.02, "Air Pollution Control," Provision 1409.02 requires the contractor to comply with all pertinent rules, regulations, ordinances, and statutes of the local air district. Regulations such as idling restrictions on construction vehicles may help reduce GHG emissions.

CEQA Conclusion

While the project will result in a slight increase in GHG emissions during construction, it is anticipated that the project will not result in any increase in operational GHG emissions. While it is Caltrans' determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct impact and its contribution on the cumulative scale

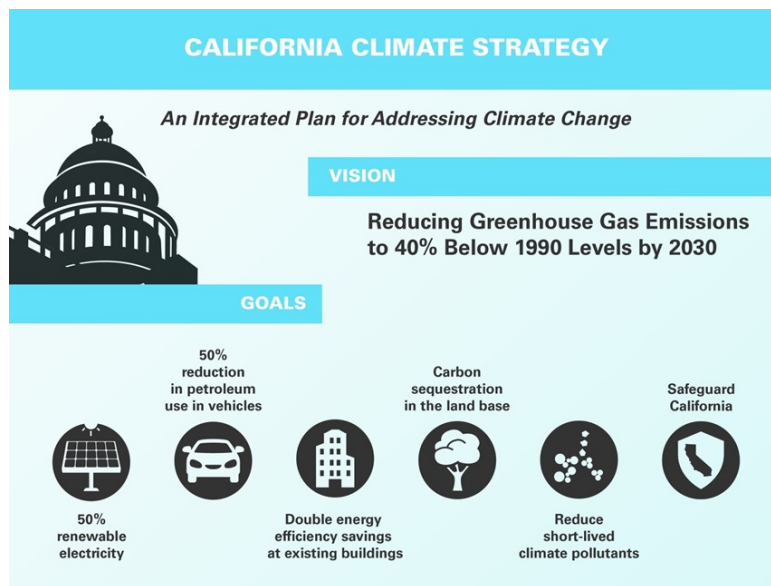
to climate change, Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

Statewide Efforts

To further the vision of California’s GHG reduction targets outlined in AB 32 and SB 32, Governor Brown identified key climate change strategy pillars (concepts). These pillars highlight the idea that several major areas of the California economy will need to reduce emissions to meet the 2030 GHG emissions target. These pillars are (1) reducing today’s petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farm and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state’s climate adaptation strategy, *Safeguarding California*.

Figure 13. The Governor’s Climate change pillars: 2030 Greenhouse gas reduction goals



The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that we build on our past successes in reducing criteria and toxic air pollutants from transportation and goods movement activities. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled. One of Governor Brown's key pillars sets the ambitious goal of reducing today's petroleum use in cars and trucks by up to 50 percent by 2030.

Governor Brown called for support to manage natural and working lands, including forests, rangelands, farms, wetlands, and soils, so they can store carbon. These lands have the ability to remove carbon dioxide from the atmosphere through biological processes, and to then sequester carbon in above- and below-ground matter.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set a new interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

California Transportation Plan (CTP 2040)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. The CTP defines performance-based goals, policies, and strategies to achieve our collective vision for California's future statewide, integrated, multimodal transportation system. It serves as an umbrella document for all of the other statewide transportation planning documents.

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs.

While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

Caltrans Strategic Management Plan

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT per capita
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several funding and technical assistance programs that have GHG reduction benefits. These include the Bicycle Transportation Program, Safe Routes to School,

Transportation Enhancement Funds, and Transit Planning Grants. A more extensive description of these programs can be found in *Caltrans Activities to Address Climate Change* (2013).

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a department policy that will ensure coordinated efforts to incorporate climate change into departmental decisions and activities.

Caltrans Activities to Address Climate Change (April 2013) provides a comprehensive overview of activities undertaken by Caltrans statewide to reduce GHG emissions resulting from agency operations.

Project-Level GHG Reduction Strategies

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

- Caltrans Standard Specifications, a required part of all construction contracts, should reduce and control emission impacts during construction under the provisions of Section 7-1.02C "Emission Reduction". Provision 14-9.02 "Air Pollution Control" requires the contractor to comply with all pertinent rules, regulations, ordinances, and statutes of the local air district.
- Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CA Code of Regulations Title 17, Section 93114.
- Construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak times.
- Trees removed as a result of construction activities will be replanted in order to replace lost tree canopy to enhance Carbon sequestration.

Adaptation Strategies

"Adaptation strategies" refer to how Caltrans and others can plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage—or, put another way, planning and design for resilience. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. These types of impacts to the transportation infrastructure may also have economic and strategic ramifications.

Federal Efforts

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the CEQ, the Office of Science and Technology Policy (OSTP), and the National Oceanic and Atmospheric Administration (NOAA), released its interagency task force progress report on October 28, 2011¹⁰, outlining the federal government's progress in expanding and strengthening the nation's

¹⁰ <https://obamawhitehouse.archives.gov/administration/eop/ceq/initiatives/resilience>

capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provided an update on actions in key areas of federal adaptation, including: building resilience in local communities, safeguarding critical natural resources such as fresh water, and providing accessible climate information and tools to help decision-makers manage climate risks.

The federal Department of Transportation issued *U.S. DOT Policy Statement on Climate Adaptation* in June 2011, committing to “integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely and that transportation infrastructure, services and operations remain effective in current and future climate conditions.”¹¹

To further the DOT Policy Statement, on December 15, 2014, FHWA issued order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*).¹² This directive established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. The FHWA will work to integrate consideration of these risks into its planning, operations, policies, and programs in order to promote preparedness and resilience; safeguard federal investments; and ensure the safety, reliability, and sustainability of the nation’s transportation systems.

FHWA has developed guidance and tools for transportation planning that fosters resilience to climate effects and sustainability at the federal, state, and local levels.¹³

State Efforts

On November 14, 2008, then-Governor Arnold Schwarzenegger signed EO S-13-08, which directed a number of state agencies to address California’s vulnerability to sea-level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea-level rise and directed all state agencies planning to construct projects in areas vulnerable to future sea-level rise to consider a range of sea-level rise scenarios for the years 2050 and 2100, assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea-level rise. Sea-level rise estimates should also be used in conjunction with information on local uplift and subsidence, coastal erosion rates, predicted higher high water levels, and storm surge and storm wave data.

Governor Schwarzenegger also requested the National Academy of Sciences to prepare an assessment report to recommend how California should plan for future sea-level rise. The final report, *Sea-Level Rise for the Coasts of California, Oregon, and Washington* (Sea-Level Rise Assessment Report)¹⁴ was released in June 2012 and included relative sea-level rise projections for the three states, taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge, and land subsidence rates; and the range of uncertainty in selected sea-level rise projections. It provided a synthesis of existing information on projected sea-level rise impacts to state infrastructure (such as roads, public facilities, and beaches),

¹¹ https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm

¹² <https://www.fhwa.dot.gov/legsregs/directives/orders/5520.cfm>

¹³ <https://www.fhwa.dot.gov/environment/sustainability/resilience/>

¹⁴ *Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future* (2012) is available at: http://www.nap.edu/catalog.php?record_id=13389.

natural areas, and coastal and marine ecosystems; and a discussion of future research needs regarding sea-level rise.

In response to EO S-13-08, the California Natural Resources Agency (Resources Agency), in coordination with local, regional, state, federal, and public and private entities, developed *The California Climate Adaptation Strategy* (Dec 2009),¹⁵ which summarized the best available science on climate change impacts to California, assessed California's vulnerability to the identified impacts, and outlined solutions that can be implemented within and across state agencies to promote resiliency. The adaptation strategy was updated and rebranded in 2014 as *Safeguarding California: Reducing Climate Risk (Safeguarding California Plan)*.

Governor Jerry Brown enhanced the overall adaptation planning effort by signing EO B-30-15 in April 2015, requiring state agencies to factor climate change into all planning and investment decisions. In March 2016, sector-specific Implementation Action Plans that demonstrate how state agencies are implementing EO B-30-15 were added to the Safeguarding California Plan. This effort represents a multi-agency, cross-sector approach to addressing adaptation to climate change-related events statewide.

EO S-13-08 also gave rise to the *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance), produced by the Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT), of which Caltrans is a member. First published in 2010, the document provided "guidance for incorporating sea-level rise (SLR) projections into planning and decision making for projects in California," specifically, "information and recommendations to enhance consistency across agencies in their development of approaches to SLR."¹⁶

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation, and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is actively engaged in working towards identifying these risks throughout the state and will work to incorporate this information into all planning and investment decisions as directed in EO B-30-15.

The proposed project is outside the coastal zone and not in an area subject to sea-level rise. Accordingly, direct impacts to transportation facilities due to projected sea-level rise are not expected.

The project area is within FEMA FIRM No. 0602620475E dated July 6, 1998. The proposed project is within Flood Zone A, AE and Zone X of the Cosumnes River 100-year floodplain. The replacements of bridge No. 24-0020R/L and Bridge No. 2424-0021/L, the section of SR 99 embankment to be elevated, and the improvements at Dillard Road OC (Bridge No. 24-0163) lay within critical floodplain (Zone A and AE). The replacement bridges will have a smaller footprint within the floodplain because the area of the new bridge supports would be smaller than the area of the existing bridge supports. New bridge decks will be placed at a higher elevation, creating additional freeboard. Ground surfaces that will be elevated are already above the 100-year floodplain. Most work on improvements at the Dillard Road OC will take place above the 100-year floodplain elevations.

¹⁵ <http://www.climatechange.ca.gov/adaptation/strategy/index.html>

¹⁶ <http://www.opc.ca.gov/2013/04/update-to-the-sea-level-rise-guidance-document>

Chapter 5. Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation, the level of analysis required, and to identify potential impacts and avoidance, minimization and/or mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including: Project Development Team (PDT) meetings, partnering meetings, interagency coordination meetings, and public information meetings.

A public open house was held on March 28, 2019 at the Valley Hi-North Laguna Library during the circulation of this Initial Study.

A second public open house was held on April 11, 2019 at Elk Grove City Council Chambers during the circulation of this Initial Study.

This Initial Study was made available for public and agency review and comment from March 18, 2019 to April 16, 2019. Caltrans has ensured that the document was made available to all appropriate parties and agencies, including other state, federal and local agencies which have regulatory jurisdiction, or that exercise authority over resources that may be affected by the project and the general public.

All project comments received during the circulation of this Initial Study are placed in and addressed in this Chapter.

From: [Bob Murdoch](#)
To: [Suthahar, Sutha@DOT](#)
Cc: [Kristyn Laurence](#); [Murphy, Rodney @DOT](#);
[Kevin Bewsey](#)
Subject: RE: Cosumnes Bridge Replacement Open House in Elk Grove
Date: Monday, April 1, 2019 12:44:22 PM

Sutha,

1 | The Elk Grove City Council is interested in Caltrans' Cosumnes Bridge Replacement Project. They are concerned about the proposed closure of the Eschinger ramps and the long term impact on constructing a full interchange at 99/Eschinger. The City Council has asked for two things:

- 2 |
1. A presentation to the City Council before the environmental comment period ends. The next Council meeting is on April 10th.
 2. A public meeting/open house in Elk Grove before the environmental comment period ends so that citizens can learn about the project and provide comments. We can help secure a location for this meeting.

Can Caltrans provide a presentation to Council and hold another open house in Elk Grove?

From: Kevin Bewsey
Sent: Friday, March 29, 2019 8:33 PM
To: rodney.murphy@dot.ca.gov
Cc: Bob Murdoch; Kristyn Laurence
Subject: Cosumnes Bridge Replacement Open House in Elk Grove

Afternoon Rod,

I wanted to follow up with a written email after our discussion last night at your open house. At the March 27, 2018 City Council meeting public comment was made on your March 28th open house requesting that a similar open house be held in Elk Grove. Our City Council also provide direction to request a similar meeting at City Hall during circulation of your CEQA

document. Can you provide some possible dates for when Caltrans could hold this open house so we can check availability of City Hall?

Thanks,

Kevin Bewsey | Public Works

Capital Program Division Manager

City of Elk Grove

8401 Laguna Palms Way, Elk
Grove, CA 95758 t 916.478.2243 |
f 916.627.4400

TTY/TDD 888.435.6092

elkgrovecity.org

Response to Comment 1:

Thank you for your comment. Noted.

Response to Comment 2:

Caltrans conducted a second Public Meeting on April 11, 2019 prior to the environmental comment period ending on April 16, 2019 at City Council chambers.

Comment 3 and 4

From: [Tom and Debbie Rutsch](#)
To: Lambirth, Cara@DOT
Subject: Cosumnes River Bridge Replacement
Date: Friday, April 5, 2019 1:12:39 PM

I'm writing to you about the Cosumnes River Bridge and Cosumnes River Overflow Bridge Replacement Project.

3 The Cosumnes River is the only wild river on the western slopes of the Sierra Nevada and has been designated as an ecological reserve by the Fish and Game Commission. Highway 99 where it crosses the Cosumnes River falls within this reserve. Because the Consumes River remains undammed, it experiences the seasonal overbank flooding that was once a common feature of rivers in California's central valley. This flooding supports the natural growth of riparian and floodplain vegetation, which in turn serves as home to an astounding array of wildlife. More than 250 bird species, over 40 fish species, and approximately 230 plant species have been identified on the approximately 4,700 acre reserve.

4 Because of the unique natural character of the project location, its imperative that the project include components in the design to support the natural character of the river and its floodplain. This includes see-through Bridge Metal Rail Barriers (ST series) and concrete and metal colors that blend with the natural environment.

Thank you for your consideration of this important component of the project.

Tom Rutsch
5038 Willow Vale Way
Elk Grove, CA, 95758
916-690-0880

Response to Comment 3:

Commenter makes a general comment about the environmental setting. The Project's environmental setting is discussed in detail in Chapter 4 of the IS/ND (March 2019) and in Chapter 3 of the Natural Environment Study "NES" (November 2018).

Response to Comment 4:

The Visual Impact Assessment (VIA) concluded that the project would not create any potentially significant or significant visual impacts on the environment, and therefore, no mitigation is necessary. However, to more effectively visually integrate the project with its surrounding environment, Caltrans is considering including aesthetic treatment for the bridge rail barriers at the Dillard Road Overcrossing (OC). The aesthetic treatment will be similar to that applied at the Grant Line Road (OC), located approximately 3/4-mile north of the project site. During the Design Phase, Caltrans may also consider aesthetic treatment for the Cosumnes River Bridge and Cosumnes River Overflow Bridge.

Comment 5-8

SACRAMENTO METROPOLITAN



April 16, 2019

SENT VIA EMAIL

Amarjeet S.
Benipal District 3
Director, Caltrans
703 B Street, Marysville, CA 95901

RE: State Route 99 Cosumnes River / Cosumnes River Overflow Bridge Replacement

Dear Mr. Benipal,

Thank you for providing the Sacramento Metropolitan Air Quality Management District (SMAQMD) with the opportunity to review the environmental document for this project. We have reviewed the project in a manner consistent with the California Health and Safety Code Section 40961 requirement that the District “represent all the citizens of the Sacramento District in influencing the decisions of other public and private agencies whose actions may have an adverse impact on air quality.” Staff comments follow.

Climate Change: Real & Substantive Impacts

More than once, the environmental document uses the following language to describe assessment of climate change or greenhouse gas emissions impacts: “... it is too speculative to make a determination regarding significance of the project’s direct impact and its contribution on the cumulative scale to climate change.” This language appears regularly in Caltrans environmental documents, and counters evolving scientific knowledge and state regulatory schemes.

5

The repeated assertion, that it is too speculative to make a significance determination about climate change impacts, undermines explicit guidance in the

most recent Scoping Plan Update for the California Global Warming Solutions Act of 2006 (AB 32, and its extension SB

32) – guidance to use a threshold in climate change analysis, with the end goal of significance determination. This creates inconsistent messaging from State agencies about climate change analysis. Further, the repeated assertion is inconsistent with more longstanding guidance from other state agencies on climate change analysis. For example State CEQA Guidelines, as incorporated into the California Code of Regulations Title 14 § 15064.4, provides clear guidance to determine significance in climate change analysis under CEQA review.

Caltrans must support overall state efforts to fight climate change, if it is to be a consequential participant in California’s leadership in this arena. As such, it is overdue to change this boilerplate language about speculative impacts, as cited above, to language that adequately reflects evolving scientific knowledge and state regulatory schemes.

777 12th Street, 3rd Floor ■ Sacramento, CA 95814-1908
916/874-4800 ■ 916/874-4899 fax
www.airquality.org

April 16, 2019

Page 2 of 2

Construction Emissions

6

The project does not appear to be over the District's 35-acre screening threshold for construction projects. Note the threshold of significance in the District's [CEQA Guide to Air Quality Assessment](#) (Guide) is zero for particulate matter, unless best management practices are included in the project. The District's [Basic Construction Emission Control Practices](#) are considered best management practices.

If the project does result in any significant demolition, trenching, cut-and-fill, soil hauling, or an unusually compact construction schedule, we recommend conducting an analysis as described in Chapter 3 of the District's Guide to ensure less than significant impacts from project construction. This includes a full description of construction activity, quantification of expected emissions, a discussion of significance according to District thresholds, and mitigation as necessary.

Greenhouse Gas Emissions

7

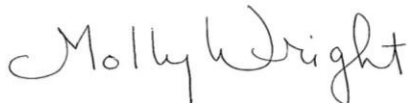
The project does not appear to be over the District's screening threshold for construction projects, but we nevertheless recommend using the District's best management practices for reducing greenhouse gas emission from construction projects, as applicable. These practices are listed under [Guidance for Construction GHG Emissions Reductions](#) in the Guide.

General Comments

8

All projects are subject to District rules and regulations in effect at the time of construction. The attached document describes District rules which may apply to this project whether the air quality impacts are determined to be significant or not. If you have additional questions or require further assistance, please contact me at mwright@airquality.org or 916-874-4207

Sincerely,



Molly Wright, AICP

Air Quality Planner / Analyst

Attachment: SMAQMD Rules and Regulations

Statement c: Paul Philley, AICP, Program Supervisor

Sac Metro Air District Rules & Regulations Statement (revised 6/2018)

*The following statement is recommended as standard condition of approval or construction document language for **all** development projects within the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District):*

8

All projects are subject to Sac Metro Air District rules in effect at the time of construction. A complete listing of current rules is available at www.airquality.org or by calling 916-874-4800. Specific rules that may relate to construction activities or building design may include, but are not limited to:

Rule 201: General Permit Requirements. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from Sac Metro Air District prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the Sac Metro Air District early to determine if a permit is required, and to begin the permit application process. Other general types of uses that require a permit include, but are not limited to, dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions.

Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc.) with an internal combustion engine over 50 horsepower is required to have a Sac Metro Air District permit or a California Air Resources Board portable equipment registration (PERP) (see Other Regulations below).

Rule 402: Nuisance. The developer or contractor is required to prevent dust or any emissions from onsite activities from causing injury, nuisance, or annoyance to the public.

Rule 403: Fugitive Dust. The developer or contractor is required to control dust emissions from earth moving activities, storage or any other construction activity to prevent airborne dust from leaving the project site.

Rule 414: Water Heaters, Boilers and Process Heaters Rated Less Than 1,000,000 BTU PER Hour. The developer or contractor is required to install water heaters (including residence water heaters), boilers or process heaters that comply with the emission limits specified in the rule.

Rule 417: Wood Burning Appliances. This rule prohibits the installation of any new, permanently installed, indoor or outdoor, uncontrolled fireplaces in new or existing developments.

Rule 442: Architectural Coatings. The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.

Rule 453: Cutback and Emulsified Asphalt Paving Materials. This rule prohibits the use of certain types of cut back or emulsified asphalt for paving, road construction or road maintenance activities.

8

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CA 95814-1908 916/874-4800 ▪
916/874-4899 fax

www.airquality.org

Rule 460: Adhesives and Sealants. The developer or contractor is required to use adhesives and sealants that comply with the volatile organic compound content limits specified in the rule.

Rule 902: Asbestos. The developer or contractor is required to notify the Sac Metro Air District of any regulated renovation or demolition activity. Rule 902 contains specific requirements for surveying, notification, removal, and disposal of asbestos containing material.

Other Regulations (California Code of Regulations (CCR))

17 CCR, Division 3, Chapter 1, Subchapter 7.5, §93105 Naturally Occurring Asbestos: The developer or contractor is required to notify the Sac Metro Air District of earth moving projects, greater than 1 acre in size in areas “Moderately Likely to Contain Asbestos” within eastern Sacramento County. The developer or contractor is required to comply with specific requirements for surveying, notification, and handling soil that contains naturally occurring asbestos.

13 CCR, Division 3, Chapter 9, Article 5, Portable Equipment Registration Program: The developer or contractor is required to comply with all registration and operational requirements of the portable equipment registration program such as recordkeeping and notification.

13 CCR, Division 3, Chapter 9, Article 4.8, §2449(d)(2) and 13 CCR, Division 3, Chapter 10, Article 1, §2485 regarding Anti-Idling: Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes. These apply to diesel powered off- road equipment and on-road vehicles, respectively.

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4800 ▪ 916/874-4899 fax

www.airquality.org

Response to Comment 5

CEQA requires a lead agency to make a good faith effort to identify impacts and gives the lead agency discretion on the approach to analyze impacts. Per CEQA Guidelines §15064.4 Caltrans has used the best available information to conduct a combination of qualitative and quantitative analysis of greenhouse gas emissions related to the proposed project and have disclosed those projected emissions for anticipated construction activities within the draft document. While it is challenging to link the direct impacts of the proposed project to the global greenhouse gas effects on a cumulative scale to climate change, Caltrans is committed to reducing GHG emissions as outlined in the draft initial study.

Response to Comment 6

CEQA requires a lead agency to make a good faith effort to identify impacts and gives the lead agency discretion on the approach to analyze impacts. Per CEQA Guidelines §15064.4 Caltrans has used the best available information to conduct a combination of qualitative and quantitative analysis of greenhouse gas emissions related to the proposed project and have disclosed those projected emissions for anticipated construction activities within the draft document. While it is challenging to link the direct impacts of the proposed project to the global greenhouse gas effects on a cumulative scale to climate change, Caltrans is committed to reducing GHG emissions as outlined in the draft initial study.

Response to Comment 7

Caltrans will incorporate measures to reduce GHG emissions related to construction activities for this proposed project.

Response to Comment 8

Caltrans will be in compliance with all the local ordinances including Sacramento Metropolitan Air Quality Management District Rules in terms of Construction emissions. This document also provides mitigation strategies to reduce air quality impacts during construction.

Comments 9-23



Sacramento Audubon Society



www.swainsonshawk.org

April 15, 2019

Friends of the Swainson's Hawk
8867 Bluff Lane

Fair Oaks, CA 95628
916-769-2857

swainsonshawk@sbcglobal.net

Sacramento Audubon Society
P.O. Box 160694

Sacramento, CA 95816-0694

president@sacramentoaudubon.org

Comments and Questions from Friends of the Swainson's Hawk and Sacramento Audubon Society regarding "Initial Study with Proposed Negative Declaration, March 2019, Cosumnes River Bridge Replacement Project 03-SAC-99-PM 7.1-9.4"

Please send all notices of all hearings and documents to us at the addresses and emails above.

The Project area appears to reach from just south of the interchange at Kammerer Road to Dillard Road, over two miles in length. It is described as:

" The California Department of Transportation proposes a bridge replacement project on SR 99 between post miles 7.1 and 9.4 near the City of Elk Grove in Sacramento County. The proposed project would replace four bridge structures with two bridge structures, each spanning the entire width of the roadway including the median; relinquish the McConnell Underpass (Br No. 24-0048L) under the UPRR rail line, construct a southbound (SB) McConnell OH structure adjacent to the existing McConnell OH northbound (NB) structure or replace the existing NB McConnell OH structure with a single McConnell OH for both NB and SB SR 99, realign the SB lanes of SR 99 at McConnell to align with the NB SR 99 lanes, improve the Dillard Road Overcrossing and abandon the Eschinger Road on and off ramps from SB SR99. Two build alternatives; Alternative 1 and Alternative 2, and a no-build alternative are being considered for the proposed project. The two build alternatives include common design features. " (p. 2)

On page 4, the IS/ND states that it will obtain streambed alteration and temporary access permits for the Dillard Unit of Cosumnes Ecological Reserve from the California Department of Fish and Wildlife prior to construction. However, the IS/ND provides no information on consultation with the Department regarding project impacts on state listed species.

10

At Pages 51-52, the IS/ND notes that California Endangered Species Act, and specifically Section 2081 of the California Fish and Game Code, "emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The

California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA." Yet the document shows no indication that project proponents actually consulted with CDFW on impacts to listed species. The document should be revised and recirculated after consultation with CDFW regarding impacts on wildlife.

11

The IS/ND at Page 54 states: "Nest surveys during the inactive season identified ten potential raptor nests within 500 feet and sixteen nests within a half mile of the Cosumnes River Bridge and the Cosumnes River Overflow Bridge. Swainson's hawk pairs were identified flying over the project area during their breeding season in July. Although there were ten observed raptor nests identified within 500 feet of the project area, it is likely that most of these nests would be occupied by other raptor species, not Swainson's." No evidence is presented to support the assertion that Swainson's Hawk would not be occupying these nests. "Likely" is not evidence and fails to comply with disclosure requirements under CEQA. Moreover, even if only one of these nest sites is for a state listed species, the impact will be significant and would need to be mitigated. Additionally, we advise that you obtain a 2081 permit from the CDFW as there is a chance of take. By not doing so, you and your contractors risk being prosecuted for a violation of CESA.

12

In addition, the IS/ND asserts: "Thus, the temporary impacts to Swainson's Hawk as a result of the project are anticipated to be minimal in comparison to the larger population of Swainson's Hawk in the surrounding area. Additionally preconstruction surveys will occur to avoid any impacts to the species." There are several inadequacies in this analysis and mitigation.

First, impacts to listed species may not be discounted because other individuals of the species are present in the region and not impacted by the project. The environmental baseline is the project area and environmental impacts are considered in terms of the baseline. (CEQA Guidelines Section 15125). Any potential impacts to Swainson's Hawk must be identified and mitigated for a Negative Declaration.

13

Secondly, the assertion that all impacts to the species will be avoided by preconstruction surveys is not supported by any evidence. On page 55, the measures to avoid impacts are described as:

The following measures would be implemented to avoid impacts to Swainson's hawks:

- Preconstruction surveys will be conducted no less than 14 days and no more than 30 days before the project starts.
- If an active nest is found a qualified biologist will monitor the active nest during construction activities to ensure that no interference with the hawks' breeding activities occurs.
- Removal of any trees within the project area should be done outside of the nesting season, however, if a tree needs to be removed during nesting season a qualified biologist will inspect the tree prior to removal to ensure that no nests are present.

No impacts to Swainson's hawk are anticipated, therefore no compensatory mitigation is proposed."

13

This conclusion is not supported by substantial evidence which is required by CEQA. How will preconstruction surveys or biological monitors avoid impacts to an actively nesting pair in the project footprint? If there is likelihood, as there is here, that nesting pairs may be present in the project footprint, Caltrans must consult with the CDFW well in advance and obtain a 2081 take permit to satisfy the CDFW that Caltrans is following the CDFW protocols for avoiding and mitigating for take of Swainson's Hawk.

14

The IS/ND and Initial Study provide no map of the location of known Swainson's Hawk nests, nor disclosure of whether any known nest trees would be removed during the project construction. Two maps of the known nest trees are available and one of these is attached.¹ It is common to provide such maps in environmental documents affecting Swainson's Hawks and other migrating raptors so that the agency and public can determine whether nest trees will be removed or whether there are nest trees so close to the project site that adverse impacts during construction are likely. Swainson's Hawks have high nest site fidelity which means that they return to the same nesting sites year after year.² The document fails to provide the level of detail required by CEQA to fully inform the decision makers and the public about the impacts of the project on Swainson's Hawk nesting pairs in the project area.

15

Migratory Birds at Pages 49-50, the IS/ND describes measures to avoid impacts to migrating birds, which includes vegetation and tree removal during the non-nesting season. It does not show any mitigation for loss of nesting habitat. The IS/ND should specify when and where nesting habitat will be replaced, and ensure that this impact is mitigated with an enforceable measure. Migratory birds are protected by federal and state law under the Migratory Bird Treaty Act (MBTA).

16

Bats. At Pages 50-51 the IS/ND dismisses any impacts on bats despite the use of the bridge by bats. We urge you to consider the positive environmental and ecological benefits of building the replacement bridge sections so that bats will nest in the bridge. This was done at the Franklin Road Bridge in South Sacramento with outstanding results. The benefits of 60,000 nesting bats are maintained simply with design features of the bridge. Similarly, the

Yolo Bypass structure hosts bats. Bats provide excellent insect control benefits and are also forage for raptors.

¹ California Fish and Game, 2005 and 2009 nest survey, request from CDFW; South Sacramento County Habitat Conservation Plan, Figure SWHA-1, Range of the Swainson's Hawk in the SSHCP Plan Area

² The Distribution, Abundance, and Habitat Associations of the Swainson's Hawk (*Buteo swainsoni*) in South Sacramento County Prepared for: City of Elk Grove, Estep Environmental Consulting Jim Estep. April 2007 P. 17 "Nesting pairs are highly traditional in their use of nesting territories and nesting trees. Many nest sites in the Central Valley have been occupied annually since 1979 and banding studies conducted since 1986 confirm a high degree of nest and mate fidelity."

Our concerns:

- 17 1. The claim that there are no impacts and no mitigation is needed for impacts on Swainson's Hawk is not supported by evidence in the IS/ND and therefore violates CEQA. Did you fail to consult with the California Department of Fish and Wildlife on the wildlife impacts of the project prior to issuing the IS/ND? Did you not ask DFW to identify known nesting territories of Swainson's Hawk in the project area, and how to assess and fully mitigate for the impacts? The IS/ND should be revised and recirculated after consultation with the Department, or an EIR prepared.
- 18 2. The project extends for over two miles and crosses one of the most valuable and sensitive wildlife habitats in the South Sacramento County area, the Cosumnes River Preserve (see attached map of the preserve). The property on the east is part of the Cosumnes River Preserve, is owned by the Department of Fish and Wildlife, and is managed as permanent protected habitat. The IS/ND does not acknowledge the importance of the Cosumnes River Preserve in protecting the wildlife resource of Sacramento County. Nor does it explain why it would pick a nature preserve as the property to use for staging the construction project instead of an alternative, more industrial or urbanized site. We lack the expertise to comment on the 4(f) de minimis analysis, but urge Caltrans to avoid activities on the DFW property.
- 19 3. The IS/ND does not reference the South Sacramento County Habitat Conservation Plan. You are obligated by CEQA to determine if your project plan is consistent with or conflicts with provisions and the conservation strategy of the SSCHCP, and to mitigate or avoid conflicts. The IS/ND should be revised and recirculated after consultation with the South Sacramento Conservation Agency JPA.
- 20 4. Nesting activities in this area are well documented and should have been considered and disclosed, which could have happened if you had consulted with CDFW. Surveys in non-nesting season for nesting areas of migrating raptors (such as the Swainson's Hawk) are not an adequate substitute for disclosing known nesting activity and doing a survey in nesting season to identify potential impacts. The latter is necessary to fully inform decision-makers and the public about the baseline condition of the site and the foreseeable impacts of the project.
- 21 5. It is very likely given the description of the construction site that Swainson's Hawk nesting activity will be impaired with the likely potential of lost Swainson's Hawk reproduction. A single mortality to SWHA or to SWHA eggs would be a violation of Fish and Game Code. The IS/ND makes no mention of disturbance or nest abandonment that could occur due to noise, dust, and vibration from construction activities. This could lead to a CESA violation.
- If nesting trees are eliminated for the project, the loss could extend for more than one season. Nesting trees for Swainson's Hawk are large, mature trees and typically used every year or

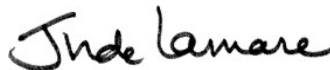
21 | alternates years (use of pairs of nearby nest trees in alternate years is common). Nesting
occurrences and nest tree loyalty are well documented in the work of wildlife biologist Jim
Estep³ and the South Sacramento HCP, Figure 3-25.⁴ Mitigation for loss of nesting trees
should be included in the IS/ND.

22 | 6. The Department of Transportation is obligated to consult with the Department of Fish and
Wildlife on this project to ensure that all impacts to state listed species are indeed identified
and mitigated. It is not appropriate to release an IS/ND for a project in listed species nesting
territory prior to consultation with the Department. CDFW has jurisdiction over the
conservation, protection, and management of wildlife, native plants, and habitat necessary to
maintain biologically sustainable populations. As a trustee for these resources, CDFW provides
the requisite biological expertise to review and comment upon environmental documents and
impacts arising from project activities, as those terms are used in CEQA. (Fish and Game Code
Section 1802).]

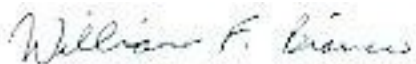
As the trustee agency for fish and wildlife resources, CDFW must be notified when a CEQA
project involves fish and wildlife of the state, rare, and endangered native plants, wildlife areas,
and ecological reserves. Lead and responsible agencies are required to consult with the trustee
agencies (CEQA Guideline 15086(c)).]

23 | 7. Please add to the IS/ND the mitigation measure that Caltrans will apply for 2081 incidental
take permit from the Department of Fish and Wildlife and comply with all conditions imposed
by the Department to avoid and minimize take of Swainson's Hawk.

Sincerely,



James P. Pacht and Judith Lamare, Co-Founders



William Bianco

President, Sacramento Audubon Society

³ [The Distribution, Abundance, and Habitat Associations of Swainson's Hawk \(*Buteo swainsoni*\) in South](#)

[Sacramento County](#)– April 2007; [Monitoring Swainson's Hawk \(*Buteo swainsoni*\) Nesting Activity in South Sacramento County Results of 2008 Surveys](#) – February 2009

⁴ Chapter 3, Biological Setting, p 113. <https://www.southsachcp.com/sshcp-chapters---final.html>

Response to Comment 9

Caltrans has, and will continue, to consult with the California Department of Fish and Wildlife (CDFW) concerning state listed species. CDFW has also been to the project site to discuss potential impacts to state listed species. Additionally, Caltrans has, and will continue, coordination with CDFW concerning the Dillard Unit of the Cosumnes Ecological Preserve (“Preserve”). See NES, Section 2.4, for information related to consultation with CDFW.

Response to Comment 10

See response to Comment 9.

Response to Comment 11

Preliminary field surveys for raptors were conducted prior to the release of the IS/ND. During preliminary studies, a pair of Swainson's hawks were observed, however, no Swainson's hawk nests were observed in the project area. Caltrans is currently conducting protocol level surveys for Swainson's hawk. A survey for nesting Swainson's hawk was conducted on May 2-3, 2019, following the applicable survey protocols provided in the *CDFW Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's central Valley, Swainson's Hawk Technical Advisory Committee, May 31, 2000*. As a result of the May 2-3 2019 survey, no active nests were observed at the project site or vicinity. Please refer to Section 4.3.5, Threatened and Endangered Species, of the Final Environmental Document for a complete list of avoidance and minimization measures incorporated as project features. With implementation of these avoidance and minimization measures, no impacts to Swainson's hawks are anticipated.

Response to Comment 12

See response to Comment 11.

Response to Comment 13

See response to Comment 11. Caltrans has and will continue to consult with CDFW.

Response to Comment 14

The map referenced shows regional-level occurrences and lacks specificity to determine project area impacts. Preliminary field surveys did not identify Swainson’s hawk nests within the project area or study limits. See Comment 11 for avoidance and minimization measures.

Response to Comment 15

Analysis of vegetation removal did not indicate a potentially significant impact. As a permit compliance measure, Caltrans anticipates replacing removed trees at a minimum of a 1:1 ratio.

Response to Comment 16

Analysis of bat impacts did not indicate a potentially significant impact. Section 4.5 of the NES state that approximately 15 to 20 bats were observed and avoidance will be achieved by exclusion during the migration period. Note that there are other structures and habitat nearby that the species could utilize without disruption to their roosting habits.

Response to Comment 17

See response to Comment 11.

Response to Comment 18

Use of the Preserve property will be limited to a 50-foot wide temporary construction easement (“TCE”) adjacent to the Caltrans right-of-way which is necessary to allow for vehicle and equipment access to construct the new bridges. All temporary impacts within the Preserve have been found to be de minimis per the Section 4F Study, as areas of impact will be restored. No permanent impacts to the Preserve will occur.

Response to Comment 19

Caltrans is not a signatory to the HCP. The project will not impact the preserves identified in the HCP or their function.

Response to Comment 20

See response to Comment 11.

Response to Comment 21

See response to Comment 11, 14 and 15.

Response to Comment 22

See response to Comment 9.

Response to Comment 23

See response to Comment 11.



April 15, 2019

Cara Lambirth
Caltrans Office of Environmental Management
703 B Street
Marysville, CA 95901

RE: Elk Grove Comment Letter Regarding the Caltrans Draft Initial Study with Proposed Negative Declaration/Draft Section 4(f) De Minimis Determination for the Cosumnes River Bridge Replacement Project (EFIS: 0312000069)

Dear Ms. Lambirth:

The City of Elk Grove (City) and its hired expert environmental and engineering consultant have reviewed the Draft Initial Study with Proposed Negative Declaration/Draft Section 4(f) De Minimis Determination (ISND) and supporting technical studies for the Cosumnes River Bridge Replacement Project (Project) (EFIS: 0312000069), prepared by the California Department of Transportation (Caltrans) as part of its California Environmental Quality Act (CEQA) analysis. During this review, the expert consultants and City identified several concerns and issues in the document, many related to environmental impacts that have not been addressed. The consultant's qualifications are attached to this letter.

The following are the City's comments.

ISND Public Notice

- The project title of Cosumnes River Bridge Replacement Project is misleading and does not lend itself to the public disclosure of the other project activities such as realigning southbound State Route (SR) 99, replacing a grade separated rail road crossing, relinquishing an existing underpass and abandoning the Eschinger Road southbound on and off ramps at SR 99. Someone receiving the notice would not have enough information to determine in full what the project entails.
- Why does the ISND Public Notice not disclose the closure of the Eschinger Road southbound on and off ramps at SR 99, which is part of the Project's description and is a permanent closure of an existing interchange? CEQA guidelines §15072 state that the Notice should have a brief description of the Project. While this means that the Notice's Project Description and the ISND's Project Description do not need to be identical, the Notice's Project Description should note all the components of the Project so that the Public can understand the full implications involved with approval and implementation of the Project. Not including the permanent on/off ramp closure in the Project Description is misleading and therefore makes the Notice deficient.

ISND - General

- The included maps have very low resolution making them almost impossible to read. Please include high resolution map figures.

- 27 • Document and supporting technical studies reference post miles. These post miles should be depicted on maps within the document.
- 28 • It is unclear if every supporting technical study utilized the same study area delineated as the "ESL Boundary Line" on Figure 2. Please clarify.
- 29 • It is unclear why there are two different "ESL Boundary Line" on Figure 2, please explain.
- 30 • Figure 2 is difficult for reader to orient where each map page is on the Project. Provide a grid index/over view map showing where each detailed map occurs throughout the Project.
- 31 • Many of the minimization/avoidance measures should be correctly identified as mitigation, as defined in CEQA Public Resource Code §15370, since without their implementation the Project would have significant impacts to the environment. This would necessitate the declaration to be revised from a "Negative Declaration" to a "Mitigated Negative Declaration", at a minimum. Affected sections are not limited to, but include the following:
 - Biological Resources
 - Hazards and Hazardous Materials
 - Cultural/Paleontological Resources
 - Water Quality

ISND Chapter 1 - Project Description

- 32 • Caltrans states "The geometrics of the current on/off ramps will not allow for connection to the realigned SB SR 99" but there is no discussion of any feasible alternatives, mitigation measures, or whether other alternatives to maintain the ramps were pursued. Pursuant to CEQA guidelines §15126.6, the lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There are other design alternatives that could be utilized to preserve the existing connection. The exhibit enclosed with this comment letter (Attachment 1) details a possible alternative and was designed by an expert Professional Engineer (P.E.) hired by the City. The alternative maintains the existing ramp access through slight realignment of Eschinger Road a hook ramp located adjacent to the railroad. Please see the enclosed exhibit which depicts this design alternative. This alternative shows that maintaining a connection is possible and Caltrans needs to evaluate and include this additional alternative and any other applicable options to maintain the southbound Eschinger off/on ramp.
- 33 • Caltrans states "It is understood that closing the Eschinger ramps will not preclude the local community from developing future access to SR 99 at Eschinger Road." However, Caltrans has not demonstrated it is technically feasible or that their Project has been designed to accommodate future access without creating cost prohibition to the implementing agency (i.e. the City of Elk Grove or Sacramento County). As the proposed bridges have a 75-year design life, the Project should be designed to accommodate a future interchange to Eschinger with both northbound and southbound access. It does not appear that any feasible alternatives or other mitigation measures were investigated.
- 34 • The purpose and need do not support closing Eschinger Road Ramps. Eschinger Road closure is not discussed in the purpose and need.

- 35
- The project description includes relinquishing the McConnell Underpass (Br. No. 24-0048L) under the Union Pacific Railroad (UPRR) rail line but the physical changes being proposed are not described or disclosed. Is the undercrossing being demolished or is the rail crossing being placed on a new embankment? It is issues such as these that are not addressed in the Negative Declaration that will likely have environmental impacts that make this document deficient for purposes of disclosure under CEQA.
 - The Project design does not appear to have been taken to a sufficient level to fully define the project description and project activities prior to beginning the environmental technical studies that support the environmental document. A summary of these missing activities is provided below:
 - 36
 - Modifications to the Eschinger Road and West Stockton intersection after the Project closes the southbound ramps are not included on the map figures or discussed in the text. What are the physical changes being proposed as part of this project? What additional traffic control is being proposed? Does the intersection accommodate overtraking without going into the opposing lane from West Stockton to Eschinger? Will Caltrans maintain this intersection in perpetuity as it is in there right of way? Is Caltrans proposing that the Right of Way be given to Sacramento County? If given to the County will the Project be required to complete additional improvements prior to the County's acceptance?
 - Modifications to the Kammerer Road and Promenade Parkway intersection to accommodate additional vehicles, trucks, and school buses at that intersection are not shown. Is additional left turn storage needed? Does that intersection have sufficient shoulder width to accommodate overtraking without going into the opposing lane? What are the physical changes being proposed as part of this Project?
 - The new bridges at the Cosumnes River, Cosumnes River Overflow, and McConnell overhead are not described in type, width, or length.
 - The modifications in the median are not described.
 - The number of lanes, future lanes, inside shoulder, and outside shoulder are not described. They are shown in the attached drawings from the recent Request for Qualifications (RFQ). It is unclear if this is the Project or a different project is being analyzed under CEQA.

ISND Chapter 1 - Permits and Approvals

- 37
- Certain roads within the City of Elk Grove are load limited. To operate on these roads with a load greater than their limit requires a Transportation Permit pursuant to Elk Grove Municipal Code Chapter 10.40. Kammerer Road between Bruceville Road and State Route 99 is weight restricted to 7 tons. Grant Line Road between State Route 99 and Wilton Road is also weight restricted to 7 tons. The only local access to the Project site north of the Cosumnes River is West Stockton, which would require access by either of these two roads. As the amount of fill needed for the Project is several hundred thousand cubic yards and these dump trucks typically exceed 7 tons, Caltrans must obtain a Transportation Permit from the City. No discussion of potential mitigation under the permit is found in the document.

ISND Chapter 3 - General

- 38
- Throughout Chapter 3, the reader is referred to "Chapter 2" for more information (see page 20 for an example). Based on the table of contents, the reader should be referred to "Chapter 4".

ISND Chapter 3 - Aesthetics

- 39
- Will the Project replace the non-riparian vegetation loss, in addition to the riparian? This section does not disclose the quantity of trees that are being removed but the supporting study, the Visual Impact Assessment (VIA), states that between 250 and 300 non-riparian trees and 280 riparian trees will be removed. This is a high number of trees being removed, which will alter the viewshed and the document does not address whether the non-riparian removal will be mitigated.

ISND Chapter 3 - Biological Resources

- 40
- The ISND references "offset" of impacts to waters of the US, waters of the State, wetlands, and Valley Elderberry Longhorn Beetle, stating that there is no significant impact, thereby implying that the offset cannot be considered mitigation. The "offset" terminology is referenced in the CEQA guidelines, in regard to Greenhouse Gas Emissions. Guidelines §15126.4(c)(3) state that off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions are a recommended option to mitigate greenhouse gas emissions. This specific guideline is the only formal reference within CEQA guidelines relating to offsets; however, this reference to offsets within §15126.4(c)(3) still states that the offset is suitable mitigation. In this context, offsets could be used, in addition to other mitigation, as a way to completely mitigate a significant impact under Greenhouse Gas Emission. There does not appear to be another CEQA guideline which discusses use of offsets and whether to consider the offset as mitigation or other type of measure. Should Caltrans be applying the Greenhouse Gas Emission's definition of offset, which does not appear to be authorized under CEQA, Caltrans is treating the proposed offsets as a minimization measure, by stating that there are no significant impacts to any biological resource and that implementation of the offset measure is therefore not required but will be done as a good faith effort by the agency. This use of offset is not correct and purposefully tries to mask the true nature of mitigation measures by redefining them as "offsets."

- 41
- The ISND states that permanent and direct impacts to the Valley Elderberry Longhorn Beetle (VELB) are considered less than significant; however:
 - Chapter 4, Page 62 - "The project may affect and is likely to adversely affect VELB; therefore, through the consultation process, the United States Fish and Wildlife Service requires compensatory mitigation. The proposed project work window also includes three months of the adult flight period, increasing the chances of adult mortality."
 - Chapter 4, Page 68 - "Although the temporary and permanent impacts to riparian elderberry habitat and non-riparian elderberry shrubs are considered less than significant pursuant to CEQA, through consultation with USFWS, in addition to transplanting elderberry shrubs...it was required that impacts be offset through the purchase of credits at a USFWS approved mitigation bank. Permanent riparian impacts will be compensated at a 3:1 acreage ratio and permanent non-riparian impacts will be mitigated at a 1:1 acreage ratio as follows...."
 - 5.07 acres permanent riparian, needs 123 credits
 - 5.99 acres permanent non-riparian, needs 145 credits

The USFWS has mandated that impacts to the VELB must be mitigated because of their determination that a project may affect and is likely to adversely affect VELB. This is a significant impact. Agencies cannot determine significance of project impacts by only considering those impacts after incorporation of regulatory agency mandate measures. Pursuant to the Caltrans Significance and Mitigation under the California Environmental Quality Act Guidance, authored by the Environmental Management Office and issued November 2016:

Incorporating measures into a project does not always mean they are not "mitigation". Conditions imposed on permits by regulatory agencies will often be

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mandatory and essentially part of the project, but they are still fairly characterized as mitigation measures if the impacts would be significant without them. In those instances, the significance determination should be made without consideration of the permit conditions. This is the case, even though Caltrans would lack the discretion to consider the alternative. (Pages 4-5)

The Caltrans guidance further states:

Make all significance determinations without consideration of inclusion of any avoidance, minimization, or mitigation measures, AND explain why the impact is or is not significant, and then how the mitigation measure would be reduced to less than significant. (Page 6)

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Based on the USFWS determination, the Caltrans guidance, and CEQA guidelines, there are significant impacts to VELB and the identified relocation and credit measures should be considered mitigation and not minimization or offset measures.

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- The ISND states less than significant impacts to Waters of the US; however, there is no discussion of why permanent impacts to 0.69 waters is not considered significant. CDFW is requiring that the permanent impact be mitigated through purchase of credits or on-site restoration so that there is no permanent loss of habitat. By not disclosing why permanent fill of waters is not a significant impact, the document does not support the Less than Significant determination. Further discussion is required to argue the significance threshold to the Public.

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- The ISND states less than significant impact to 0.69 acres of riparian habitat; however, there is no discussion of why permanent impacts to 0.69 riparian habitat is not considered significant, per CEQA Statutes §21803. By not disclosing why permanent fill of waters is not a significant impact, the document does not support the Less than Significant determination. Further discussion is required to argue the significance threshold to the Public.

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- The ISND states less than significant impacts to Mexican free-tailed bats currently utilizing the bridge due to anticipated exclusion but notes on Page 50 that the species is vulnerable to habitat destruction. There is no discussion of why permanent reduction of habitat is not considered a significant impact, pursuant to CEQA Statutes §21803, especially in the context of the document's statement regarding the vulnerability of the species to habitat destruction.
- By what environmental approval mechanism were the non-riparian trees removed from the median north of the Cosumnes River prior to the circulation of this document? If an activity is deemed necessary for the operation of a project, or necessary to achieve the project objectives, or a reasonably foreseeable consequence of approving the project, then it should be considered an integral project component that should be analyzed within the environmental analysis. The activity cannot be separated from the Project and analyzed as a separate and individual Project. This is referred to as piecemealing or segmenting and is explicitly forbidden by CEQA since dividing a Project does not allow for analysis of entire project impacts. Even if the lead agency decides that vegetation removal within a non-riparian area has no potential to be considered a significant impact, the activity cannot occur prior to approval/finalization of the environmental document because the lead agency does not have authority to move forward with implementation of the Project.

The ISND does not mention the non-riparian tree removal. Several of the supporting technical studies, including the NES, state that the Project will have three construction stages and that Stage I will include tree removal and vegetation clearing from within the median area north of Cosumnes

45 River. Based on this information, it is clear the tree removal and vegetation clearing observed in the median were removed as part of the Stage 1 construction for this Project. In order to determine the true effects of a project, the whole of the action must be analyzed. In doing a portion of the Project prior to completion of the environmental review, Caltrans has thwarted opportunity for the whole of an action to be reviewed and is in violation of CEQA compliance.

46 • The ISND does not indicate that non-riparian trees would be removed as a result of the Project, although the Visual Impact Assessment (VIA) states that between 250 and 300 non-riparian trees would be removed as part of the Project. Caltrans must present all anticipated environmental impacts and define whether they are considered significant or not, per CEQA Statutes Section 21803. Without full disclosure and analysis, the document does not support its less than significant determination.

47 • There is no discussion of whether there are applicable tree permits or tree ordinances, such as the Sacramento County Tree Ordinance, Caltrans tree policies, or applicable policies with the Cosumnes River Preserve. Is the Project following any mitigation strategy? If there are tree policies and Caltrans does not believe them applicable to this Project, why are they not applicable? Environmental analysis must present whether a Project is consistent with all applicable policies, ordinances, and land management plans. Without disclosure of whether there are tree related policies, ordinances, or guidelines that could set the significance threshold or a discussion on why Caltrans does not believe the removal of hundreds of trees qualifies as a significant impact, the document does not support its less than significant impact.

ISND Chapter 3 - Cultural Resources

48 • The supporting cultural study notes that previous cultural studies were conducted, presumably for the earlier bridge retrofit iteration of the Project. It is not clear based on the provided Supplemental HPSR and the Cultural Resources discussion in the ISND whether the previous geoarchaeological testing and Extended Phase I testing occurred within all sensitive areas in the current construction footprint, which was expanded from previous studies conducted to identify historical resources/historic properties, pursuant to CEQA and Section 106 of the National Historic Preservation Act (NHPA). While it is Caltrans prerogative not to disclose the types of resources considered exempt under Attachment 4 of the First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the NHPA (January 2, 2014) (Caltrans Section 106 PA,) due to the Project description of the removal of four bridges on a State Route, it should be mentioned whether the bridges to be replaced are exempt from review or were previously determined to not be historical resources/historic properties. The Public should not need a command of the Caltrans Section 106 PA to reason that the bridge must be exempted under this agreement and that is why there is no mention of the bridges. Without this information, it is difficult for the Public to know whether the document supports the No Impact determination.

49 • The document notes that Project was determined to have a "No Adverse Effect with Standard Conditions" as the two archaeological resources identified in the Project area could be protected in their entirety through designation of Environmentally Sensitive Areas (ESA). This implies that these two resources are considered historic properties, and therefore historical resources. This section must state that high visibility exclusionary fencing is what will ultimately protect the historical resources/historic properties from a Project induced significant impact. Without the combination of ESA establishment and exclusionary fencing, the Project could have a significant impact under CEQA or an adverse effect under Section 106 of the NHPA on these resources.

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- The supporting document, the Supplemental Historic Property Survey Report (SHPSR), indicates that an Archaeological Monitoring Area (AMA) is necessary to minimize impacts to potential buried archaeological resource. This is not discussed in the ISND and there is no minimization measure identifying the need for an AMA or archaeological monitoring. CEQA analysis must include all potential impacts and whether those impacts are significant. Without this discussion, the document does not support its No Impact determination.
- 51
- Regarding paleontological impacts, why are the "measures" listed on page 23 not identified as mitigation? The ISND identifies that a Paleontological Evaluation Report (PER) needs to be prepared. Pursuant to Caltrans guidelines, the PER is prepared prior to circulation of the draft environmental document so that there is sufficient information to determine likelihood of significantly impacting a unique paleontological resource. The Paleontological Mitigation Plan (PMP) can be prepared following the final environmental document. As the PER has not been prepared, there is insufficient information and analysis to support a finding of no significant impact.

ISND Chapter 3 - Hazards and Hazardous Materials

- 52
- Aerially deposited lead (ADL) from the historical use of leaded gasoline exists along roadways throughout California. Soil that contains lead in concentrations greater than considered appropriate for unrestricted use by the Department Of Toxic Substances Control (DTSC) (currently 80 milligrams per kilogram [mg/kg] total lead based on a 95 percent upper confidence limit [UCL]) and/or 5 mg/l extractable lead based on a 95 percent UCL, as determined by the CA Waste Extraction Test (CA-WET) poses a unacceptable risk to human health or the environment. A July 1, 2016, ADL Agreement between Caltrans and the California Department of Toxic Substances Control allows such soils to be safely reused within the project limits as long as all requirements of the Agreement are met. This agreement requires Caltrans to conduct sampling and analysis to adequately characterize the soils containing aerially deposited lead in the areas of planned excavation along the project route. The ADL Site Investigation Report dated August 8, 2016 documents sampling and analysis for a Seismic Retrofit and Bridge Rail replacement project at SR 99 and post miles 7.36, 7.92 and 8.39 only and does not demonstrate that sampling and analysis was conducted for the Project as described in the ISND for the larger limits from post mile 7.1 to 9.4. The ADL Site Investigation Report does document the presence of lead in soils at a concentration greater than what is considered appropriate for unrestricted use by the DTSC and that would poses a unacceptable risk to human health or the environment. These soils require soil management for aerially deposited lead-contaminated soils in order for these soils to not pose an unacceptable risk to human health or the environment and create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The ADL Site Investigation Report only serves to document the Project would create a potentially significant impact due to the significant hazard it would create to the public or the environment through the routine transport, use, or disposal of hazardous materials by not adequately characterize the soils containing aerially deposited lead and no proposed soil management associated with the project as described in the ISND.
- 53
- Asbestos Containing Material (ACM) was historically used in the construction of buildings, structures and, bridges. ACM is hazardous to human health. Both the Federal and State Occupational Safety and Health Administration (OSHA) require special training, handling, and reporting of ACM when it is disturbed. No sampling for ACM was conducted at either the McConnell Underpass or McConnel Overhead Structure. There is potentially significant impact due to the significant hazard it would create to the public or the environment through the routine transport, use, or disposal of hazardous materials by not adequately identify the presences of ACM as described in the ISND.
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- Railroad lines have historically used creosote treated wooden railroad ties in their construction, herbicides along their rail lines, and there is often heavy metal in the soils from rail cars and engines.

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These materials are hazardous to human health and would require special training and handling if disturbed. Sampling was not conducted at either the existing or proposed McConnell Underpass or McConnell Overhead Structure. There is potentially significant impact due to the significant hazard it would create to the public or the environment through the routine transport, use, or disposal of hazardous materials by not adequately identify the presences of these materials as described in the ISND.

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ISND Chapter 3 - ISND Chapter 3 Hydrology and Water Quality

- Caltrans operates under a separate Municipal Separate Storm Sewer System (MS4) Permit for its facilities under the State Water Resources Control Board. This permit regulates water quality standards. Caltrans has prepared a Water Quality Assessment Report referenced in the analysis section of the ISND to determine what project activities are needed to meet these regulatory requirements. In order to complete this analysis, the amount of disturbed soil area (DSA), existing impervious surface area, and new impervious surface area is needed to identify these requirements. At the time the Water Quality Assessment Report was prepared these were unknown as documented in the assessment report. The City identified at least 5 acres of new impervious surface area are being added. The MS4 permit requires that projects that create 1 acre or more of new impervious surface implement post construction treatment control BMPs. The amount of treatment depends on the increase in impervious area as a percentage of the total post-project impervious area. Depending of these calculations Caltrans would be required to size this treatment based on the new impervious area or the entire project. In addition, the MS4 permit has Hydro Modification Requirements to ensure that a project does not cause a decrease in lateral (bank) and vertical (channel bed) stability in receiving stream channels. Unstable stream channels negatively impact water quality by yielding much greater quantities of sediment than stable channels. Due to the amount of impervious surface added and the proximity to the river crossings, the Water Quality Assessment Report should have identified a Threshold Drainage Area and conducted a rapid assessment of stream stability at each stream crossing (e.g., pipe, culvert, swale or bridge) within that Threshold Drainage Area to properly identify the appropriate post-Construction Stormwater Treatment Controls or if the Project should complete instream or offsite restoration of Project redesign. This was not completed and as such all the Project activities associated with the Project have not been identified or analyzed under CEQA. There is a potentially significant impact the Project could create by violating water quality standards and degrade water quality. CEQA analysis must include whether a project would violate any water quality standards, alter the drainage pattern of the site/area, substantially degrade water quality, and other significant thresholds. Should permanent treatment BMPs be required, this would indicate that the Project may have a significant impact to water quality as currently designed.

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ISND Chapter 3 Land Use and Planning

- The Elk Grove General Plan was adopted on February 27, 2019 prior to circulation of this document. The ISND should reference the adopted General Plan and not refer to the draft General Plan. Additionally, the ISND should acknowledge the two Sphere of Influences added to the City (one located south of Bilby Road; one located south of Kammerer Road); the south of Kammerer Sphere of Influence is especially relevant as it includes Eschinger Road and the Project should be consistent with the General Plan in relation to this area. These revisions are needed to demonstrate whether the Project is consistent with the Elk General Plan, as currently adopted. There could be a potential significant impact to land use and planning if the project activities would preclude a future interchange at SR 99 and Eschinger Road such that Elk Grove's General Plan would no longer be applicable. This impact would be realized if either a future interchange was precluded, or a future interchange was no longer economical to construct. Feasible Alternatives should be investigated to ensure these impacts are not realized.

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- There is a lack of discussion on whether the Project is consistent with the Cosumnes River Preserve's Management Plan. CEQA analysis must include all applicable plans which could be impacted by Project. Without a full analysis detailing applicable points of the plan or why none are applicable, the document cannot support a determination of no impact.

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- There is a lack of discussion on whether the Project is consistent with Sacramento County's Natural Preserve Policies and Practices. Without a full analysis detailing applicable points of the plan or why none are applicable, the document cannot support a determination of no impact.

ISND Chapter 3 - Public Services / Emergency Services

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- How will permanent closure of Eschinger southbound off/on ramps impact emergency services provided by Cosumnes Services District Fire, Elk Grove Police, and Sacramento County Sheriff. While the post-construction conditions of wider shouldered northbound and southbound SR 99 would likely benefit emergency response vehicles, the document does not consider any impacts to the Eschinger portion of Sacramento County and Elk Grove's Sphere of Influence due to the removal of an existing access point to SR 99. This may have a significant impact that requires mitigation to ensure response times are not significantly impacted. Caltrans must present all anticipated environmental impacts and define whether they are considered significant or not, pursuant to CEQA Statutes §21803. Without full disclosure and analysis, the document does not support its less than significant determination.

ISND Chapter 3 -Transportation/Traffic

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- The Project Area is within unincorporated Sacramento County. There no discussion of Project's consistency with the County General Plan, specifically general plan policies regarding land use and transportation and whether the Project complies with these elements, especially regarding potential impacts to adopted LOS for intersections that would be impacted by the closure of Eschinger Road off/on ramps. Caltrans must present all anticipated environmental impacts and define whether they are considered significant or not, pursuant to CEQA Statutes §21803. Without full disclosure and analysis, the document does not support its less than significant determination.
 - The Sacramento County General Plan notes an interchange at Eschinger Road and designates the road as rural collector. The Project and the proposed removal of the Eschinger Road interchange is inconsistent with the County General Plan. This inconsistency needs to be noted in the Transportation/Traffic section of the document and explored for the potential of a significance effect on the environment.
 - Why are the potential LOS impacts to the local intersections (Eschinger Road/W. Stockton Blvd.; Eschinger Road/Bruceville) not discussed, even though the document states the traffic will be permanently rerouted to these areas?
 - Modifications to the Eschinger Road and West Stockton intersection after the Project closes the southbound ramps are not included on the map figures or discussed in the text.
 - What are the physical changes being proposed as part of this project? More detail is necessary to determine if the proposed ISND is supported by the environmental analysis presented in the document.

A project's inconsistency with a general plan does not itself mandate the project will have a significant effect on the environment but with no analysis whatsoever on this topic a determination can't be made based on the ISND provided.

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- The ISND notes (in the Land Use discussion) that the Project is consistent with the City of Elk Grove General Plan, as the Project area is not included in an annexed portion of the City and there are no planned developments in the Project area; however, the General Plan identifies Eschinger as an existing interchange within the City's South Study Area. Closure of this interchange would be inconsistent with the General Plan. Why is this not discussed or treated as an inconsistency with the General Plan? This inconsistency needs to be noted in the Transportation/Traffic section of the document. A project's inconsistency with a general plan does not itself mandate the project will have a significant effect on the environment but with no analysis whatsoever on this topic a determination cannot be made based on the ISND provided.

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- The City's General Plan has adopted Vehicle Miles Traveled (VMT). Why has the Project not presented an analysis on whether the closure of the Eschinger ramps will induce additional VMT? The Project needs to be consistent with all General Plans and Policies pursuant to CEQA guidelines. A project's inconsistency with a general plan does not itself mandate the project will have a significant effect on the environment but with no analysis whatsoever on this topic a determination can't be made based on the ISND provided.

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- Closure of the Eschinger SR 99 interchange would create substantial air quality and circulation issues. Caltrans must present all anticipated environmental impacts and define whether they are considered significant or not, per CEQA Statutes §21803. Without full disclosure and analysis, the document does not support its less than significant determination.

Caltrans must present all anticipated environmental impacts and define whether they are considered significant or not, pursuant to CEQA Statutes §21803. Without full disclosure and analysis, the document does not support its less than significant determination.

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- Modifications to the Kammerer Road and Promenade Parkway intersection to accommodate additional vehicles, trucks and School Buses at that intersection are not shown.

- Is additional left turn storage needed?
- Does that intersection have sufficient shoulder width to accommodate overtraking without going into the opposing lane?
- What are the physical changes being proposed as part of this project?
- Was the Seasonal nature of agricultural operations and the percentage of trucks considered?

Caltrans must present all anticipated environmental impacts and define whether they are considered significant or not, per CEQA Statutes Section 21803. Without full disclosure and analysis, the document does not support its less than significant determination.

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ISND Chapter 3 - Tribal Cultural Resources

- How was AB 52 consultation conducted? AB 52 establishes specific timelines and protocols for initial project notification to California Native American Tribal Governments. Should any Tribal Government wish to consult on the Project, after having received a written notification by the lead CEQA agency, the lead CEQA agency must begin consultation with the Tribal Government within 30 days. Consultation cannot conclude until a resolution regarding concerns on Project impacts to Tribal Cultural Resources has been resolved through mitigation or through documentation that no feasible solution could be achieved. Based on the SHPSR there are two prehistoric sites located within the APE. It seems likely that concerns regarding these sites may have been raised by the Native

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American community and a more detailed discussion about why no impacts are anticipated is required for the public to verify that the Project will not have a significant impact. The existing discussion in the checklist does not detail how consultation was implemented, whether the appropriate time periods and governments were notified, whether any concerns about buried resources were expressed, how those concerns were addressed, and how the AB 52 consultation process was resolved and concluded. This information is needed to support the determination of no impact. Further, if consultation occurred under Section 106 of the NHPA only, then Caltrans has not complied with CEQA as Section 106 consultation is not a substitute for AB 52 consultation.

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ISND Chapter 3 - Utilities

- The document references relocation of SMUD 60kv lines with Comcast service as part of the Project (page 31). Will relocation to an easement located 100 feet from edge of the southbound SR-99 bridge deck conflict with the City's General Plan and future intersection plans at Eschinger? This could result in inconsistency with the City's General Plan, which may be considered a significant impact. Without consideration of the implications of relocating the SMUD 60kv lines, the document does not support its determination of no impact. Caltrans must present all anticipated environmental impacts and define whether they are considered significant or not, per CEQA Statutes §21803. Without full disclosure and analysis, the document does not support its less than significant determination.

ISND Supporting Technical Studies Comments

Visual Impact Analysis

- More information on how impacts to the non-riparian and riparian will be mitigated is needed.

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Air Quality Study

- Mentions designation of environmental sensitive areas for sensitive receptors. Please identify these receptors or indicate if the Project does not have sensitive receptors. Discussion of sensitive receptors is not included in the Initial Study analysis.

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Biological Assessment

- Please provide the US Fish and Wildlife Service biological opinion issued for the 2018 initiation of formal consultation.
- Please provide the National Marines Fisheries Services letter of concurrence issued for the 2018 initiation of informal consultation.
- Clearly states that mitigation is required, which contradicts the Negative Declaration of the Initial Study.

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Phase I Initial Site Assessment

- It is unclear if the 2016 testing incorporated the entire construction footprint of the current iteration of the Project, including the earthen median. Please clarify through text and map depiction.

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Noise Memorandum

- Memorandum identifies the Project as a Type 3, which does not require analysis; however, the Project description states that SR-99 will be realigned. This means the Project is a Type 1 and requires analysis.

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Water Quality Assessment

- Land disturbance area and new impervious area are not included in the assessment as the assessment states that the information "has not been provided". This implies that insufficient design has occurred to conduct environmental analysis; however, impact acreages for riparian habitat is provided in the Biological Assessment and the ISND, which suggest that sufficient design has occurred to estimate project impacts. Please provide information in this assessment regarding land disturbance area and new impervious area. If additional lanes are being added which is not clear by the documentation provided additional further analysis will need to be included throughout including analysis of growth inducement.

After review of the documents, it is the City's and its expert's opinion that the environmental analysis is not legally sufficient to support the proposed Negative Declaration. There must be further analysis within each section of the Checklist and Chapter 4 on what Caltrans considers as significant thresholds and why Project impacts are not considered significant impacts. The above bulleted items require substantial revisions and additional analysis to the document, and together with the above design alternative outlined in this letter, Caltrans should not adopt the Negative Declaration as currently proposed. The document should be increased to an IS with Proposed Mitigated Negative Declaration (at a minimum) and recirculated, per CEQA Guidelines §15073.5, so that there is adequate public disclosure of impacts. The City looks forward to Caltrans' answers regarding the above bulleted items and working with Caltrans so that it may create a document that adequately addresses adverse impacts

Sincerely,

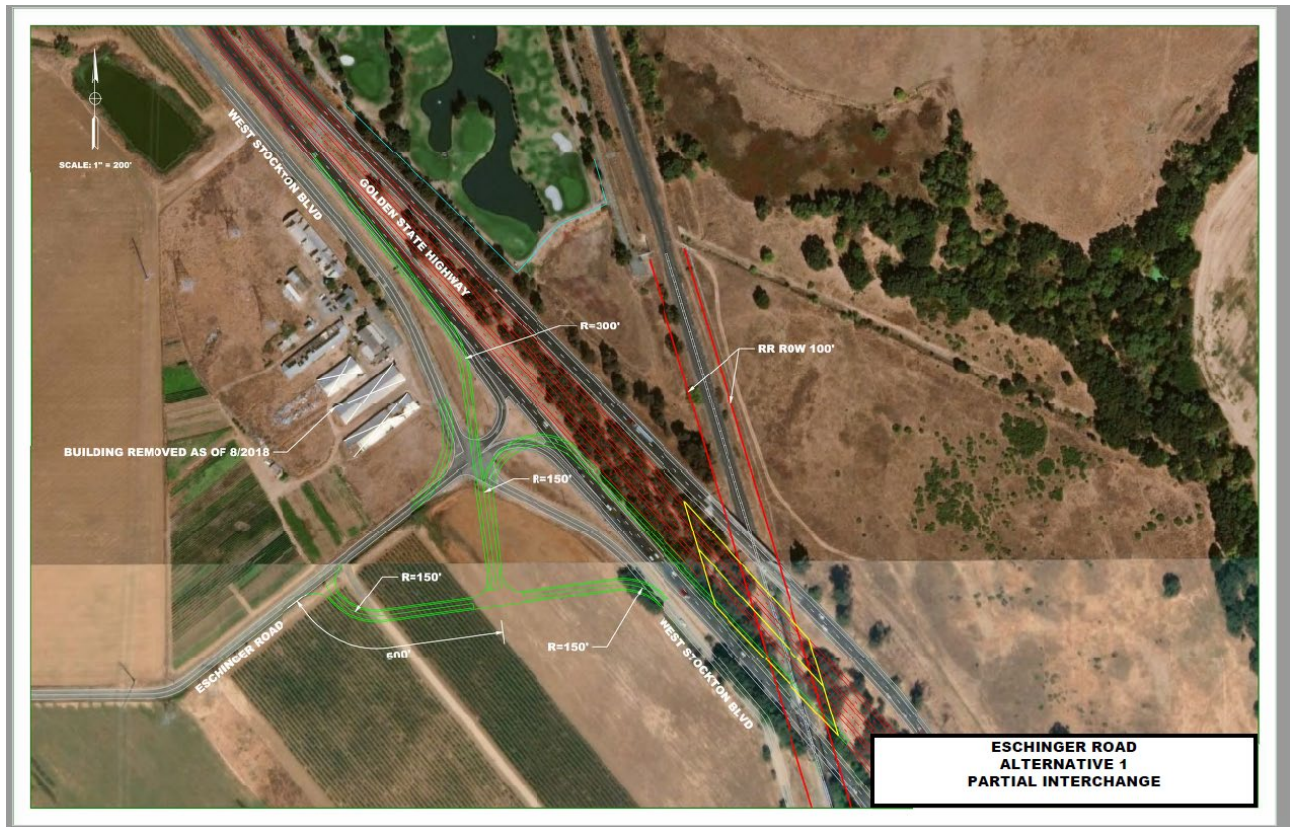


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Christopher Jordan, AICP
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Enclosure:
Attachment 1: Alternative I
Attachment 2: RFQ Drawings
Attachment 3: Resumes



Response to Comment 24

Noted

Response to Comment 25

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future.

Response to Comment 26

Higher resolution figures have been included as Appendix B.

Response to Comment 27

The IS/ND maps adequately identify contextual location of environmental features. In addition, post miles were identified on Figures 1 and 2 of the IS/ND (ESL 1, 2, 6, 7, 8 and 9).

Response to Comment 28

All technical studies utilized, at a minimum, the ESL boundary line shown on Figure 2. Certain components of the technical studies (e.g., nesting bird surveys) utilized a greater area due to the protocol requirements of the surveys.

Response to Comment 29

Figure 2 identifies the ESL boundary as both the Wood Rodgers ESL Boundary Line (green dashed line) and Additional Caltrans Work ESL Boundary Line (yellow dashed). These lines are not in conflict and comprise the ESL boundary.

Response to Comment 30

Figure 1 is an overview map of the project, with key project features identified. The individual ESL maps show the project in segments from the southern boundary at PM 7.1 to the northern boundary at PM 9.4. Nevertheless, Figure 1 has been revised to include a grid index/overlay and the Figure 2 ESL maps have been labeled accordingly. See Appendix B.

Response to Comment 31

The IS/ND, supported by thorough technical analyses, identifies no potentially significant impacts. Avoidance and minimization measures and compliance measures for anticipated permit conditions have been incorporated as project features. These measures are not mitigations required to reduce potentially significant impacts. A negative declaration is the appropriate CEQA determination given the absence of potentially significant impacts.

Response to Comment 32

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Caltrans has agreed to coordinate with the City to provide a design/feasibility analysis with regard to a future interchange at Eschinger Road which includes both southbound and northbound connections. The design of the project will not preclude future construction of the conceptual interchange identified in the analysis.

Response to Comment 33

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Caltrans has agreed to coordinate with the City to provide a design/feasibility

analysis with regard to a future interchange at Eschinger Road which includes both southbound and northbound connections. The design of the project will not preclude future construction of the conceptual interchange identified in the analysis.

Response to Comment 34

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future.

Response to Comment 35

The 1938 agreement with the railroad requires removal of the existing McConnell Underpass bridge when the existing SB alignment is relinquished. The new SB McConnell Overhead Bridge will cross over the UPRR tracks as described in the CEQA document.

Response to Comment 36

The project design details have not yet been fully developed, which is normal for the timing of a CEQA document. The project design will be coordinated with the adjacent public agencies and will consider and address all the noted comments.

Response to Comment 37

Caltrans understands that the City of Elk Grove has imposed load restrictions on certain City roads. Caltrans will acquire transportation permits as necessary and comply with associated conditions. This is not a potentially significant impact under CEQA.

Response to Comment 38

The IS/ND has been amended to refer to Chapter 4, where appropriate.

Response to Comment 39

The Section 4F Study (Appendix A to IS/ND) includes provisions for a restoration plan to address replacement of non-riparian trees that may be impacted within the Preserve TCE.

As discussed in the VIA, the removal of non-native, riparian, and non-riparian vegetation will not create potentially significant or significant visual impacts on the environment, and therefore, mitigation is not required. However, during the Design Phase, Caltrans may consider replacement highway planting to offset the loss of non-native trees located outside of TCEs. The replacement planting would further improve the visual and aesthetic qualities of the project.

Response to Comment 40

Offset is a generic term, used in this case to describe replacement credits to be used as compliance measures for anticipated permit conditions. See response to Comment 31.

Response to Comment 41

Preliminary studies and agency consultation were conducted prior to the release of the IS/ND. The analyses did not reveal a potentially significant impact to VELB. Per Section 4.3.1.2 of the NES, avoidance and minimization measures have been incorporated as project features. As a permit compliance measure, Caltrans anticipates replacing VELB habitat per United States Fish and Wildlife Service (“USFWS”) consultation

Response to Comment 43

The analyses did not reveal a potentially significant impact to riparian habitat. Per Section 4.3.2.2 of the NES, shaded riverine or natural woody riparian habitat will be avoided or preserved to the maximum extent practicable. Disturbed riparian vegetation will be replanted at a minimum of a 1:1 ratio.

Response to Comment 44

See response to Comment 16.

Response to Comment 45

The non-riparian vegetation removal was performed as a maintenance measure related to safety independent of the project. The tree removal was performed following a visual survey by a qualified biologist and occurred outside of the bird nesting season.

Response to Comment 46

Removal of non-riparian trees is discussed in the VIA and determined less than significant as indicated by the CEQA checklist, “1. AESTHETICS b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway”.

Additionally, the Section 4F Study (Appendix A to IS/ND) includes provisions for a restoration plan to address replacement of non-riparian trees that may be impacted within the Preserve TCE.

Response to Comment 47

No applicable tree ordinance or policy covers the project activities. Tree replacement will be performed in accordance with anticipated permit conditions; see response to Comment 15.

Response to Comment 48

Identification efforts for both iterations of the project were sufficient for the scope of the project and the cultural documents were subjected to a review process.

Response to Comment 49

The protective measures for cultural Environmental Sensitive Areas (ESA) are not disclosed to the public, as well as the locations of such areas.

Response to Comment 50

Archaeological Monitoring Areas (AMA) are confidential, therefore not discussed in the ISND.

Response to Comment 51

The measures outlined in the environmental document are in place on the proposed project to avoid and minimize any damage to paleontological resources. Under CEQA, the term “mitigation” refers to measures taken to compensate for CEQA-significant impacts. The Riverbank formation’s entire extent is classified as highly-sensitive for paleontological resources due to previous discoveries within it, however no fossils have been found in or adjacent to the proposed project area and the project development team (PDT) decided that due to this any anticipated impacts to paleontological resources would not be significant under CEQA.

As Caltrans projects are fully-designed after environmental clearance is approved, the project footprint identified by design engineers and studied for environmental analyses is larger and deeper than what the actual impact area will be. Refined design plans are needed to accurately estimate where and when paleontological monitors will be needed and to prepare a paleontological mitigation plan (PMP). The paleontological identification report (PIR) written for the environmental document contains sufficient information to identify the underlying geologic formation (Riverbank) and its potential to contain fossil resources (high) under an enlarged project footprint. Refined and accurate details needed to complete the paleontological evaluation report (PER) and PMP will become available while the project is further designed after environmental approval is achieved, and thus the reports will be more effective if written after these design details are known. Furthermore, it is often useful for the Paleontological Firm contracted to write the PMP to also write the PER, based on the information provided by Caltrans in the PIR, as the information in the PER directly informs the details of the PMP. According to the Caltrans Standard Environmental Reference (SER) Volume 1, Chapter 8, “Paleontological evaluations are *generally* completed as part of preparing the draft environmental document/determination”. Completion of the PER prior to the environmental document is not a requirement.

Response to Comment 52

As stated in the question, aerially deposited lead (ADL) is from the historical use of leaded gasoline that exists along roadways throughout California. ADL (at some concentration) is found on every project. Caltrans either disposes of the ADL in a permitted landfill or reuses the soil (using appropriate guidelines, rules, and regulations). The data from the three existing studies is to be used, as it is representative of the stretch of the project. Two of the studies showed the soil to be non-hazardous, however, one study showed the top 1' of the soil to be hazardous. The most conservative approach will be used from the given data (first 1' of soil is assumed to be hazardous for the entire stretch of the project and not just at the location it was found to be). The management of the soil will follow all the legal requirements. In 2016, DTSC and Caltrans entered into the Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (DTSC ADL Agreement) for the management of ADL-contaminated soils generated by Caltrans in the course of State highway projects, in all Caltrans districts, statewide. The DTSC Agreement conditions regarding the reuse and management of soil for construction and maintenance operations. The agreement includes following strict guidelines for stockpiling, disposal, tracking, transportation and final placement of the ADL contaminated soil.

Response to Comment 53

The McConnell Underpass under the Union Pacific Railroad rail line is being relinquished. The McConnell Overhead (Southbound) would be a new structure as proposed, however the McConnell Overhead (Northbound) structure will be removed. This will require Asbestos containing material (ACM) testing at the McConnell Underpass and the McConnell Overhead structures. Both structures will be tested for ACM, and if ACM is found, it will be dealt with accordingly through implementation of appropriate measures. ACM testing will be conducted prior to demolition of the structures. Caltrans will conduct the ACM testing at both structures. In addition, lead containing paint (LCP) testing may also be required as well, if needed.

Response to Comment 54

Guardrails, thrie beam barriers, roadside signs are all assumed to contain treated wood waste. They are removed, stockpiled and disposed of accordingly. As per Caltrans Special Standard Provision 14-11.14, the material will be removed, stockpiled, and disposed of properly and according to the rules and regulations. ADL testing has been conducted at three locations over the stretch of this project. The data from the existing studies will be used, as it is representative of the entire project. Two of the studies showed the soil to be non-hazardous, however, one study showed the top 1' of the soil to be hazardous. The most conservative approach will be used from the given data. The soil at this location (as per the entire stretch of the project and not just at one location) will be assumed to be hazardous for the first top 1' and will be handled and reused/disposed as per the DTSC ADL Agreement allows. Asbestos containing material (ACM) study needs to be conducted at the McConnell Overhead and the McConnell Underpass structures. Caltrans will do the ACM study at both locations prior to demolition and appropriate measures implemented.

Response to Comment 55

The water quality assessment report has been revised to reflect the most current information, provided by the Department's Design (Project Delivery) functional unit, which includes the anticipated DSA, new impervious area, treatment quantity, and specifics related to the RSA study.

Response to Comment 56

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future.

Response to Comment 57

A Section 4F Study was conducted in consultation with CDFW related to a temporary construction easement on Preserve property. The project is consistent with Preserve Policies and Management Plans.

Response to Comment 58

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future.

Response to Comment 59

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future.

Response to Comment 60

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future.

Response to Comment 61

See response to Comment 56.

Response to Comment 62

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future.

Response to Comment 63

By the recent scope change, Caltrans will re-establish and construct the Eschinger Road/SR 99 interchange in a similar configuration to existing (SB connections only)

Response to Comment 64

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future.

Response to Comment 65

The project was initiated prior to AB52. Consultation with Native American tribes and individuals have been ongoing since the inception of the project.

Response to Comment 66

Relocation of the SMUD lines to an easement adjacent to the SB SR 99 bridge deck was determined not to result in potentially significant impacts. See IS/ND Public Service's section.

The relocation of the SMUD 60kv lines would occur only adjacent to the Cosumnes River Bridge and Cosumnes Overflow Bridge and it outside the influence of the City's general plan.

Response to Comment 67

As discussed in the VIA, the removal of non-native, riparian, and non-riparian vegetation will not create potentially significant or significant visual impacts on the environment, and therefore, mitigation is not required. However, during the Design Phase, Caltrans may consider replacement highway planting to offset the loss of non-native trees located outside of TCEs. The replacement planting would further improve the visual and aesthetic qualities of the project.

In addition, the Section 4F Study (Appendix A to IS/ND) includes provisions for a restoration plan to address replacement of non-riparian trees that may be impacted within the Preserve TCE.

Response to Comment 68

Usually, an air quality study is conducted to evaluate the change in roadway emission rates between the existing condition, future no build alternative and the future build alternatives, and sensitive receptors are not involved.

Response to Comment 69

In Appendix C

Response to Comment 70

In Appendix D

Response to Comment 71

See response to Comment 31.

Response to Comment 72

The data from the three existing studies is to be used, as it is representative of the stretch of the project. Two of the studies showed the soil to be non-hazardous, however, one study showed the top 1' of the soil to be hazardous. The most conservative approach will be used from the given data (first 1' of soil is assumed to be hazardous for the entire stretch of the project and not just at the one location it was found to be). The management of the soil will follow all the legal requirements. In 2016, DTSC and Caltrans entered into the Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (DTSC ADL Agreement) for the management of ADL-contaminated soils generated by Caltrans in the course of State highway projects, in all Caltrans districts, statewide. The DTSC Agreement conditions regarding the reuse and management of soil for construction and maintenance operations. The agreement includes following strict guidelines for stockpiling, disposal, tracking, transportation and final placement of the ADL contaminated soil. Two of the studies showed the soil to be nonhazardous. One of the studies showed the soil to be hazardous for the first 1'. Caltrans will go with the most conservative approach and assume the entire stretch of this project (and not just at the location the hazardous soil was found to be at) is hazardous soil for the first 1'. The attached ADL studies shows the exact locations of the sampling and the results

Response to Comment 73

As indicted in our noise memo, projects that proposes to *substantially* alter the highway's existing horizontal and vertical alignment is classified as a Type I project. Type I projects require a detail noise impact study to determine the noise impact of a proposed project to adjacent land use such as homes and businesses.

FHWA defines substantial alteration of a highway's horizontal alignment when a project halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition. And substantial vertical alteration when a project proposes to remove shielding thereby exposing the line-of-sight between the

receptor and the traffic noise source. This is done by altering either the vertical alignment of the highway or the topography between the highway traffic noise source and the receptor.

Since SR 99 realignment proposed / designed for this project is not considered substantial as defined above, this project is classified as a Type III project. Permanent / operational increase in noise levels at adjacent land use is not anticipated to occur, therefore, a detailed noise analysis is not required.

Response to Comment 74

SWDR Calculations	
Areas/Types	Total
Disturbed Soil Area (DSA)	62 Ac
Post-Project Impervious Area (TPPIA)	34 Ac
Pre-Project Impervious Area (PRE-PIA)	25 Ac
Excluded Impervious Area	---
Net New Impervious (NNI)	9 Ac
NNI to TPPIA Comparison	26%
Replaced Impervious Surface (RIS)	12 Ac
New Impervious Surface (NIS)	21 Ac
Additional Treatment Area #1 (ATA #1)	0 Ac
Additional Treatment Area #2 (ATA #2)	0 Ac
Post Construction Treatment Area (PCTA)	21 Ac

Further information regarding the anticipated strategy for design pollution prevention and treatment best management practice implementation can be found in the finalized Storm Water Data Report (SWDR).

Response to Comment 75

See response to Comments 24 through 74.

Comment 76-83

From: [Gilmore, Suzanne@Wildlife](mailto:Gilmore,Suzanne@Wildlife)
To: [Lambirth, Cara@DOT](mailto:Lambirth,Cara@DOT)
Cc: [Wildlife R2 CEQA](#); [Kleinfelter, Eric@Wildlife](mailto:Kleinfelter,Eric@Wildlife)
Subject: Consumnes River Bridge Replacement Project SCH 2019039070
Date: Tuesday, April 16, 2019 11:02:24 AM

The California Department of Fish and Wildlife (CDFW) appreciates the opportunity to comment on the Initial Study with Proposed Mitigated Negative Declaration (IS/MND) for the Consumnes River Bridge Replacement Project (Project) [State Clearinghouse No. 2019039070]. CDFW is responding to the IS/MND as a Trustee Agency for fish and wildlife resources (California Fish and Game Code Sections 711.7 and 1802, and the California Environmental Quality Act [CEQA] Guidelines Section 15386), and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines Section 15381), such as the issuance of a Lake or Streambed Alteration Agreement (California Fish and Game Code Sections 1600 et seq.) and/or a California Endangered Species Act (CESA) Permit for Incidental Take of Endangered, Threatened, and/or Candidate species (California Fish and Game Code Sections 2080 and 2080.1).

The California Department of Transportation (Caltrans) proposes to replace the Consumnes River Bridge on State Route (SR) 99 between post miles 7.1 and 9.4 near the City of Elk Grove in Sacramento County. CDFW recommends the following items be addressed in the CEQA document:

1. Section IV. Biological Resources – Riparian Habitat. Please note that CDFW does not typically accept In-Lieu fees for mitigation to address impacts to bed, bank or channel including riparian resources. On page 22, the MND states that impacts to riparian resources will be offset by the purchase of credits at a CDFW approved mitigation bank or by on-site restoration. On page 42, no mitigation is proposed to address potentially significant impacts to riparian habitat. The MND should not defer mitigation measures to future regulatory discretionary actions, such as a Lake or Streambed Alteration (LSA) Agreement. Any proposed measures to compensate for impacts such as on-site or off-site habitat enhancement should be identified and quantified in the MND.

76

Identifying the type and quantity of restored habitat or permanently impacted habitat is needed to analyze efforts to reduce impacts to a less-than-significant level. Where Caltrans' standard specifications are expected to avoid or minimize impacts to riparian resources, the MND should list the specific activities intended as mitigations. CDFW recommends that permanent removal of riparian vegetation should be mitigated and based on habitat quality, typically at a ratio greater than 2:1 as well as on-site restoration to ensure long-term viability and ecological services will be replaced.

77

2. Section IV. Biological Resources – Oak Woodland Habitat. The CEQA analysis should disclose the maximum extent of impacts that may occur with the chosen project alternative. The discussion analyzes 0.69 acres of impacts to riparian habitat but does not discuss approximately 7.21 acres of mature oak woodland impacts (including over 70 mature trees with several oak trees greater than 60 inches in diameter at breast height). CDFW recommends listing all activities analyzed to appropriately disclose the level of biological impacts and how temporary effects were calculated including temporal losses anticipated. Work planned on the adjacent Consumnes River Wildlife Area as discussed in Appendix A is not adequately captured in the Biological Resources Section of the MND.

78

3. Swainson's Hawk Impacts and Avoidance Surveys. Ten potential raptor nests were identified within 500 feet of the Project and the adjacent Consumnes River Wildlife Area provides extensive suitable nesting habitat the project may impact. Additionally, the Project will remove over 7 acres of mature native trees with potential to impact nesting birds including Swainson's hawk (*Buteo swainsoni*), a State Threatened species. As stated on page 55, the MND proposes pre-construction surveys no less than 14 days before project activities and no mitigation measures for Swainson's hawk. CDFW recommends that prior to any tree removal or Project related activities, the MND should require protocol-level surveys according to the Swainson's Hawk Technical Advisory Committee's (TAC) Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley, 1994. The MND should also include a description of the survey area, measures to replace the removal of mature nesting habitat, survey methodology and timing of each survey visit. CDFW recommends that the TAC survey method be strictly followed starting early in the nesting season in order to maximize the likelihood of detecting an active nest.

Raptor nests may be very difficult to locate during egg-laying or incubation, or chick brooding periods (late April to early June) if earlier surveys have not been conducted. These full-season surveys may assist with Project planning, development of appropriate avoidance, minimization and mitigation measures, and may help avoid any pre construction Project delays.

79

Please be advised that a California Endangered Species Act (CESA) Permit would be required from CDFW for any projects that have the potential to result in take of a state listed species such as Swainson's hawk, either during construction or over the life of the project. Issuance of a CESA Permit is subject to California Environmental Quality Act (CEQA) documentation; therefore, the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the project will impact CESA listed species, early consultation is encouraged, as modifications to the project and mitigation measures may be required in order to obtain a CESA Permit.

80

Bats. CDFW recommends adding additional measures to avoid impacts and proportionately enhance or create habitat impacted as a result of the project. Specifically maternity colony impacts should be appropriately mitigated. CDFW recommends utilizing the following measures as appropriate, to reduce potentially significant impacts to maternity bat roosts:

Qualified Bat Biologist. Retain a biologist with expertise and experience with bats and their habitat. The minimum qualifications for the biologist should include at least 3 years of experience in conducting bat habitat assessments, night-time emergence surveys, and acoustic monitoring. The bat biologist should have adequate experience identifying local bat species (visual and acoustic identification), type of habitat, and differences in roosting behavior and types (i.e. day, night, maternity).

The Qualified Bat Biologist should ensure that no Project Activities occur within 200 ft of a bat roost during the maternity (April 15 to August 31) or hibernation (October 15 to March 1) seasons.

80

Bat Avoidance Plan. The Qualified Bat Biologist should prepare a Bat Avoidance Plan if maternity or hibernation roosts are identified during pre-construction surveys. The Bat Avoidance Plan should include detailed measures to avoid and minimize impacts to roosting bats in and near the construction areas. Bats should not be disturbed without an experienced biologist overseeing avoidance and minimizations measures designed to protect nesting/roosting bats. All appropriate exclusionary measures should be implemented prior to the bridge construction during the period of March 1 to April 15 or August 31 to October 15. Potential avoidance efforts may include exclusionary blocking or filling potential roosting cavities with foam or steel wool, visual monitoring, and staging project work to

avoid bats. If bats are known to use the bridge structure, exclusion netting should not be used.

80

Bat Avoidance During Tree Removal. Potential bat roost trees should only be removed between approximately March 1 and April 15, prior to parturition of pups. The next appropriate period for roost tree removal occurs after pups become self-sufficiently volant, approximately September 1 through October 15. Bat roost trees should be removed only during seasonal periods of bat activity, and according to the following measures:

- All other vegetation other than trees within the project site should be removed prior to bat roost tree trimming or tree removal, during seasonal periods of activity, and preferably, within 4 days of commencing two-step removal of habitat trees
- Two-step tree trimming, or tree removal should occur over two consecutive days under the supervision of the Qualified Bat Biologist. The first day (in the afternoon), limbs and branches would be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures would be avoided, and only branches or limbs without those features would be removed. The following day, limbs containing bat habitat, or the remainder of the tree should be removed.

80

Temporary Bat Exclusion. To exclude bats from roosting in the Project Area, the project proponent should develop a plan and time schedule for minimizing impacts and preventing entry/reentry of bats into structures within the Project Area. The exclusion structures (e.g. one-way doors, lights and fans, foam or steel wool) should be installed immediately after pre-construction surveys have determined that there are no bats present in the structure. The temporary exclusion structures should be installed before commencement of project activities.

Bat Mitigation. In-kind replacement habitat (e.g. trees, crevice, panel, collar, capped-edge drain habitat) consistent with the amount of habitat with evidence of use by bat colonies should be provided in consultation with a qualified bat biologist with experience in designing bat habitat. As appropriate, on-site temporary roosting habitat (e.g. bat houses, wooden backed signs) should be installed prior to bridge removal and maintained until construction of the new bridge is complete.

Additionally, a Vegetation Restoration Plan (VRP) should be developed to restore the tree roosting bat habitat that will be removed during construction to pre-Project or better conditions. The VRP should be developed by a qualified bat biologist prior to the start of project activities. The VRP should identify plant species damaged or removed

during project activities. Caltrans should plant replacement vegetation the first suitable season after construction is complete.

The VRP should include measures (i.e., irrigation methods, weed management, maintenance and replanting if necessary) to ensure a minimum of 70 percent survivorship for three years, after the last planting (i.e., if up to 30 percent of any of the species are at risk of not surviving and repeated plantings are necessary, then monitoring, maintenance, and annual reporting should continue for the subsequent three years).

81

4. Lake and Streambed Alteration Agreement. As stated in the MND, CDFW will require a Lake and Streambed Alteration Agreement (LSAA) pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant for any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank of a river, stream or lake, or use material from a streambed. Issuance of an LSAA is subject to the California Environmental Quality Act (CEQA). CDFW, as a responsible agency under CEQA, will consider the MND for the project. To obtain information about the LSAA notification process, please access our website at <http://www.dfg.ca.gov/habcon/1600/>

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5. Coordination/Public Notice Process – Appendix A. Please remove Suzanne Gilmore from the discussion in Appendix A. This staff person was not involved with the proposed Section 4(f) findings and was not provided mapping as currently stated. Additional information is needed on how Caltrans determined “temporary effects” to 7.21 acres of mature oak woodlands and the timing expected to be fully restored to at least as good as that which exists prior to the project.

83

Please note that when acting as a responsible agency, CEQA guidelines section 15096, subdivision (f) requires the Department to consider the CEQA environmental document prepared by the lead agency prior to reaching a decision on the project. Addressing the Department’s comments and disclosing potential Project impacts on CESA-listed species and any river, lake, or stream, and provide adequate avoidance, minimization, mitigation, monitoring and reporting measures; will assist the Department with the consideration of the IS/MND.

If you should have any questions regarding these comments, please contact me at (916) 767-3513 or Suzanne.gilmore@wildlife.ca.gov.

Suzanne Gilmore

Senior Environmental Scientist Specialist
CDFW, North Central Region (2)

Response to Comment 76

See response to Comment 43.

Response to Comment 77

See response to Comment 39.

Response to Comment 78

See response to Comment 11.

Response to Comment 79

See response to Comments 11 and 13.

Response to Comment 80

Preliminary studies and agency consultation were conducted prior to the release of the IS/ND. The analyses did not reveal a potentially significant impact to bats. Per Section 4.5 of the NES, avoidance and minimization measures, which include bat exclusion, have been incorporated as project features.

Response to Comment 81

A Lake and Streambed Alteration Agreement will be obtained as necessary.

Response to Comment 82

Suzanne Gilmore's name has been removed from Appendix A. The impacts by definition are temporal, as the mature oak woodlands will be replaced at a minimum of a 1:1 ratio. As described in the Section 4F Study, a restoration plan will be submitted to CDFW for approval in connection with the tree removal.

Response to Comment 83

See response to Comments 76 – 82.



SACRAMENTO COUNTY FARM BUREAU

PUTTING THE FOOD ON YOUR FORK SINCE 1917

April 15, 2019

Cara Lambirth
Environmental Coordinator Department of Transportation
District 3 Environmental Planning
703 B Street, Marysville, CA 95901

RE: Cosumnes River Bridge Replacement Project

Dear Ms. Lambirth,

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The Sacramento County Farm Bureau is a non-governmental, non-profit, grassroots organization. Our purpose is to protect and promote agricultural interests throughout Sacramento County and to find solutions to the problems of the farm, the farm home, and rural communities. Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources.

We are appreciative of the opportunity to provide comments on this proposed project as we are supportive of its need and many aspects of its construction. While we understand the purpose and intent for the major structural improvements of this area, we are in strong opposition to the closure and abandonment of the Eschinger on and off ramps.

85

The determination that this project has no impacts on agricultural resources is misleading, because this on and off ramp is used primarily for agricultural freight throughout the year, and in particularly during the harvest seasons. While the project does not result in a direct loss of farmland it does result in increased costs and burdens to surrounding agricultural operations. It is important that this access remain open, as its closure will only negatively impact several surrounding agricultural operations including vineyards, row crops, dairies and the feed mill, among others. This on ramp in particular, is used hundreds of times a day during the peak of harvest and without access to it agricultural freight trucks, will have to alter their routes to either Grant Line/ Kammerer Road or Twin Cities Road to access Highway 99 Southbound.

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This will not only add to increased fuel and freight costs for the additional time and mileage but will also cause increased traffic congestion, particularly on the Grant Line Road freeway access. This increased traffic, combined with the new housing developments, commercial developments and the pending Casino in that area, will negatively impact traffic flow and cause increased congestion, especially during peak seasons. While it is noted that the Kammerer Road access can absorb the physical load of the average daily traffic, it is failing to note the increased agricultural freight element, as these are not just simple vehicles. Additionally, agricultural freight will be forced North through West Stockton Blvd. which does not boast the best conditions, and will only be further deteriorated by the increased freight traffic.

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We are asking, on behalf of all of our agricultural growers in this area, that you find a way to spare the closure and abandonment of the Eschinger Road freeway access and keep that access intact, as it is vital to thriving agricultural operations in its immediate area. While it is noted that this closure

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SACRAMENTO COUNTY FARM BUREAU

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does not preclude the local community from future access to SR 99 at Eschinger Road, we are asking that this be addressed now, before this abandonment becomes permanent. We are very much looking forward to working with the project designers and managers to address these concerns and are appreciative of their efforts to address our concerns.

Please contact our office with any questions or requests for additional information regarding this project or the surrounding agricultural operations affected by this project.

Thank you for the opportunity to share our concerns.

Sincerely,

Lindsey Liebig
Executive Director

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Phone 916-685-6958 • www.sacfarmbureau.org

Response to Comment 84

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future.

Response to Comment 85

Consideration of economic impacts is not a CEQA-related issue. Consideration of economic impacts is not a CEQA-related issue.

Response to Comment 86

See response to Comments 84 and 85.

Response to Comment 87

Thank you for your comment. Please refer to comments 56, 84 and 85.



Central Valley Regional Water Quality Control Board

9 April 2019

Cara Lambirth
California Department of Transportation
703 B Street
Marysville, CA 95901

CERTIFIED MAIL
7018 1830 0001 0062 4258

COMMENTS TO REQUEST FOR REVIEW FOR THE NEGATIVE DECLARATION,
COSUMNES RIVER BRIDGE REPLACEMENT PROJECT, SCH#2019039070,
SACRAMENTO COUNTY

Pursuant to the State Clearinghouse's 13 March 2019 request, the Central Valley Regional
Water Quality Control Board (Central Valley Water Board) has reviewed the Request for Review
for the Negative Declaration for the Cosumnes River Bridge Replacement Project, located in
Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and
groundwaters of the state; therefore our comments will address concerns surrounding those
issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas
within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality
Control Act. Each Basin Plan must contain water quality objectives to ensure the
reasonable protection of beneficial uses, as well as a program of implementation for
achieving water quality objectives with the Basin Plans. Federal regulations require each
state to adopt water quality standards to protect the public health or welfare, enhance the
quality of water and serve the purposes of the Clean Water Act. In California, the beneficial
uses, water quality objectives, and the Antidegradation Policy are the State's water quality
standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR
Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws,
policies, technologies, water quality conditions and priorities. The original Basin Plans were
adopted in 1975, and have been updated and revised periodically as required, using Basin
Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan
amendment in noticed public hearings, it must be approved by the State Water Resources
Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases,

KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, Esq., EXECUTIVE OFFICER

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the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits¹

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

¹ Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

For more information on the Water Quality Certification, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agriculture, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/ or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently \$1,277 + \$8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order.

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A

Cosumnes River Bridge Replacement Project - 6 -
Sacramento County

9 April 2019

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complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
<https://www.waterboards.ca.gov/centralvalley/help/permit/>

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.



Jordan Hensley
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

Response to Comment 88

Comment includes generalized discussion regarding water quality permits that may apply to the project. Caltrans will obtain applicable water quality permit as necessary.



Sent Via E-Mail

April 10, 2019

Cara Lambirth
Caltrans, District 3
703 B Street
Marysville, CA 95901

Subject: Cosumnes River Bridge Replacement Project / NEG / 2019039070

Dear Cara Lambirth,

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Negative Declaration (ND) for the Cosumnes River Bridge Replacement Project (Project, SCH 2019039070). SMUD is the primary energy provider for Sacramento County and the proposed Project area. SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region. As a Responsible Agency, SMUD aims to ensure that the proposed Project limits the potential for significant environmental effects on SMUD facilities, employees, and customers.

It is our desire that the Project ND will acknowledge any Project impacts related to the following:

- Structural setbacks of less than 14 feet may create clearance issues. Caltrans shall meet with all utilities to ensure adequate setbacks are maintained.
- Overhead and or underground transmission and distribution line easements. Please view the following links on smud.org for more information regarding transmission encroachment:
 - <https://www.smud.org/en/Business-Solutions-and-Rebates/Design-and-Construction-Services>
 - <https://www.smud.org/en/Corporate/Do-Business-with-SMUD/Land-Use/Transmission-Right-of-Way>
- Existing overhead 69kV and 12kV facilities within the project location
- Utility line routing
- Electrical load needs/requirements
- Energy Efficiency
- Climate Change
- Cumulative impacts related to the need for increased electrical delivery

More specifically, SMUD would like to have the following details related to the electrical infrastructure incorporated into the project description:

Environmental regulatory permit project descriptions and permits shall include and cover the relocation of all electrical utility infrastructure required to accommodate project activities

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable delivery of the proposed Project. Please ensure that the information included in this response is conveyed to the Project planners and the appropriate Project proponents.

Environmental leadership is a core value of SMUD and we look forward to collaborating with you on this Project. Again, we appreciate the opportunity to provide input on this NEG. If you have any questions regarding this letter, please contact SMUD's Environmental Management Specialist, Ashlen McGinnis at ashlen.mcginis@smud.org or 916.732.6775.

Sincerely,



Nicole Goi
Regional & Local Government Affairs
Sacramento Municipal Utility District
6301 S Street, Mail Stop A313
Sacramento, CA 95817
nicole.goi@smud.org

Cc: Ashlen McGinnis

Response to Comment 89

The Project Design Team (PDT) has been actively coordinating with SMUD on the potential impacts to SMUD facilities and will address all noted concerns.

Comment 90

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

Highway 99 Cosumnes River Bridge Replacement Project

Name (please print) Ken Oneto E-mail/Phone# 916-505-5174

5912 Cowston Ct Elk Grove CA 95758
Address (home) City State Zip Code

Authorized Representative (name of organization or agency) Self

Address (business) City State Zip Code

COMMENTS

Please keep the Eschinger off + On Ramp -
I need it for my farming operation



Response to Comment 90

Given concerns raised with regard eliminating access to SR at Eschinger Road during the environmental document review process and public workshops, access to SR 99 will be maintained. Furthermore, the project design will not preclude improvements to the connection in the future.

Comment 91

Highway 99 Cosumnes River Bridge Replacement Project

Name (please print) LYNN Wheat E-mail/Phone# _____

Wheat91@yahoo.com
Address (home) _____ City _____ State _____ Zip Code _____

Authorized Representative (name of organization or agency) _____

Address (business) _____ City _____ State _____ Zip Code _____

COMMENTS _____

I support alternative 2 FOR THIS PROJECT.



Response to Comment 91

Noted. Thank you for your interest in the project.

Chapter 6. List of Preparers

The following Caltrans North Region staff contributed to the preparation of this Initial Study:

Cara Lambirth - Associate Environmental Planner. Contribution: Document Writer and Programmatic Section 4(f) de Minimis

Mike Bartlett – Senior Environmental Planner. Contribution: Document Reviewer

Jason Lee – Transportation Engineer. Contribution: Air Quality Report

William Larson – Associate Environmental Planner (Archaeology). Contribution: Historic Property Survey Report and Archaeological Survey Report

Bradley Bowers – Environmental Planner. Contribution: Paleontological Identification Report

Kelli Angell - Associate Environmental Planer (Natural Sciences) Contribution: Biological Assessment for National Marine Fisheries Service (NMFS), Biological Assessment for United States Fish and Wildlife Service (USFWS), Natural Environment Study

Lazlo Nagy – Hydraulic Engineer Contribution: Floodplain Hydraulic Study

Alamgit Mangat – Transportation Engineer. Contribution: Hazardous Waste Study

Jeffery Juarez – Landscape Associate. Contribution: Visual Impact Analysis

Saeid Zandian – Transportation Engineer. Contribution: Noise Study

Sean Cross – Transportation Engineer. Contribution: Water Quality Study

Nasim Hasan – Design Engineer. Contribution: Project Engineer

Morgan Wright – Design Engineer. Contribution: Project Engineer

Doug Lange – Transportation Engineer. Contribution: Project Manager

Rodney Murphy – Transportation Engineer. Contribution: Project Manager

Appendix A – Section 4(f) Study

Appendix B – ESL Mapping

Appendix C – USFWS Biological Opinion

Appendix D – NMFS Letter of Concurrence

Appendix E – Eschinger Road Southbound On/Off Ramp Layout