

# Vertical Clearance Project

Placer County  
03-PLA-80-8.13/37.78  
EA 3E100  
EFIS# 0300000473

## Initial Study with Proposed Negative Declaration



**Prepared by the  
State of California Department of Transportation**

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.



June 2011

# **General Information About This Document**

## **What's in this document?**

The California Department of Transportation, as California Environmental Quality Act (CEQA) lead agency, has prepared this Initial Study (IS), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Placer County, California. The document tells you why the project is being proposed, what alternatives we have 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.

## **What should you do?**

- Please read the document.
- Additional copies of this document, as well as technical studies, are available for review at the Caltrans District 03 Office at 703 B. Street, Marysville, CA 95901.
- We'd like to hear your thoughts. If you have any comments regarding the proposed project, please send your written comments to the Department by the deadline stated below. Submit comments via postal mail service to the following Caltrans office:

Environmental Branch Chief  
Attention: Suzanne Melim  
Department of Transportation, Environmental Planning  
703 B. Street, Marysville, CA 95953

- Submit comments via email to: [suzanne\\_melim@dot.ca.gov](mailto:suzanne_melim@dot.ca.gov)
- At this time, we expect to circulate the document from approximately July 15 to August 15. Please submit comments by the end of the 30-day comment period.

## **What happens next?**

After comments are received from the public and reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Suzanne Melim at (530) 741-4484, or use the California Relay Service TTY number, 1-800-735-2929

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**Placer County**  
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**3E100**  
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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

4/30/11  
Date of Approval

*Susan D. Bauer*  
for John D. Webb  
Office of Environmental Service - South  
California Department of Transportation

## Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

### ***Project Description***

The California Department of Transportation (Caltrans) is developing a project to increase the vertical clearance of nine structures on Interstate 80 (I-80) in Placer County. Insufficient mainline vertical clearance impedes commerce and national defense needs on I-80 in Placer County. The purpose of this project is to enable over height military and commercial permit vehicles to move continuously along the I-80 corridor. The overall goal of this project is to bring the interstate facility up to current standards for vertical clearance. Project work includes bridge work, replacing bridge rails, seismic upgrades, improving curb ramps and pedestrian crossings to American's with Disabilities Act (ADA) specifications, upgrading guardrails and dikes to current standards, and the repair of drainage facilities, as needed. Other project work activities involve the following: road cut and fill, temporary detours, temporary ramp closures, temporary bridge closures, utility relocation, ground disturbance, vegetation and tree removal, tree planting, pile driving, and night work.

### ***Determination***

This proposed Negative Declaration (ND) is included to give notice to interested agencies and the public that it is the Department's 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 modification based on comments received by interested agencies and the public. The Department 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 farmlands and timberlands, hazardous materials, recreation, utilities, cultural resources, geology and soils, growth, air quality, noise, the coastal zone, wild and scenic rivers, and floodplains;
- The project would have no significant effect on transportation and traffic, public services, aesthetics or visual resources, or hydrology and water quality.
- The project would have no significantly adverse effect on the Valley Elderberry Beetle (VELB) because mitigation measures in the form of purchasing VELB credits at an approved mitigation bank would reduce potential effects of insignificance.

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*John D. Webb*  
Chief, Office of Environmental Services  
California Department of Transportation

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Date

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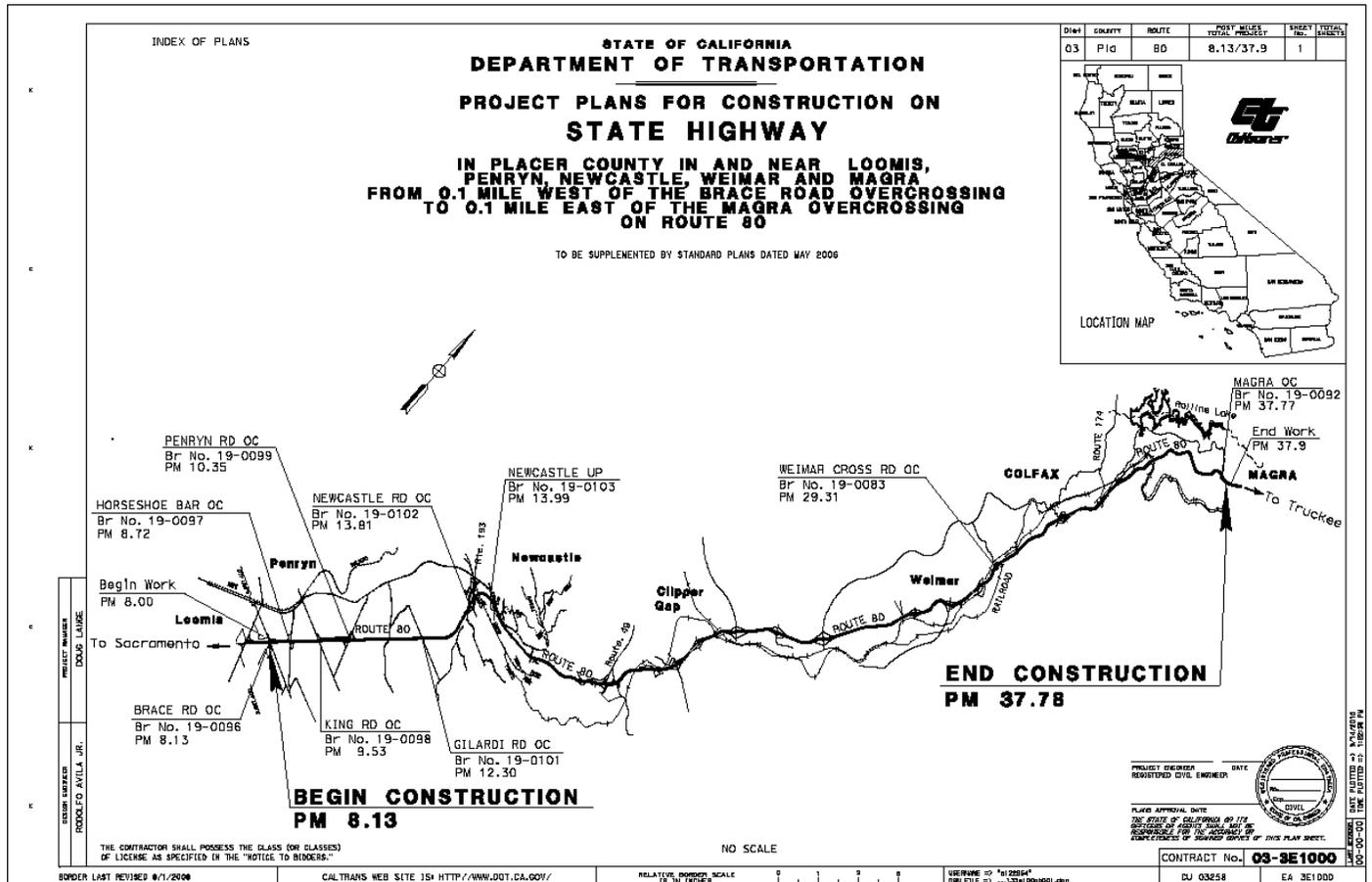
# Chapter 1 – Proposed Project

## 1.1 Introduction

The California Department of Transportation proposes to increase the vertical clearance of nine bridges on Interstate 80 (I-80) in Placer County, in order to meet the vertical clearance bridge height for permit vehicles. The project is located on I-80 in Placer County, from post mile 8.13 to post mile 37.78. It runs generally between the Town of Loomis to the community of Magra, 5.8 miles past the Town of Colfax, and passes through Newcastle and Auburn along the way. The project limits are approximately twenty-nine miles long. *Project location map is shown below.*

The project is scheduled to be delivered in the 2012/2013 fiscal year. The project is programmed in the 2010 State Highway Operation and Protection Plan (SHOPP) under the funding from 20.10.201.322 Transportation Permit Requirements for Bridges Program.

### Project Location Map



## **1.2 Purpose and Need**

### **Purpose**

Currently there is insufficient mainline vertical clearance at eight overcrossings and at one railroad underpass which impedes commerce and national defense needs on I-80 in Placer County. The purpose of this project is to enable over-height military and commercial permit vehicles to move continuously along I-80 by increasing the vertical clearance height on nine bridge structures in Placer County.

### **Need**

Because there is insufficient mainline vertical clearance at nine structures, this impedes commerce and national defense needs on I-80 in Placer County. The project is needed in order to meet both Federal Highway Administration (FHWA) requirements and U.S. Department of Defense deployment needs in the Strategic Highway Network (STRAHNET), as well as Caltrans standards.

### **Project Background**

Interstate 80 is a major route on the Federal Interstate System which travels through California from the San Francisco Bay Area to the Nevada border, just west of Reno. From the Nevada border, the highway continues eastward toward the northeastern United States and eventually ends in New Jersey. The interstate is part of the National Priority Network and is a main commercial and recreational route allowing for the movement of services and goods to and from the State of California.

The interstate also holds national significance as the principal west-east route for North and Central California and a main freeway crossing of the Sierra Nevada Mountain Range, it stands out among the world's most scenic multilane highways in terms of elevation gain, ridge hugging highways with beautiful scenic vistas, and innovation for addressing maintenance challenges. The freeway is the main commercial and recreational route serving Northern California, the Sacramento Valley, and the San Francisco Bay Area. I-80 is also a major truck route in California particularly because it contains the best all-weather route for traveling over the Sierra Nevada Mountains north of State Route 58 in Kern County.

Following the completion of this section of I-80, there have been several projects to maintain the roadway, upgrade the drainage systems, replace the metal beam guard

railing, and other improvement projects. Some bridge decks on this corridor have been either been rehabilitated or replaced since they were first constructed.

The nine structures scoped for this project on I-80 within Placer County do not meet the 16'6" minimum vertical clearance standard requirement, which is both a federal and a state requirement. The existing vertical clearance height of the nine bridges scoped for this project varies from approximately 14'10" to 15'2" high. Other examples of structures on I-80 that did not meet the vertical clearance height in the past were later modified to do so, under separate projects, include the following: Weimar Road OC (Br. # 19-0082), which was raised to standard vertical height in 2002 and the Sierra College Boulevard OC (Br. # 19-0180) in Rocklin, which was replaced with a new structure meeting the vertical clearance height standard.

Oversized vehicles, also known as "permit vehicles", which this project would allow are already permitted to travel in other parts of the state's corridors. The amount of trucks traveling in California is not expected to change; permit vehicles are usually headed to their final destination and passing through the area; example destinations include military bases, sea ports, airports, or transportation facilities such as rail yards. This project will not increase lane size or widen the bridges or provide a new interchange, therefore no foreseeable growth related impacts are anticipated. Trucks would mostly be passing through to get to their destination at the end.

### **Project Description**

To meet the purpose and need, Caltrans is developing this project to increase the vertical clearance of eight overcrossings (OC) and one railroad underpass (UP) on I-80 in Placer County. The project proposes to raise six overcrossings (OC) structures and lower the mainline vertical profile which travels under three other bridges.

Six of the bridges will be raised by installing a temporary support system, cutting the existing columns, and raising the bridge(s) approximately 2 feet using hydraulic jacks. Reinforcing steel will then be spliced at the columns and abutments before the concrete is added. The roadway approaches will then be rebuilt to meet the taller structures.

Three of the bridges will involve the roadway underneath the bridge to be lowered. The westbound lanes on I-80 under the Newcastle Underpass (UP) would need to be lowered as the Union Pacific Rail Road (UPRR) railroad travels over the interstate. For the Newcastle Road OC the interstate would need to be lowered in both directions,

eastbound and westbound, in order to achieve vertical clearance. For the Weimar Cross Road OC, the interstate would need to be lowered only in the eastbound direction to meet vertical clearance standards.

Project work includes bridge work, replacing bridge rails, seismic upgrades, improving curb ramps and pedestrian crossings to ADA specifications, upgrading guardrails and dikes to current standards, and the repair of drainage facilities, as needed. Other project work activities include the following: road cut and fill, temporary ramp closures, temporary bridge closures, utility relocation, ground disturbance, vegetation and tree removal, pile driving, and night work. The following bridges are scoped for work:

- Brace Road Overcrossing (OC)      PM 8.13      (Bridge # 19-0096)
- Horseshoe Bar OC                      PM 8.72      (Bridge # 19-0097)
- King Road OC                            PM 9.53      (Bridge # 19-0098)
- Penryn Road OC                         PM 10.35     (Bridge # 19-0099)
- Gilardi Road OC                         PM 12.30     (Bridge # 19-0101)
- Newcastle Road OC                     PM 13.81     (Bridge # 19-0102)
- Newcastle Underpass (UP)           PM 13.99     (Bridge # 19-0103)
- Weimar Cross Road OC                PM 29.32     (Bridge # 19-0083)
- Magra OC                                 PM 37.78     (Bridge # 19-0092)

### **1.3 Alternatives**

During the development of all projects, alternatives are considered to the extent necessary to minimize items such as cost and/or potential environmental impacts, or to maximize public benefits. Generally, the concept and scope of project alternatives can include location, geometric features, striping, staging, construction impacts, or mix of modes.

#### **Alternative 1: No Build**

The No-Build alternative will continue imposing a 300 mile-long detour on trucks with tall trailers or high loads or permit vehicles to reach destinations in major cities of Northern California. Due to its adverse impact on commerce, military operations, federal and state standards, and permit vehicles, the No-Build alternative has been rejected.

## **Alternative 2:**

Raise six overcrossings and lower the mainline interstate vertical profile beneath two overcrossings and one underpass to meet the current standard of 16 feet 6 inches.

Alternative 2 involves working on one overcrossing at a time, involving two seasons.

The estimated cost for the project (year 2011) is \$27,800,000. The project-escalated cost to year 2012 is estimated to be \$28,800,000. The estimated total working days for this alternative are approximately 340 days.

### **Alternative 2 - Season 1 (working on one OC at a time):**

1. 20 day full closure; begin work on King Rd OC (Br No. 19-0098).
2. 10 day full closure; begin work on Penryn Rd OC (Br No. 19-0099).
3. 20 day full closure; begin work on Magra Rd OC (Br No. 19-0092).
4. 20 day full closure; begin work on Gilardi Rd OC (Br No. 19-0101).

### **Alternative 2 - Season 2 (working on one OC at a time):**

1. 10 day full closure; begin work on Horseshoe Bar OC (Br No. 19-0097).
2. 10 day full closure; begin work on Weimar Cross Rd OC (Br No.19-0083).
3. Bridge Open, Reduced lanes on I-80; Lower I-80 at Newcastle Rd OC (Br No. 19-0102) & Newcastle UP (Br No. 19-0103).
4. 20 day full closure; begin work on Brace Rd OC (Br No. 19-0096).

*Based on the previous Project Scope Study Report (PSSR) the following work is included:*

- Seismic Upgrades
- Upgrade bridge railings to Concrete Barrier (Type 26 or 732).
- Upgrade sidewalks and approaches to Americans with Disabilities Act (ADA) standards.
- Place Chain Link Railing on top of Concrete Barrier (Type 26 and 732).
- Repair/Upgrade drainage facilities as needed.
- Upgrade metal beam guard railing.
- Upgrade curbs and dikes.
- Some minimization measures for potential visual impacts require the replacement of trees at the edge of the new slopes to replace the visual screen.

Additional work, not in the previous PSSR but added to the scope:

- Apply aesthetic treatment to Concrete Barrier (Type 26 or 732).
- Apply aesthetic treatment to Chain Link Railing.

**Alternative 3:**

Raise six OCs and lower the mainline interstate vertical profile beneath two OCs and one UP to meet the required minimum vertical clearance of 16 feet 6 inches. The estimated capital cost for the project (year 2011) is \$29,200,000. The project-escalated cost to year 2011/2012 is estimated to be \$30,200,000. The estimated total working days for this alternative are approximately 235 days.

Alternative 3 involves the same work as Alternative 2; however Alternative 3 involves working on two bridges at a time. This alternative would take approximately two seasons as well. The bridge closure times would remain the same.

**Transportation System Management (TSM) and Transportation Demand Management (TDM) Alternatives**

Although Transportation System Management measures alone could not satisfy the purpose and need of the project, the following Transportation System Management measures have been incorporated into the Build Alternatives for this project: upgrading curbs, sidewalks, and bicycle lanes on the bridges for ADA compliance and pedestrian/bicycle connectivity.

**COMPARISON OF ALTERNATIVES**

After the public circulation period, all comments will be considered; the Department will compare and weigh the benefits and impacts of the alternatives and then will select a preferred alternative and make the final determination of the project's effect on the environment.

**ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION**

A number of alternatives were considered but eliminated from the project for various reasons. The Department looked into lowering the Interstate underneath each of the bridge structures at most of the bridge locations. However, lowering the roadway underneath the structures would potentially create a sag in the road which may lead to operational or drainage issues. In addition, the lanes would be reduced to two 11 foot lanes with no shoulders potentially causing queues and delays during peak traffic periods. In lowering the Interstate, the ramps would also have to be closed at the interchanges and the road excavation would be substantially greater than raising the bridges. The ramps would also have to be extended to meet tapers. Lowering the roadway underneath the bridge also has a wider footprint therefore potentially

increasing tree removal and ground disturbance and potentially resulting in more environmental impacts.

Some of the advantages for raising the bridges, instead of lowering the mainline interstate vertical profile, are the following: reduced construction staging, reduced working days, reduced exposure to traveling public and contractors, and eliminating some hydraulic, pumping plant and/or drainage issues.

Newcastle UP, Newcastle Road OC, and Weimar Cross Road OC, however, have particular reasons to lower the roadway under the bridge. Newcastle UP is a bridge that is owned by the Union Pacific Rail Road Association. It is very difficult to move, adjust, or alter functioning rail road tracks; therefore the only alternative to increase the vertical clearance height under this bridge is to lower the roadway underneath the bridge. Because the Newcastle UP is just a few hundred feet away from the Newcastle Road OC, it became more physically feasible to lower the interstate beneath both bridges rather than raise the overcrossing. The foot print of both structures will flow better, and the dip in the roadway will have more length to taper out and provide a smooth transition. Lowering the interstate under the Weimar Cross Road OC was the most structurally feasible option as well.

#### 1.4 Permits and Approvals Needed for Project:

Agency	Permit/Approval	Status
State Water Resources Quality Control Board (SWRQCB)	Statewide National Pollutant Discharge Elimination System (NPDES) Permit	Standard permit for all projects
California Department of Fish and Game (CDFG)	1602 Permit	Will be completed during the Project Specification and Estimates (PS&E) phase
United States Army Corps of Engineers (USACOE)	404 Nationwide #14 Permit	Will be completed during the PS&E phase
Regional Water Quality Control Board (RWQCB)	401 Certification	Will be completed during the PS&E phase

## **Chapter 2 – Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures**

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document.

- Farmlands/Timberlands
- Recreation
- Utilities
- Cultural Resources
- Geology and Soils
- Growth
- Air Quality
- Noise
- Coastal Zone
- Wild and Scenic Rivers
- Hydrology and Floodplain

### **1.5 Human Environment**

#### **1.5.1 Existing Land Use**

The existing land use of the project area varies as the bridge locations climb up the interstate into the Sierra Nevada Mountains. Because the projects' locations are spread out, each bridge location's land use and zoning designations vary and are described by the general area, below:

##### Loomis and Penryn Area

Brace Road OC is at the beginning of the project limits. Most of the surrounding land use for Brace Road OC is single family residential and rural residential. The property

on the northeast parcel near the bridge is zoned as tourist/destination commercial. Brace Road OC is generally located between Loomis and Rocklin.

Horseshoe Bar Road OC is located within the Town of Loomis. The surrounding zoning consists of the following: medium density residential and single family residential to the west and southwest, general commercial to the west and north, tourist/destination commercial to the east and south, and residential estate to the far southeast.

King Road OC is located on the northern end of Loomis and the land use varies. Southwest of King Road OC is zoned as office commercial and single-family residential; southeast of the bridge is rural estate. Northwest of King Road OC most of the parcels consist of office commercial, public institutional and residential estate. Further west is zoned as single-family residential. Northeast of King Road are a few open space parcels. Just north of the bridge is low-density residential.

Penryn Road OC travels through the community of Penryn, generally going north and south over I-80. Most of the parcels east and south of the bridge are designated as rural estate (4.6-20 acre minimum). Directly north and west of Penryn Road OC are many parcels with a Penryn Parkway land use classification. Rural residential properties are located west of Penryn Road OC.

Approximately two miles west up I-80 from Penryn Road OC lies Gilardi Road OC. Almost all of the properties surrounding Gilardi Road OC are classified as rural residential. Some of the properties further south are zoned as rural estate.

### Newcastle Area

Newcastle Road OC and Newcastle UP are in close proximity with each other, so many of the zoning classifications overlap. Newcastle Road OC travels across I-80 through the town of Newcastle. The properties surrounding the Newcastle Road OC consist of general commercial.

Newcastle Road UP is a structure that is designated for trains, rail, passenger, and freight travel; I-80 travels under the Newcastle Road UP. The properties southeast of Newcastle Road UP are zoned as low-density residential. Directly north, northeast, and directly west of the UP the properties are zoned as business park industrial. Further north and southwest of the UP, the area is zoned as general commercial.

### Weimar and Magra Area

Weimar Cross Road OC is located approximately 15 miles east of Newcastle Road UP. Zoning surrounding Weimar Cross Road OC mostly consists of rural estate; however, some of the parcels to the east of Weimar Cross Road OC are zoned as commercial.

Approximately eight miles east on I-80 from Weimar Cross Road OC is Magra Road OC, which is the furthest bridge on the project. All the properties surrounding Magra OC are zoned as rural residential.

### **Future Land Use**

There are a number of future land use proposals and developments within the general area of the project. Most of the land use information came from the Placer County General Plan and other community plans as appropriate. Other future project information was derived from local newspaper articles, development plans, local websites, county websites, etc. Below is a table identifying known development projects within the general project area at this time:

Name	Jurisdiction	Proposed Uses	Status
Loomis Town Center	Town of Loomis	Purpose is to make Taylor and Horseshoe Bar Road more pedestrian friendly, improved connections, better infrastructure, and design use for 2 town properties within the town center	Proposed
The Village at Loomis	Town of Loomis	The Village at Loomis consists of a retail center including shops and restaurants, professional office uses, site for a town hall, detached single-family residential units, attached single-family residential units, live-work units, multi-family residential units, possible senior housing, parks, open space, and trails. 54 acres cover the proposed project area.	Proposed
Baltimore Ravine Specific Plan (BRSP)	City of Auburn	This development is located east of I-80 just north of Indian Hill Road and Auburn Folsom Road and proposes the following: 725 residential units, up to 90,000 square feet of commercial uses, 143 acres open space, and a 2-acre park.	Proposed
Orchard at Penryn	Penryn Development LLC	This project proposes to develop 150 condominiums, a recreation center with a swimming pool, exercise room, etc. on 15.1 acres. East of the Orchard is Penryn Road where access would be to the development. This project is part of the Penryn Parkway plan.	Draft EIR is in progress and scheduled to be out within the next year (2010-2011).
Penryn Parkway	Horseshoe Bar/Penryn Community Plan	The Penryn Parkway is generally located along Penryn and Taylor roads. It is approved as a highway commercial area due to the availability of necessary infrastructure and proximity to I-80 which allowed the potential for expanded commercial and professional office use areas. The parkway is intended to provide services to both residents and travelers along I-80. Penryn Parkway's goal is to encourage a compact commercial core to serve the local Penryn community.	Adopted and somewhat built, and is designated as the Penryn Parkway in land use maps.
Penryn Heights	Penryn Partners LP	Includes a minor land division of dividing a parcel into 4 parcels of .67, .67, 1.08, and 2.21 acres. The property is currently zoned for commercial use, including multi-family house. It is located off of English Colony way, west of Taylor Road in Penryn.	Project is under environmental review. However at this time there are no plans to present it to the Penryn MAC.

### Consistency with State, Regional, and Local Plans and Programs

The I-80 Vertical Clearance project is included in the Fiscal Year (FY) 2009/2012 Sacramento Area Council of Governments (SACOG) lump sum of projects, Metropolitan Transportation Improvement Plan (MTIP) and is proposed for funding from the 2008 State Highway Operation and Protection Program (SHOPP). The project is consistent with federal, state, regional, and local plans.

## **Parks and Recreational Facilities**

Most of the bridge locations are located within the outer communities of the City of Sacramento, therefore many parks and recreational facilities are available for the surrounding metropolis to use. The Loomis Basin Regional Park, also known as the Loomis Basin Community Park, is close to the beginning of the project. This park is one of the main parks in the Loomis and Penryn area; it is located on the east side of I-80 in between Horseshoe Bar Road OC and King Road OC. This park contains the following facilities: 3 ball fields, 2 tot lots, basketball courts, horseshoe pits, covered pavilions, restrooms, bicycle and pedestrian trails, and an equestrian arena. The park covers a many acres of recreational space.

Close to the community of Penryn, lies a quaint park called the Griffith Quarry Park. The park is described as passive, with some picnic areas and some hiking trails to enjoy. There is also a county museum located on the park grounds.

The Folsom Lake State Recreation Park is approximately four miles directly east of Horseshoe Bar Road Overcrossing. Although the Folsom Lake Park is further from the general project area, many locals from Loomis, Newcastle, and the surrounding areas of Sacramento use the Folsom Lake State Recreation Park. The lake and recreation area offers opportunities for hiking, biking, running, camping, picnicking, horseback riding, water-skiing and boating. A 32-mile long bicycle path exists for cyclists which connects Folsom Lake with many Sacramento County parks before reaching Old Sacramento. Many people visit this park.

### **1.5.2 Traffic and Transportation/Pedestrian and Bicycle Facilities**

#### **Regulatory Setting**

The Department directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see CFR 652). It further directs that the special needs of the elderly and disabled must be considered in all federal aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

The Department is committed to carrying out the Americans with Disabilities Act (ADA) by building transportation facilities that provide equal access for all persons. The same

degree of convenience, accessibility, and safety available to the general public will be provided to peoples with disabilities.

### **Affected Environment**

The study area for the project includes I-80 through Placer County from the Town of Loomis to north of the town of Colfax. I-80 is a major route which serves one of the only crossings through the Sierra Nevada Mountains in northern California, and provides interregional, regional, commercial, commuter, and recreational traffic.

Along with the interstate as part of the affected environment, bikeway paths and bike lanes are also within the general area of the project. Bikeway paths are classified as a Class I, Class II, or a Class III route. A Class I path provides a completely separated right of way exclusively for bikes and pedestrians, with cross flow minimized. A Class II bike lane provides a striped lane for one-way bike travel on a street or highway. A Class III designation provides for shared use with pedestrian or motor vehicle traffic typically on lower volume roadways.

Within the Town of Loomis there are a few designated bikeways. Currently, King Road OC includes a Class II bike lane on the overcrossing travelling over I-80. A Class II bike lane exists on Taylor Road as well. Horseshoe Bar Road contains a multiuse path which starts at the intersection of Taylor Road and Horseshoe Bar Road and continues on Horseshoe Bar Road, the striped bike lane ends just west of the overcrossing at the Raleys shopping center traffic signal. The pedestrian path continues on over the overcrossing and then turns into a dirt path and tapers off.

Currently a Class II bike lane travels over King Road, with a striped bike lane provided on one side of the bridge and a raised pedestrian path on the other side of the bridge. Currently Brace Road does not have a class bike lane; however there is a raised pedestrian sidewalk traveling over the interstate on Brace Road. Penryn Road contains a raised pedestrian crossing but not a striped bike lane. Gilardi Road's conditions are similar to Penryn and Brace Road, regarding current bike and pedestrian facilities.

Newcastle Underpass is a structure in which a rail road travels over the interstate. The project proposes to lower the interstate underneath the structure rather than raise the structure above. The Newcastle Road OC has a Class II bike lane in which a striped lane is provided.

## **Environmental Consequences**

Impacts for this project will be temporary as they are taking place during construction. The six overcrossings which are scheduled to be lifted should be closed for approximately 10 to 20 days at a time. During the actual lifting of these overcrossing(s), the interstate below will be closed for approximately two four hour periods. If one bridge is closed, the next adjacent bridge will be open and accessible. Most of the ramps should remain open and closures, if necessary, would be temporary in nature.

For the three bridges scheduled to have the freeway lowered beneath them to meet vertical clearance, the scenario will be somewhat different. Newcastle Road OC and Weimar OC structures shall remain open for local traffic; however the interstate will be reduced to two thru lanes in each direction for approximately 30-60 days. Newcastle UP is a railroad overcrossing where the traffic is freight and passenger trains traveling over the interstate. The railroad will not have any permanent or temporary impacts associated with this project.

Closing the various bridges for any length of time would temporarily restrict bicyclists and pedestrians to cross over the interstate. However the inconvenience will be temporary and detours will be provided.

## **Avoidance, Minimization, and/or Mitigation Measures**

The following avoidance and minimization measures will help offset the temporary impacts to traffic and circulation during construction:

- On I-80, lane closures will be restricted to off-peak and nighttime hours. Off-peak hours are usually 10am-3pm and 7pm-6am. The maximum length of any lane closure shall be limited to one mile.
- During ramp closures, traffic will be detoured in accordance with detour traffic handling plans prepared in accordance with Traffic Operations. Detour routes are also checked to ensure they meet Highway Design Manual requirements, such as truck turning radii and vertical/horizontal clearances. Detours are required to be in place before construction.
- Detour plans will be provided for any full closures, which include bridge and ramp closures. The proposed detour plans, shown in more detail, are in the “Construction Impacts” section on page 46.

- Access to cross streets and driveways will be maintained during construction. Additional signs and striping will be required to direct bicycle traffic when bikeways are closed for construction work.
- Caltrans will develop a Public Involvement Plan for public communication and outreach. The plan will include coordination with local agencies, public meetings and events, outreach at schools, and various meetings with stakeholders.
- Caltrans media communication about the traffic and detour information may involve a combination of television and radio service announcements, newspaper articles, social networks like twitter and facebook, updates on the website [www.getacross80.com](http://www.getacross80.com), temporary changeable message signs, and other outlets as necessary. Some of these outlets will display closure information as soon as it's available so people will be informed about the construction closures and detours.
- Information regarding the scheduled bridge closures will be available to the public in adequate time and format(s). As a result of project completion, the bridges would be ADA compliant, providing more fluid pedestrian and bicycle pathways.
- A Traffic Management Plan (TMP) Data Sheet was completed for this project in July 2010. The TMP summarizes the bridge, lane, and ramp closure requirements, traffic handling practices and/or other traffic managing strategies which will be implemented during construction.
- Because of Loomis Fire Department's concerns regarding the potential for longer fire emergency response times during construction, the project will temporarily fund 2-3 personnel positions, for approximately 12 days, in order to keep a small fire substation in operation while Horseshoe Bar Road is closed during construction. Currently the substation is unmanned and has been unmanned for some time, as the primary fire station is located on the north side of the interstate and is operational. The fire substation is located south of I-80 right off Horseshoe Bar Road near Tudsberry Road.

Various improvements are expected after completion of the project, which include connectivity for all modes of transportation, improvements to bike lanes and upgrading

pedestrian facilities to Americans with Disabilities Act (ADA) standards, smoother pavement and updated and connected sidewalks over the bridges. Visual and safety improvements such as higher-link chain fencing, which is more visually appealing, and textured outside barriers on the bridge structure, will be implemented into the project.

### **1.5.3 Visual Impacts and Aesthetics**

#### **Regulatory Setting**

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of *aesthetic*, natural, scenic and historic environmental qualities.” (CA Public Resources Code Section 21001[b])

#### **Affected Environment**

A Visual Impact Assessment was conducted by Caltrans’ Office of Landscape Architecture qualified staff in May of 2010. The study area for the project is located on I-80 and generally starts from the Town of Loomis, to Newcastle, through Auburn and continues on towards the Magra area, covering a distance of about 29.7 miles. I-80 is one of the only east and west routes through the Sierra Nevada Mountains and many people visit and travel on this interstate. This part of the interstate is not an Officially State Designated Scenic Highway, nor is it eligible for designation of a scenic highway at this time.

The project starts at the base of the Sierra Nevada Mountains in the foothills, showcasing oak trees scattered among the rolling hills with many communities and residences in between. As the interstate climbs up the mountain in elevation along I-80 through Newcastle, the viewshed changes from rolling hills and scattered oaks to denser oak forest mixed with pine trees. Through Auburn the viewshed turns to mostly pine trees with scattered oaks. Towards the end of the project at the Magra OC and the Weimar Cross Road OC, the viewshed is dense pine forest.

Viewshed is defined as an area of landscape that is visible from a particular location or series of points. Two major viewer groups are identified in the project area; they are the residential communities living near the project site and businesses located near the area, along with highway travelers.

## **Environmental Consequences**

Several bridges are scoped for this project and cover a wide area; below they are addressed individually, starting from the most westerly location, Brace Road OC, to the most easterly location, Magra Road OC. Tree removal for this project is necessary as many of the trees are very close to or are directly under the bridge scheduled to be raised. However, where possible, some trees will be saved by shortening the length and toe of slopes, or by providing tree wells. By removing particular trees, the bridge can be safely raised to meet the vertical clearance height and in turn, making the structure stronger and safer.

Within the project limits there are a large number of trees, which include a variety of oaks, eucalyptus, almonds and pines, along with various low growing shrubs. Many of these trees could be compromised and several will be removed due to this project. Some removals will be minor due tree size and/or location; however, the trees that are noteworthy will be replaced with a five gallon sized replacement. The trees that will be planted as part of the follow up project to the construction work will consist of a variety of native plant materials, such as oaks, pines, cercis, and other tree species that are indigenous to the area. Smaller native shrubs and grasses will also be implemented into the areas of disturbance. This work will be conducted under the guidance of the Caltran's Landscape Architectural Division.

Potential visual impacts from the project are listed by bridge OC below:

### **Brace Road OC**

The removal of two large eucalyptus trees and three large oak trees near the abutments of Brace Road OC would result in a reduction of a visual buffer for the five homes on the northwest quadrant of this interchange (IC). The removal of one large eucalyptus, two blue oaks, one scrub oak, and three almond trees would also result in the reduction of the visual buffer for the single family home on the northwest quadrant of the interchange.

The commercial and farmhouses on the southwest quadrant and farmhouses on the southwest quadrant of IC are set back from the freeway and therefore would not be visually impacted.

### Horseshoe Bar OC

Raleys shopping center is located on the southwest quadrant of the IC, with existing full landscaped plantings. The project proposes to place a new fill slope and remove a portion of the existing plantings. Some of Raleys landscaped plantings will be removed and replaced. Also some of the eucalyptus trees between the Raleys supermarket and freeway will be removed to provide fill for the new structure components. The manager of Raleys has asked Caltrans to trim those trees, as they currently block their advertising sign. The project proposes to remove those trees, therefore re-creating views of the sign, for travelers.

There are some commercial buildings on the southwest quadrant and the removal of some trees in this area would not result in a visual impact, as there is an existing buffer of trees between the highway and the building that would remain. Farmlands exist on the southeast and northeast quadrants, with no homes in the immediate vicinity; they should not be visually impacted.

### King Road OC

The King Road OC area is fairly rural, with views of some farmlands to the southeast and the southwest of the IC. Three small older homes are located in the southeast quadrant of the IC with an existing tree buffer which is to remain. Therefore there shouldn't be a visual impact for those particular homes, in the southeast and southwest quadrant.

On the northwest quadrant of the IC however, one single family home would be impacted as the project proposed to remove two large eucalyptus trees, one large blue oak, and one large valley oak from the area.

### Penryn Road OC

Commercial areas exist to the northeast and southeast of the IC; a single family residence is located to the southwest and farmlands are generally located northwest of the IC. Tree removals in this area would not result in a great visual impact for the adjacent homes or other buildings as they are set back from the roadway.

### Gilardi Road OC

A few farmhouses and farmland surround the Gilardi Road OC. For this location, two large oaks will be removed resulting in no visual impacts to the surrounding residences.

### Newcastle Road OC

All adjacent areas are commercial with the exception of the southwest quadrant and the far north side of the railroad tracks, which are residential. Trees removed at this slope would expose the homes to a view of freeway traffic, resulting in a visual impact to the homes and apartments in the southwest quadrant of the IC.

### Weimar Cross Road OC

Most of the surrounding properties at this location are designated as commercial. One elderberry shrub located in the eastbound I-80 onramp is proposed to be removed at this time. A few trees along the westbound section of the interstate will need to be removed as well. However, this should not interfere with sight distance and there will not be a visual impact at this location.

### Magra OC

Approximately one hundred pine trees will be removed at this location. At this time there are no homes in the immediate vicinity. The impact is minimal to no impact. The existing dense pine forest precludes the need to plant any replacement trees for this location.

## **Avoidance, Minimization, and/or Mitigation Measures**

The best management practices and minimization measures listed below will be included in the project to reduce potential visual impacts of the project at the specified locations.

### Minimization Measures

#### *Visual Buffer Replaced*

- Trees removed from the northwest quadrant of the Brace Road Interchange shall be replaced at the edge of the new slope to provide a visual buffer for the existing homes in the area.
- Trees removed from the northeast quadrant of the Brace Road Interchange shall be replaced to provide a visual buffer for the existing single family home.
- Trees removed from the northwest quadrant of the King Road Interchange shall be replaced at the edge of the new slope to provide a visual buffer for the existing home in the area.

- Trees removed from the southwest quadrant of Newcastle Road Interchange shall be replaced at the edge of the new slope to provide a visual buffer for the existing homes and apartments.
- Trees and shrubs should be planted within the southwest quadrant of the interchange at Newcastle Road OC. This will provide a screen of vegetation for the homes and apartments in the area.

#### *Bridge Railings*

- Designs for bridge railings and fences shall be compatible with some of the existing structures already in place to create unity throughout the I-80 corridor. Examples include the Weimar Bridge or more commonly known as West Paoli Lane (stained dry rock concrete texture) or the Sierra College Boulevard (granite block texture) schemes. Both the bridge railings and attached fences would be replaced with aesthetically pleasing ones.

#### *Revegetation, Oak Trees, and Erosion Control Measures*

- Tree removal will be reduced as much as possible. This could be accomplished by shortening the length and edge of slopes, and/or providing tree wells. The noteworthy trees that cannot be saved because they are within the construction zone of the bridge structure(s) or the cut and fill areas will need to be replaced during the planting phase of the highway construction project. Special consideration will be given to oak tree replacement which will include a variety of oak species, such as blue, black, and valley oak.
- At the end of construction, all areas used for staging, access or other construction activities shall be contour graded and hydro-seeded with a native seed mix. Once the native seeds germinate, the disturbed area will begin to blend into the natural landscape.
- During the design phase of the project the landscape architect will determine where planting material should be utilized to provide screening for appropriate sites (such as residential and commercial areas, and objectionable views).

#### *Best Management Practices*

- Only native plant species, appropriate for the project area will be used in all erosion control, vegetation seed mix, and/or stock.

- Dry farmed straw will not be used on this project. Instead certified weed free mulch will be used for erosion control measures and, hydro-seed mulch used for vegetation activities shall be certified weed-free.
- Cut and fill slopes should be contour graded and rounded so as to reflect the contours of adjacent undisturbed topography, to the best extent feasible. Grading operations should not result in angular landforms but shall be smooth and flowing.
- During the clearing and grubbing operations the contractor will stockpile existing surface soils and duff from the construction site, as part of the excavation work. All new cut and fill slopes shall be resurfaced with stockpiled material to enhance re-vegetation efforts and provide erosion control.
- Erosion control in the form of hydro-seed shall be applied to all disturbed areas. The seed mix used in the hydro-seed will consist of a native grasses and legumes that are indigenous to the area.
- Projects disturbing at least one acre of land require a National Pollution Discharge Elimination System (NPDES) permit. This permit regulates all storm water discharges associated with construction activities. These regulations also protect biological resources as well as set the ground work for re-vegetation and erosion control activities. Storm Water Management Plan and Storm Water Quality standards must also be implemented.

## **1.6 Physical Environment**

### **1.6.1 Water Quality and Storm Water Runoff**

#### **Regulatory Setting**

##### *Federal Requirements: Clean Water Act*

In 1972, the Federal Water Pollution Control Act was amended, making the discharge of pollutants to the waters of the United States from any point source unlawful, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The Federal Water Pollution Control Act was subsequently amended in 1977, and was renamed the Clean Water Act (CWA). The CWA, as amended in 1987, directed that storm water discharges are point source discharges. The 1987 CWA amendment established a framework for regulating municipal and industrial

storm water discharges under the NPDES program. Important CWA sections are as follows:

- Sections 303 and 304 provide for water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for any federal project that proposes an activity, which may result in a discharge to waters of the United States to obtain certification from the State that the discharge will comply with other provisions of the act.
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) into waters of the United States. Regional Water Quality Control Boards (RWQCB) administer this permitting program in California. Section 402(p) establishes addresses storm water and non-storm water discharges.
- Sections 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the U.S. Army Corps of Engineers (ACOE).

The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

*State Requirements: Porter-Cologne Water Quality Control Act (California Water Code)*

California’s Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This Act requires a “Report of Waste Discharge” for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state.

The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCB) are responsible for establishing the water quality standards (objectives) required by the CWA, and regulating discharges to ensure that the objectives are met. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. States designate beneficial uses for all water body segments, and then set criteria necessary to protect these uses. Consequently, the water quality standards developed for particular water segments are based on the designated use and vary depending on such use. In addition, each state

identifies waters failing to meet standards for specific pollutants, which are state listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source controls, the CWA requires establishing Total Maximum Daily Loads (TMDLs). TMDLs establish allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

#### State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, water pollution control, and water quality functions throughout the state. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

- National Pollutant Discharge Elimination System (NPDES) Program

The SWRCB adopted Caltrans Statewide NPDES Permit (Order No. 99-06-DWQ) on July 15, 1999. This permit covers all Department rights-of-way, properties, facilities, and activities in the State. NPDES permits establish a 5-year permitting time frame. NPDES permit requirements remain active until a new permit has been adopted.

In compliance with the permit, the Department developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP describes the minimum procedures and practices the Department uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of Best Management Practices (BMPs). The proposed Project will be programmed to follow the guidelines and procedures outlined in the 2003 SWMP to address storm water runoff or any subsequent SWMP version draft and approved.

- Municipal Separate Storm Sewer System Program

The U.S. EPA defines a Municipal Separate Storm Sewer System (MS4) as any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body

having jurisdiction over storm water, that are designed or used for collecting or conveying storm water. As part of the NPDES program, U.S. EPA initiated a program requiring that entities having MS4s apply to their local RWQCBs for storm water discharge permits. The program proceeded through two phases. Under Phase I, the program initiated permit requirements for designated municipalities with populations of 100,000 or greater. Phase II expanded the program to municipalities with populations less than 100,000.

- Construction Activity Permitting

Section H.2, Construction Program Management of the Department's NPDES permit states: "The Construction Management Program shall be in compliance with requirement of the NPDES General Permit for Construction Activities (Construction General Permit)". Construction General Permit (Order No. 2009-009-DWQ, adopted on September 2, 2009, will become effective on July 1, 2010. The permit will regulate storm water discharges from construction sites that result in a DSA of 1 acre or greater, and/or are part of a common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least 1 acre must comply with the provisions of the General Construction Permit.

The newly adopted permit separates projects into Risk Levels 1 – 3. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring. Risk levels are determined during the design phase and are based on potential erosion and transport to receiving waters. Applicants are required to develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP).

Caltrans Statewide NPDES Permit requires the Department to submit a Notice of Construction (NOC) to the RWQCB to obtain coverage under the Construction General Permit. Upon project completion, a Notice of Completion of Construction (NOCC) is required to suspend coverage. This process will continue to apply to Department projects until a new Caltrans Statewide NPDES Permit is adopted by the SWRCB. An NOC or equivalent form will be submitted to the RWQCB at least 30 days prior to construction if the associated

DSA is 1 acre or more. In accordance with the Department's Standard Specifications, a Water Pollution Control Plan (WPCP) is used for projects with DSA less than 1-acre.

During the construction phase, compliance with the permit and the Department's Standard Special Conditions requires appropriate selection and deployment of both structural and non-structural BMPs. These BMPs must achieve performance standards of Best Available Technology economically achievable/Best Conventional Pollutant Control Technology (BAT/BCT) to reduce or eliminate storm water pollution.

### **Affected Environment**

A Water Quality Assessment (WQA) was conducted by a qualified Caltrans water quality specialist in July 2010. The proposed project setting, as it pertains to water quality, occurs in the Lower American River, Upper Coon Creek-Upper Auburn River, and Upper Bear River watersheds. The hydrology in the study area is characterized as storm water drainage slopes and most of these features lack criteria for qualification as "waters of the U.S.". Prior disturbance associated with highway construction and urban and rural development has drastically altered the functions and values of the watersheds within the study area of the project. Previously undisturbed waterways now flow through culverts and roadside ditches or flow over land across storm water drainage slopes before reaching waters of the U.S.

The project is located within the City of Rocklin, City of Loomis, and Placer County MS4 areas and falls under the Central Valley Regional Water Quality Control Board (CVRWQCB) jurisdiction.

### **Environmental Consequences**

It is not anticipated that any water quality impacts will result since the nature of the work requires limited soil disturbance. However, there are previously disturbed and channelized surface waters present at Horseshoe Bar OC, King Road OC, Newcastle OC, and Weimar Cross Road OC. Project work at these particular locations will require a 401, 404, and a 1602 permit(s).

No permanent water quality impacts are expected as a result of the project. Work will be performed during the dry summer season and is estimated to take 2-3 construction seasons.

## **Avoidance, Minimization, and/or Mitigation Measures**

The following is recommended to prevent receiving water pollution as a result of construction activities and/or operation from this project:

- Since the project involves more than one acre of Disturbed Soil Area (DSA), adherence to the compliance requirements of the NPDES General Permit CAS No. 000002 (Order No. 2009-0009-DWQ) for General Construction Activities is required.
- A Caltrans approved SWPPP will be required to address temporary pollution control measures for the project during construction. These measures must address soil stabilization, sediment control, tracking control and wind erosion control practices. In addition, the project plans must include non-storm water controls, waste management and material pollution controls, as a minimum. Line Item, Temporary Construction Site BMPs, may be required and incorporated into the PS&E.
- Consideration should be given to include SSP 07-346 (Construction Site Management) during PS&E to control potential sources of water pollution before it encounters any storm water system or watercourse. This requires the Contractor to control material pollution, manage waste and non-storm water at the construction site. The SWPPP also incorporates appropriate Construction Site BMPs to implement effective handling, storage, use and disposal practices during construction activities.
- The project is within the jurisdiction of the Central Valley Regional Water Quality Control Board (CVWQCB). Early project design consultation with CVRWQCB is required.

### **1.6.2 Hazardous Waste**

#### **Regulatory Setting**

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive

Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for “cradle to grave” regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

### **Affected Environment**

An Initial Site Assessment was conducted on August 2007 by qualified Caltrans staff in the Office of Environmental Engineering Office (OEES). Visual surveys of the bridges were conducted as well as data research of the bridges and surrounding project area.

## **Environmental Consequences**

Based on the review and search by Bridge Inspection Records Information System (BIRIS), the potential for minor hazardous waste exists, based on the some minor hazardous materials discovered in and/or around the bridge location(s). Presumed Asbestos Containing Materials (PACMs) were used in the piers and abutments of some of the bridges. Naturally Occurring Asbestos (NOA) may exist within the highway right of way in the form Serpentine rock (PM 29.0/31.0) as well.

### **Avoidance, Minimization, and/or Mitigation Measures**

A Preliminary Site Investigation (PSI) of the bridges will be conducted to provide further detail about the PACMs. Because of the potential NOA in the area, an asbestos compliance plan will be required. A dust control plan for any Temporary Construction Easements (TCE) will be required and a Lead Compliance Plan (LCP) will also be required.

## **1.7 Biological Environment**

### **1.7.1 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.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in the Threatened and Endangered Species section. Wetlands and other waters are discussed in the following section.

#### **Affected Environment**

In June of 2011 a Natural Environment Study was conducted and completed by qualified Caltrans biology staff. According to the study, there are three natural communities occurring within the project limits and are the following: blue oak-foothill pine woodland, non-native grassland, and ponderosa pine forest. These three natural communities are discussed below.

## **Environmental Consequences**

The Blue Oak and Foothill Woodland natural community is generally located among the western parts of the project. Most of the bridges up to Newcastle Road OC and Newcastle UP are in the Blue Oak-foothill pine community. Blue oak and foothill pine typically dominate the canopy. Co-dominant species include valley oak, interior live oak, and California buckeye. Interior live oak dominates the canopy in rocky areas and on north-facing slopes. At lower elevations, the understory tends to be non-native grassland. At higher elevations, where foothill pines and interior live oaks comprise the canopy, the understory includes patches of shrubs in addition to the annual grasses and forbs. For this natural community, there will be a temporary impact of approximately 0.04 acres and a permanent impact of approximately 0.87 acres.

Non-native grasslands are found throughout most of the project area and typically occur along the highway margin and in adjacent to areas of similar human disturbance. The non-native grassland is covered with introduced annual grasses and contains some native grasses and forbs. Approximately 3.66 acres of the non-native grassland will be temporarily impacted and approximately 4.78 acres will be permanently impacted.

The third natural community within the project area is the ponderosa pine forest. The ponderosa pine forest is located near Weimar Cross Road OC and Magra OC. The ponderosa pine forest, in the study area, has a mixed-species canopy that is dominated by ponderosa pine and white fir. Co-dominant tree species include black oak, Douglas-fir, incense cedar, and interior live oak. For this natural community, approximately 0.28 acres will be temporarily impacted and approximately 0.08 acres will be permanently impacted.

No documented migratory corridors exist throughout the area as it is a highly developed area, which includes the freeway, and has been for some time. Prior disturbance associated with urban development and roadway construction have fragmented woodlands and plant communities in the study area. Prior development has also resulted in slopes that have been landscaped with non-native species.

## **Avoidance, Minimization, and/or Mitigation Measures**

In order to avoid potential impacts to the natural communities, the removal of native vegetation will be confined to the minimal area necessary to facilitate construction

activities. All disturbed soil areas will be restored to their original condition, as nearly as possible.

In light of the local oak tree preservation ordinance trees would be saved, where practical, by shortening of the length and toe of slopes or by providing tree wells. However, trees which are directly near the bridge structure, or are in an area where the fill material is very deep, will be removed during the clearing and grubbing operations. To compensate for the loss of impacts to native oak habitat, the area will be re-vegetated with native oaks and associated species.

## **1.7.2 Wetlands and Other Waters**

### **Regulatory Setting**

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 USC 1344) is the primary law regulating wetlands and surface waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of wetland 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 Clean Water Act.

Section 404 of the Clean Water Act 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 of Engineers (ACOE) with oversight by the Environmental Protection Agency (EPA).

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, 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.

At the state level, wetlands and waters are regulated primarily by the California Department of Fish and Game (CDFG), the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB). In certain circumstances, the Coastal Commission or Bay Conservation and Development Commission or 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 CDFG before beginning construction. If CDFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFG 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 ACOE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of the Clean Water Act.

**Affected Environment**

A Natural Environment Study was completed by qualified Caltrans biology staff in June 2011. The proposed project occurs in the Lower American River, Upper Coon Creek-Upper Auburn River, and Upper Bear River watersheds. The hydrology in the study area is characterized as stormwater drainage slopes, and most of those features lack criteria for qualification as “waters of the U.S.” However according to the study, there are previously disturbed and channelized surface waters present at Horseshoe Bar OC, King Road OC, Newcastle OC and Weimar Cross Road OC. These potentially jurisdictional state and federal waters were identified and mapped according to provisions of sections 401 and 404 of the Federal Clean Water Act and sections 1600-1616 of California Fish and Game Code. The locations and characteristics of the “other waters of the U.S.” are shown in the table below.

Location (postmile)	Type of drainage	Watershed	Length of Waters (feet)	Avg. Width of Waters (feet)	Acreage of Waters (acres)
Brace Road Overcrossing	stormwater drainage	Lower American	-	-	-

Location (postmile)	Type of drainage	Watershed	Length of Waters (feet)	Avg. Width of Waters (feet)	Acreage of Waters (acres)
(8.13)		River			
Horseshoe Bar Overcrossing (8.72)	unnamed, intermittent stream	Lower American River	1,334.26	3.5	0.11
King Road Overcrossing (9.53)	unnamed, intermittent stream	Lower American River	505.53	5.0	0.06
Penryn Road Overcrossing (10.35)	stormwater drainage	Lower American River	-	-	-
Gilardi Road Overcrossing (12.30)	stormwater drainage	Lower American River	-	-	-
Newcastle Road Overcrossing (13.81)	unnamed, intermittent stream	Lower American River	485.20	4.0	0.04
Newcastle Road Underpass (13.99)	stormwater drainage	Upper Coon Creek-Upper Auburn River	-	-	-
Weimar Crossroad Overcrossing (29.32)	unnamed, intermittent stream	Upper Bear River	457.29	1.5	0.02
Magra Overcrossing (37.78)	stormwater drainage	Upper Bear River	-	-	-
Totals:			2,782.28		0.23

## Environmental Consequences

The project involves repairing existing culverts; therefore, it is not possible to avoid impacts to waters entirely during project construction. The proposed project will permanently impact less than a tenth (0.10) of an acre of waters of the U.S.. In addition, less than a tenth (0.10) of an acre of waters of the U.S. will be temporarily impacted during project construction.

Impacts will be minimized by limiting the amount of fill necessary to provide adequate erosion and minimize impacts to natural resources during and after construction. The following paragraphs describe some of the permits which are required.

The State Water Resources Control Board (SWRCB) has developed and issued statewide National Pollutant Discharge Eliminations System (NPDES) permit to regulate storm water discharges from all Caltrans activities on its highways and facilities. The proposed rehabilitation of existing storm water cross culverts and drainage elements are covered under the statewide NPDES.

The replacement of culverts and culvert extensions may divert or obstruct the natural flow of or change the streambed or stream bank of jurisdictional waterways, so a California Department Fish and Game Code Section 1602 Streambed Alteration Agreement will be required.

The replacement of culverts and culverts extensions will place fill material in Waters of U.S.; therefore, a Clean Water Act Section 404 Nationwide #14 Permit from the U.S. Army Corps of Engineers (USACE) is required. A Clean Water Act Section 401 Water Quality Certification will also be required from the Regional Water Quality Control Board.

#### **Avoidance, Minimization, and/or Mitigation Measures**

The following avoidance measures will be implemented into the project to avoid potential impacts towards the resource.

- Establish Environmentally Sensitive Areas (ESA): ESA provisions will be implemented as a first order of work and remain in place until all construction activities are complete. Additional direct and indirect impacts to sensitive biological resources, including jurisdictional waters, will be avoided or minimized by designating these features outside of the construction impact area as ESAs on project plans and in project specifications. Design personnel will coordinate with environmental personnel during the development of the project to determine the exact locations of proposed ESA areas. ESA information will be shown on contract plans and discussed in the Special Provisions. ESA provisions may include, but are not limited to, the use of temporary orange fencing to exclude work in areas adjacent to sensitive resources. Contractor encroachment into ESAs will be prohibited (including the staging/operation of heavy equipment or casting of excavation materials).
- Storm Water Pollution Prevention Plan (SWPPP): All construction projects with over 1 acre of Disturbed Soil Area (DSA) require a SWPPP to be prepared and

implemented during construction. At this time, the project has a total of 21.2 acres of DSA. The SWPPP will be in compliance with the goals and restrictions identified in the Water Quality Control Board's Plan. The SWPPP will meet the standards and objectives to minimize water pollution impacts set forth in section 7-1.01G of Caltrans Standard Specifications.

### **1.7.3 Plant Species**

#### **Regulatory Setting**

The U.S. Fish and Wildlife Service (USFWS) and the CDFG share 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 afforded 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). Please see the Threatened and Endangered Species Section in this document for detailed information regarding these species.

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

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et seq. See also 50 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 Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

#### **Affected Environment**

According to the June 2011 Natural Environment Study, background research identified two plant species (Brandegge's clarkia (CNPS List 1B1.2) and Red Hills soaproot (CNPS List 1B.2)) with a low potential for occurrence in the study area.

The Brandegee's clarkia (*Clarkia biloba* ssp. *Brandegeeae*) is an annual herb inhabiting chaparral, cismontane woodland, and lower montane coniferous forest in Placer County. This species is in bloom between May and July (CNPS 2009). Brandegee's clarkia is considered as a List 1B (rare, threatened or endangered in California plant species by the CNPS). The plant was not detected during plant surveys but is known to occur in the vicinity of the study area. The nearest recorded occurrence is located approximately 0.2 miles west of the Newcastle OC.

The Red Hills soaproot (*Chlorogalum grandiflorum*) is a bulbiferous herb inhabiting cismontane woodland and lower montane coniferous forest in Placer County. This herb is in bloom between May and June (CNPS 2010). Red Hills soaproot is considered as a List 1B (rare, threatened or endangered in California plant species by the CNPS). This species was not detected during plant surveys but is known to occur in the vicinity of the study area. The nearest recorded occurrence is located approximately 2.75 miles southwest of the Magra OC and in Caltrans right of way along I-80.

Prior disturbance associated with urban development and roadway construction has fragmented woodlands and plant communities in the area. Prior development has resulted in cut/fill slopes which have been landscaped with non-native species.

### **Environmental Consequences**

Non-native grasses and weedy species dominate the study area. However, the Brandegee's clarkia and the Red Hill soaproot have a low potential to occur in the study area but were not detected during the field surveys. The project is not expected to impact these two species.

### **Avoidance, Minimization, and/or Mitigation Measures**

Removal of native vegetation shall be confined to the minimal area necessary to facilitate construction activities. Revegetation measures shall include erosion control containing native species familiar with the area and will be weed free certified with no invasive species.

## **1.7.4 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 (NOAA) Fisheries and the CDFG (CDFG) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the state or federal Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in the Threatened and Endangered Species Section. All other special-status animal species are discussed here, including CDFG fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations pertaining to wildlife include the following:

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

State laws and regulations pertaining to wildlife include the following:

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

In addition to state and federal laws regulating impacts to wildlife, there are often local regulations (example: county or city) that need to be considered when developing projects. If work is being done on federal land (BLM or Forest Service, for example), then those agencies' regulations, policies, and Habitat Conservation Plans are followed.

### **Affected Environment**

According to the June 2011 Natural Environment Study conducted by qualified Caltrans biology staff, one reptile, 32 bird species, and signs of three mammal species were observed during field surveys conducted in the study area. The known animal species documented in the database are not special status species or Threatened or Endangered Species. There are no known fish passages within the area as well. There

is the potential for birds and bats to nest in or on the structure(s). During the biological studies, only a few birds were seen nesting on some of the bridge structures.

### **Environmental Consequences**

Implementation of avoidance and minimization measures would protect the birds and bats during construction, and are described below.

### **Avoidance, Minimization, and/or Mitigation Measures**

Below are some avoidance and minimization measures to minimize affects to the birds which may be nesting in the trees and/or vegetation scheduled to be removed.

- No known active nests shall be disturbed prior to, during, and after project construction.
- Removal of native vegetation shall be confined to the minimal area necessary to facilitate construction activities.
- Vegetation removal on the project site shall occur outside the nesting season for migratory bird species in the project area; the nesting season is usually from February 15 to August 31, of any given year. Trees scheduled for removal should be removed between September 1 and February 14.
- However if woody vegetation removal, construction, structures work, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds, a focused survey for active bird nests of such birds will be conducted by a qualified biologist within 30 days prior to the beginning of project-related activities. If active bird nests are found, Caltrans will consult with USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and with CDFG to comply with provisions of the Fish and Game Code of California. If a lapse in project-related work of fifteen days or longer occurs, another survey and/or consultation with USFWS and CDFG will be required before work can be initiated.

The avoidance measures below would be applied to avoid impacts to bird and/or bat species which may be nesting in or on the bridge structure.

- To avoid potential impacts to nesting swallows or roosting bats, exclusionary devices would be installed where feasible to prevent nesting or roosting on overcrossings at the bridge site. The installation of the exclusionary devices

would occur during the fall or winter after the fledging and before the initiation of breeding activities. A biological monitor would periodically inspect the exclusionary devices to ensure its effectiveness.

- Nest removal is another method of preventing structure nesting/roosting species. CDFG considers February 15 to August 31 to be the swallow nesting season. Old nests or nests partially developed by the birds would be washed down with water or knocked down with a pole. Swallows are strongly attracted to old nests or the remnants of deteriorated nests, so all traces of mud would need to be removed. Because cliff swallows persistently rebuild nests for most of the breeding season, the nest removal method will require many consecutive days to prevent them from nesting using this method.

### **1.7.5 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 CFR Part 402. This act and subsequent 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, are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries) 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 is a Biological Opinion or an incidental take permit. 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 CDFG is the agency

responsible for implementing CESA. Section 2081 of the 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 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 CDFG. For projects requiring a Biological Opinion under Section 7 of the FESA, CDFG may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

### **Affected Environment**

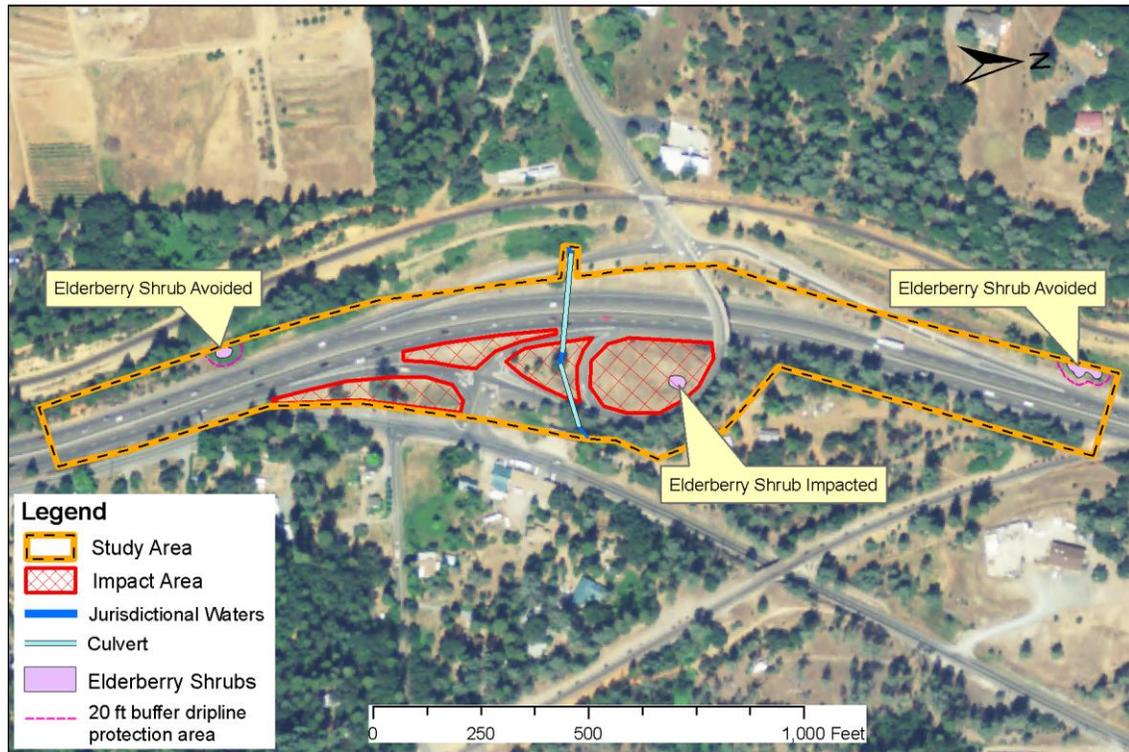
#### Valley Elderberry Longhorn Beetle (VELB)

The Natural Environment Study was completed in 2011 by qualified Caltrans biology staff. Three elderberry shrubs with stems greater than one inch diameter at ground level were observed within the project area in and around the Weimar Cross Road OC location at approximately 2300 feet elevation.

The VELB is federally listed as a threatened species. The VELB occurs in remnants of riparian and elderberry savanna habitats in the Central Valley and foothill locations; none of which are present in the study area. The VELB larvae feed solely on elderberry shrubs and are therefore codependent species. The beetle larvae are woodborers and feed internally in the roots and main stems of the elderberry shrub. Elderberry shrub stems which are greater than 1.0 inch in diameter at ground level are required for the beetle to complete its lifecycle. Adult beetles usually feed on the flowers and foliage of the shrub and are more active when the flowers are in bloom; the blooming period is usually mid-March through mid-June. The beetles are usually observed in areas where there are other riparian vegetation present, especially larger trees. Preferred riparian habitat for the beetle usually includes habitat in the valley with dominant plant species including cottonwood, sycamore, valley oak, and willow, with an understory of

elderberry shrubs.

Map Sheet 7: Aerial View of the Weimar Crossroad Overcrossing at PM 29.31



The elderberry shrub located within the Weimar Cross Road OC interchange loop, which is scheduled to be removed, is very isolated with no riparian vegetation present. The existing elderberry shrubs occur in upland areas adjacent to the highway, and no VELB exit holes were observed in any of the elderberry shrubs within the study area. The nearest documented occurrence of the VELB is located in the Rocklin USGS quadrangle located in riparian habitat along Secret Ravine near Sierra College.

#### California Red Legged Frog (CRLF)

The CRLF is federally listed as a threatened species and a state species of concern. Critical habitat for the CRLF has not been identified in Placer County. The nearest critical habitat occurs in Unit NEV-1 (Nevada County) and Unit ELD-1 (El Dorado County).

The CRLF lives near lowlands and foothills in or near permanent sources of water. They prefer ponds, creeks, or marshes with lots of dense shoreline vegetation. Occasional streams provide suitable habitat if surface water remains through the summer. Breeding generally occurs in ponds or stream pools that contain water

through late summer and support dense, shrubby, or emergent vegetation such as overhanging willows intermixed with cattails.

Habitat in the study area is described as previously disturbed cut/fill slopes in upland areas which lack suitable water connectivity to nearby ponds or stream pools. The occasional waters in the study area are conveyed through culverts located under the roadway. There is an overall lack of suitable hydrologic connectivity to nearby water features.

## **Environmental Consequences**

### VELB

The project has the potential to adversely affect the VELB due to the removal of suitable habitat. In particular, the clearing of the vegetation for the construction staging area has the potential adversely affect the VELB because of the removal of one elderberry shrub. There are no indirect effects expected to the VELB habitat located along westbound I-80. These shrubs along westbound I-80 will not be directly affected and will be protected with Environmentally Sensitive Area (ESA) fencing as an avoidance measure.

### CRLF

The project is not expected to impact this species. There are no suitable streams or stream pools for the CRLF in the study area, and the hydrological connections to waters within one mile of the study area are not suitable for CRLF habitat. The long, dark, pipe culverts and swift flowing concreted channels lack emergent and riparian vegetation cover which is necessary to protect amphibians from predators. Caltrans has determined that the project may affect, but is not likely to adversely affect, the CRLF.

## **Avoidance, Minimization, and/or Mitigation Measures**

### VELB

The measures below would be applied to minimize impacts to the VELB:

- Before initiation of any vegetation removal, grading, or any other ground-disturbing activities, a qualified biologist will conduct mandatory worker awareness training for all construction personnel. The awareness training will provide information on how to avoid impacts to biological resources, particularly

special-status species. The training will also inform workers of the penalties for not complying with mitigation requirements. If new construction personnel are subsequently added to the project, they too will receive the training.

- Prior to any ground-disturbing activities associated with the project, Caltrans will install 4-foot-tall temporary, plastic mesh construction fence (Environmentally Sensitive Area “ESA” fence) 20 feet, where possible, from the driplines of elderberry shrubs that are not to be removed. The fencing is intended to prevent encroachment by construction vehicles and personnel. The exact location of the fencing will be determined by a qualified biologist, with the goal of protecting VELB habitat. The fencing will be strung tightly on posts set at a maximum interval of ten feet. The fencing will be installed in a way that prevents equipment from enlarging the work area beyond what is necessary to complete the work. The fencing will be checked and maintained weekly until all construction is completed.
- A sign will mark this buffer zone and state the following ‘This is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines and imprisonment’. The fencing and a note reflecting this condition will be shown on the construction plans. Signs will be legible from a distance of 20 ft and must be maintained for the duration of construction.
- Prior to any ground disturbances, Caltrans would ensure that all elderberry shrubs with one or more stems measuring one-inch or more in diameter that cannot be avoided during construction will be transplanted to a conservation area in accordance with Conservation Guidelines for Valley Elderberry Longhorn Beetle (USFWS 1999).
- Dust control measures will be implemented for all ground-disturbing activities in the project area. These measures may include application of water to graded and disturbed areas that are unvegetated. To avoid attracting Argentine ants, at no time will water be sprayed within the driplines of elderberry shrubs.

### CRLF

The measures below will be applied to minimize potential for impacts to the CRLF.

- Environmental awareness training will be conducted prior to the onset of project work for construction personnel to brief them on how to recognize red-legged frogs. Construction personnel should also be informed that if a red-legged frog is encountered in the work area, construction should stop and the Service should be contacted for guidance.
- Within 24 hours prior to the onset of vegetation removal, a Service-approved biologist will survey the project area for red-legged frogs.
- The project proponent will submit the name and credentials of the project’s biologist(s) to the Service for review and approval at least 15 days prior to the onset of construction activities.
- Staging areas as well as fueling and maintenance activities will be a minimum of 100 feet away from riparian or aquatic habitats. The project proponent will prepare a spill prevention and clean-up plan.
- The project will administer Best Management Practices to protect water quality and control erosion.

**Compensatory Mitigation**

The measure below would be applied to mitigate impacts to the VELB:

- The compensation proposed for the loss of VELB habitat follows the mitigation criteria outlined in the VELB programmatic agreement with the U.S. Fish and Wildlife Service. Caltrans would purchase credits sufficient to compensate for impacts to the one elderberry shrub which has 82 stems. Credits are purchased via VELB “units” from an approved conservation bank. Each VELB mitigation credit/unit translates to 10 elderberry seedlings and 10 associated species plantings. Therefore, 11 VELB units from a bank would compensate for 107 seedlings and associated species. See the table for mitigation ratios.

Compensatory Mitigation to Offset Project Impacts to Suitable VELB habitat

Location	Stem diameter	Number of Stems Impacted	Exit Holes Present on Shrub (Y/N)	Elderberry Seedling Ratio	Elderberry Seedling Plantings	Associated Native Plant Ratio	Associated Native Plantings
Non-	1"-3"	65	No	1:1	65	1:1	65
		-	Yes	2:1	-	2:1	-

Location	Stem diameter	Number of Stems Impacted	Exit Holes Present on Shrub (Y/N)	Elderberry Seedling Ratio	Elderberry Seedling Plantings	Associated Native Plant Ratio	Associated Native Plantings
Riparian	3"-5"	9	No	2:1	18	1:1	9
		-	Yes	4:1	-	2:1	-
	> 5"	8	No	3:1	24	1:1	8
		-	Yes	6:1	-	2:1	-
Riparian	1"-3"	-	No	2:1	-	1:1	-
		-	Yes	4:1	-	2:1	-
	3"-5"	-	No	3:1	-	1:1	-
		-	Yes	6:1	-	2:1	-
	> 5"	-	No	4:1	-	1:1	-
		-	Yes	8:1	-	2:1	-
Total Elderberry and Associated Plant Species Plantings Needed toward Conservation of the VELB					<b>107</b>		<b>82</b>

## 1.7.6 Invasive Species

### Regulatory Setting

On February 3, 1999, President Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration guidance issued August 10, 1999 directs the use of the state's noxious weed list to define the invasive plants that must be considered as part of the NEPA analysis for a proposed project.

### Affected Environment

A Natural Environment Study was completed in June 2011 by qualified Caltrans biology staff. The project area has been highly disturbed over time, resulting from urban development and roadway construction, and as a result many of the nearby project areas contain non-native species. Currently one of the natural communities occurring in the project area is the non-native grassland. For non-native grassland as a whole, approximately 4.78 acres will be permanently impacted and approximately 3.66 acres will be temporarily impacted.

## **Environmental Consequences**

None of the species on the California list of noxious weeds are currently used by the Department for erosion control or landscaping. All erosion control and revegetation species will be native to the area.

## **Avoidance, Minimization, and/or Mitigation Measures**

In compliance with the Executive Order on Invasive Species, E.O. 13112, and subsequent guidance from the Federal Highway Administration, the landscaping and erosion control included in the project will not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur. Measures to minimize the risk of introducing additional non-native species are as follows:

- Weed Free Construction Equipment: All off-road construction equipment will be cleaned of potential noxious weed sources (mud, vegetation) before entry the project area and after entering a potentially infested area before moving on to another area, to help ensure noxious weeds from outside of the project area are not introduced into the project area. The contractor will employ whatever cleaning methods (typically, use of a high-pressure water hose) are necessary to ensure that equipment is free of noxious weeds. Equipment will be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required. Equipment washing stations will be placed in areas that afford easy containment and monitoring (preferably outside of the project area) and that do not drain into the forest or sensitive (riparian, wetland, etc.) areas.
- Weed Free Erosion Control Treatments: To further minimize the risk of introducing additional non-native species into the area, only native plant species appropriate for the project area will be used in any erosion control or revegetation seed mix or stock. No dry-farmed straw will be used, and certified weed-free straw will be required where erosion control straw is to be used. In addition, any hydro-seed mulch used for revegetation activities must also be certified weed-free.

- Equipment Staging in Weed Free Areas: To avoid spreading known weed infestations into other areas of the project, known noxious weed sites infestations within or adjacent to the project area will be isolated and avoided to prevent spreading weeds within the project. Areas of known noxious weed infestations will be indicated in project plans and specifications, and in the field with the use of temporary orange fencing. The staging or operation of equipment within these isolated areas will be prohibited. Smaller infestations of noxious weeds within the project area will be eradicated if feasible.

## **1.8 Construction Impacts**

During construction of the project, most of the overcrossing's will be closed for approximately 10-20 days at a time. Detours will be provided for bridges that will be closed. If one bridge is closed, the next adjacent bridge will be open and accessible. The following minimization measures will be implemented to guide traffic through construction of the project:

- Detour plans will be provided for any full closures, which include bridge and ramp closures.
- Caltrans will develop a Public Involvement Plan for public communication and outreach. The plan will include coordination with local agencies, public meetings and events, outreach at schools, and various meetings with stakeholders.
- Caltrans media communication about the traffic and detour information may involve television and radio service announcement, newspaper articles, social networks like twitter and facebook, [www.getaccross80.com](http://www.getaccross80.com), temporary changeable message signs, and other outlets as necessary. Some of these outlets will be able to display closure information as soon as it's available so people will be informed about the construction closures and detours at the tips of their fingers.
- Staging and storage of equipment will take place in some of the various interchange loops locations associated with the project.
- Noise generated during construction will be contained given the contractor conforms to the provisions of Caltrans Standard Specifications, Section 7-1.01, Sound Control Requirements. This section requires the contractor to comply

with all local sound noise control and noise level rules, regulations, and ordinances; this includes using mufflers on each internal combustion engine.

## **DETOURS**

### **Brace Road OC**

#### Long-Term 10-20 Day Closure for Local Traffic

- Length of Detour: approximately 3.3 miles
- From Brace Road, take Sierra College Blvd. north to Taylor Road. Take Taylor Road northeast towards Horseshoe Bar Rd. The take Horseshoe Bar southeast towards Brace Road.

#### Short-Term Closures (2 Nights) for I-80 Traffic

- Length of Detour: approximately 2.5 miles
- 2 night closure for westbound I-80 and eastbound I-80 traffic

### **Horseshoe Bar OC**

#### Long-Term 10-20 Day Closure for Local Traffic

- Length of Detour: approximately 3.3 miles
- From Horseshoe Bar Road take Taylor Rd. southwest towards Sierra College Blvd. Take Sierra College Blvd. south towards Brace Rd. Take Brace Rd. west towards Horseshoe Bar Rd.

#### Short Term Closures (2 Nights) for I-80 Traffic

- Length of Detour: approximately 5.1 miles
- 2 night closure for eastbound and westbound I-80 traffic

### **King Road OC**

#### Long Term 10-20 Day Closure for Local Traffic

- Length of Detour: approximately 4.4 miles
- From King Road take Taylor Road northeast towards Penryn Road. Take Penryn Rd. south towards King Road.

#### Short Term Closures (2 Nights) for I-80 Traffic

- Length of Detour: approximately 4 miles
- 2 night closure for eastbound and westbound I-80 traffic

### **Penryn Road OC**

#### Long-Term 10-20 Day Closure for Local Traffic

- Length of Detour: approximately 4.4 miles

- From Penryn Rd. take Taylor Rd. southwest towards King Rd. Take King Rd, east towards Penryn Rd.

Short Term Closures (2 Night) for I-80 Traffic

- Length of Detour for Eastbound I-80 Traffic: approximately 6 miles
- Length of Detour for Westbound I-80 Traffic: approximately 3.4 miles

Gilardi Road OC

Long-Term 10-20 Day Closure for Local Traffic

- Length of Detour: approximately 6 miles
- From Gilardi Rd. take Rock Springs Rd. northwest towards Taylor Rd. Take Taylor Rd. northwest towards Old State Highway. Then take Old State Hwy east towards Newcastle Rd. Then take Newcastle Rd. east and then south towards to Gilardi Rd.

Short Term Closures (2 Nights) for I-80 Traffic

- Length of Detour for Eastbound I-80 Traffic: approximately 4.4 miles
- Length of Detour for Westbound I-80 Traffic: approximately 4.1 miles

Newcastle Road OC

Long Term 10-20 Day Closure

- Length of Detour: approximately 6.5 miles
- From Newcastle Rd. take Old State Hwy west towards Taylor Rd. Take Taylor Rd. southwest towards Rock Springs Rd. Take Rock Springs Rd. southeast towards Gilardi Rd. Take Gilardi Rd. east towards Newcastle Rd.

Short Term Closures (2 Nights)

- Length of Detour for Eastbound I-80 Traffic: approximately 4.8
- Length of Detour for Westbound I-80 Traffic: short. WB I-80 traffic will be detoured via the Newcastle Rd. off-ramp and onramp.

**1.9 Climate Change (CEQA)**

**Regulatory Setting**

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization’s Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity that include carbon dioxide (CO<sub>2</sub>), methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride,

HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with greenhouse gas emissions and climate change at the state level. Assembly Bill 1493 requires the California Air Resources Board (CARB) to develop and implement regulations to reduce automobile and light truck greenhouse gas emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year; however, in order to enact the standards California needed a waiver from the U.S. Environmental Protection Agency (EPA). The waiver was denied by Environmental Protection Agency in December 2007 and efforts to overturn the decision had been unsuccessful. See *California v. Environmental Protection Agency*, 9th Cir. Jul. 25, 2008, No. 08-70011. On January 26, 2009, it was announced that EPA would reconsider their decision regarding the denial of California's waiver. On May 18, 2009, President Obama announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks which will take effect in 2012. On June 30, 2009 EPA granted California the waiver. California is expected to enforce its standards for 2009 to 2011 and then look to the federal government to implement equivalent standards for 2012 to 2016. The granting of the waiver will also allow California to implement even stronger standards in the future. The state is expected to start developing new standards for the post-2016 model years later this year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases. " Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. California, in conjunction with several environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency (EPA) to regulate GHG as a pollutant under the Clean Air Act (*Massachusetts vs. Environmental Protection Agency et al.*, 549 U.S. 497 (2007)). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.

On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>)--in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009.<sup>1</sup>

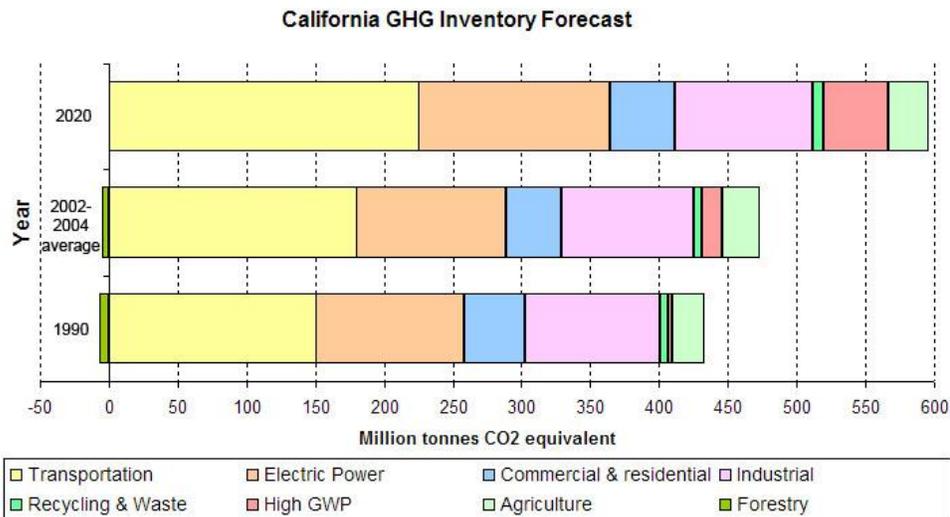
According to *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a

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<sup>1</sup> <http://www.epa.gov/climatechange/endangerment.html>

cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(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 in order to make this determination is a difficult if not impossible task.

As part of its supporting documentation for the Draft Scoping Plan, CARB recently released an updated version of the GHG inventory for California (June 26, 2008). Shown below is a graph from that update that shows the total GHG emissions for California for 1990, 2002-2004 average, and 2020 projected if no action is taken.



**FIGURE ## CALIFORNIA GREENHOUSE GAS INVENTORY**

Taken from : <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation (see Climate Action Program at Caltrans (December 2006), Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in

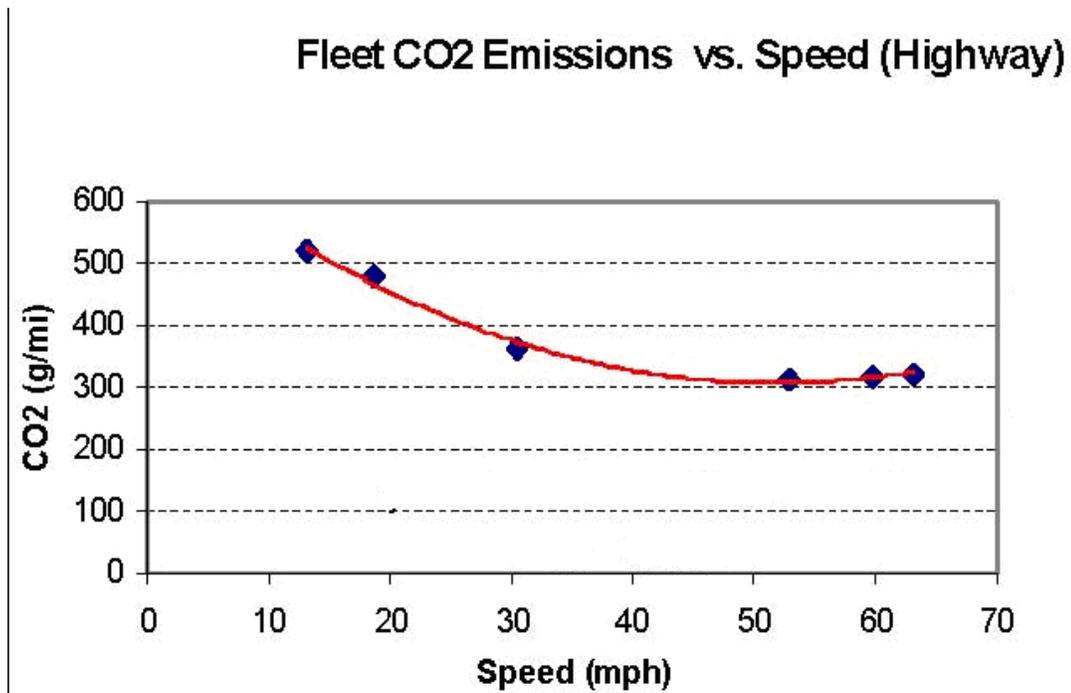
December 2006. This document can be found at:

<http://www.dot.ca.gov/docs/ClimateReport.pdf>

## Project Analysis

This project, proposes to increase the vertical clearance height of nine bridges on Interstate 80 in Placer County to enable permit vehicles to pass through the interstate corridor safely. Because the project would not increase capacity nor vehicle hours travelled, no increase in operational GHG emissions are anticipated. There will likely be long-term GHG benefits by improved operation and smoother pavement surfaces after completion of the project.

One of the main strategies in the Department's Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 mph; the most severe emissions occur from 0-25 miles per hour (see Figure below). To the extent that a project relieves congestion by enhancing operations and improving travel times in high congestion travel corridors GHG emissions, particularly CO<sub>2</sub>, may be reduced.



Source: Center for Clean Air Policy— [http://www.ccap.org/Presentations/Winkelman%20TRB%202004%20\(1-13-04\).pdf](http://www.ccap.org/Presentations/Winkelman%20TRB%202004%20(1-13-04).pdf)

## CEQA Conclusion

While construction will result in a slight increase of 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 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.

### **Construction Emissions**

GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from 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 better 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 mitigated to some degree by longer intervals between maintenance and rehabilitation events.

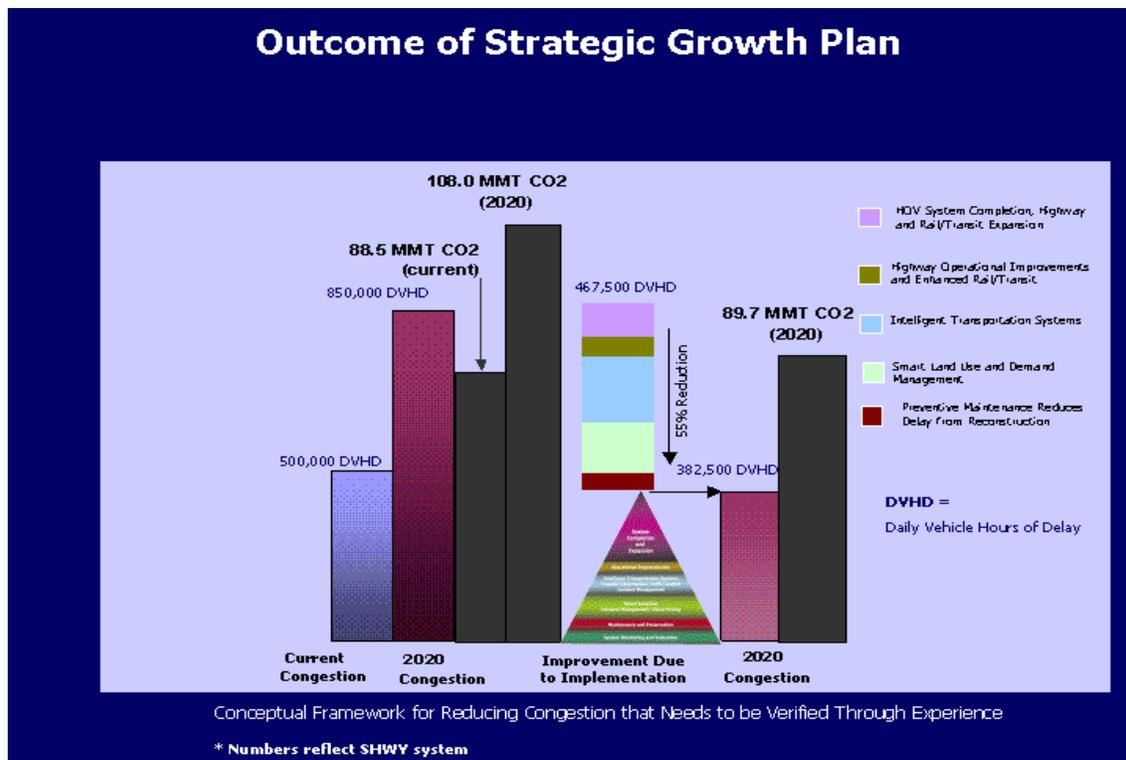
### **AB 32 Compliance**

Caltrans continues to be actively involved on the Governor's Climate Action Team as CARB works to implement the Governor's Executive Orders and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a \$238.6 billion infrastructure improvement program to fortify the state's transportation system, education, housing, and waterways, including \$100.7 billion in transportation funding through 2016.<sup>2</sup> As shown on the figure below, the Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding reduction in GHG emissions. The Strategic Growth Plan proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together yield the promised reduction in congestion. The Strategic Growth Plan relies on a complete systems

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<sup>2</sup> Governor's Strategic Growth Plan, Fig. 1 (<http://gov.ca.gov/pdf/gov/CSGP.pdf>)

approach of a variety of strategies: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements.



**Figure 3-2 Outcome of Strategic Growth Plan**

As part of the Climate Action Program at Caltrans (December 2006, <http://www.dot.ca.gov/docs/ClimateReport.pdf>), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; Caltrans is doing this by supporting on-going research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note, however, that the control of the fuel economy standards is held by EPA and CARB. Lastly, the use of alternative fuels is also being considered; the Department is participating in funding for alternative fuel research at the UC Davis.

Table A summarizes the Department and statewide efforts that Caltrans is implementing in order to reduce GHG emissions. For more detailed information about each strategy, please see Climate Action Program at Caltrans (December 2006); it is available at <http://www.dot.ca.gov/docs/ClimateReport.pdf>

**Table A - Climate Change Strategies**

Strategy	Program	Partnership		Method/Process	Estimated CO <sub>2</sub> Savings (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local Governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Trans. System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	.007	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, CARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	0.0045	0.0065 0.45 .0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5 % limestone cement mix 25% fly ash cement mix > 50% fly ash/slag mix	1.2 .36	3.6
Goods Movement	Office of Goods Movement	Cal EPA, CARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.67

## Minimization Measures

To the extent that it is applicable or feasible for the project and through coordination with the project development team, the following measures will also be included in the project to reduce the GHG emissions and potential climate change impacts from the project:

- Landscaping reduces surface warming, and through photosynthesis, decreases CO<sub>2</sub>. The project proposes planting in intersection slopes, drainage channels, and seeding in areas which have disturbed soil as a result of construction. The plants will consist of a variety of different-sized plant material both noninvasive and native plants. The replanting of oak trees will also be necessary to minimize affects associated with removing some oaks. There a few buffer areas which need tree replacement as to not significantly alter their obstructed view from the interstate. Caltrans has committed to planting a minimum of 862 seedling trees. These trees will help offset any potential CO<sub>2</sub> emissions increase. Based on a formula from the Canadian Tree Foundation<sup>3</sup>, it is anticipated that the planted trees will offset between 7-10 tons of CO<sub>2</sub> per year.

## 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. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damaging roadbeds by 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. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

Climate change adaption must also involve the natural environment as well. Efforts are underway on a statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

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<sup>3</sup> Canadian Tree Foundation at [http://www.tcf-fca.ca/publications/pdf/english\\_reduceco2.pdf](http://www.tcf-fca.ca/publications/pdf/english_reduceco2.pdf). For rural areas the formula is: # of trees/360 x survival rate = tones of carbon/year removed for each of 80 years.

On November 14, 2008, Governor Schwarzenegger signed Executive Order S-13-08 which directed a number of state agencies to address California's vulnerability to sea level rise caused by climate change.

The California Resources Agency (now the Natural Resources Agency, (Resources Agency)), through the interagency Climate Action Team, was directed to coordinate with local, regional, state and federal public and private entities to develop a state Climate Adaptation Strategy. The Climate Adaptation Strategy will summarize the best known science on climate change impacts to California, assess California's vulnerability to the identified impacts and then outline solutions that can be implemented within and across state agencies to promote resiliency.

As part of its development of the Climate Adaptation Strategy, Resources Agency was directed to request the National Academy of Science to prepare a *Sea Level Rise Assessment Report* by December 2010 to advise how California should plan for future sea level rise. The report is to include:

- relative sea level rise projections for California, taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge and land subsidence rates;
- the range of uncertainty in selected sea level rise projections;
- a synthesis of existing information on projected sea level rise impacts to state infrastructure (such as roads, public facilities and beaches), natural areas, and coastal and marine ecosystems;
- a discussion of future research needs regarding sea level rise for California.

Furthermore Executive Order S-13-08 directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level affecting safety, maintenance and operational improvements of the system and economy of the state. The Department continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

Prior to the release of the final Sea Level Rise Assessment Report, all state agencies that are planning to construct projects in areas vulnerable to future sea level rise were directed to consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. However, all projects that have filed a Notice of Preparation,

and/or are programmed for construction funding the next five years (through 2013), or are routine maintenance projects as of the date of Executive Order S-13-08 may, but are not required to, consider these planning guidelines. Sea level rise estimates should also be used in conjunction with information regarding local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data. (Executive Order S-13-08 allows some exceptions to this planning requirement.) The project was programmed for construction in 2014, therefore exempt from the Sea Level Rise analysis.

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. The Department is an active participant in the efforts being conducted as part of Governor's Schwarzenegger's Executive Order on Sea Level Rise and is mobilizing to be able to respond to the National Academy of Science report on *Sea Level Rise Assessment* which is due to be released by December 2010. Currently, the Department is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change impacts, the Department has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, the Department will be able review its current design standards to determine what changes, if any, may be warranted in order to protect the transportation system from sea level rise.

## Chapter 3 – Comments and Coordination

Early and continuing coordination with the general public and appropriate 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 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 meetings, interagency coordination meetings, three public open house informational meetings, and other focus meetings as appropriate. Three open house public meetings took place on the following days and locations: March 17, 2010 in Colfax, March 24, 2010 in Newcastle, and March 30, 2010 in Loomis. Caltrans received several comments from the public. This chapter summarizes the results of the Department's efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

Some ideas that were discussed at the public meetings and in some of the scoping meetings were considered but ultimately are not within the scope or cost estimate of the proposed project. These include ideas such as additional landscaped plantings in addition to the oak tree replacement, a gateway monument (GM) at one or more locations, and/or additional aesthetic treatments to the bridge railing such as a metal silhouettes depicting an item of importance to the area (e.g. an equestrian or fruit shed theme). These ideas were considered but are outside the project's scope and budget and will not be included in the Vertical Clearance Project.

However the Department could participate in further discussion with local entities on proposals for future projects such as gateway monuments or additional landscaping. It is possible that some pre-planting could occur during the final stages of the Vertical Clearance project so that grading at the end of construction, and/or placement of the tree plantings could be done in a manner that would facilitate future projects. Local projects that are proposed within the State highway right of way must follow the Department's Encroachment Permit process.

The Initial Study with Proposed Negative Declaration would be made available for public and agency review and comment for 30 days. Caltrans has ensured that the document would be made available to all appropriate parties and agencies, including the following: 1) Responsible agencies, 2) Trustee agencies that have resources affected by the project, 3) other state, federal and local agencies which have regulatory jurisdiction, or that exercise

authority over resources which may be affected by the project, 4) the general public. Copies of the document would be made available at the Caltrans District 3 Office of Environmental Management located at 703 B Street, Marysville, CA 95901 and via the internet at <http://www.dot.ca.gov/dist3/departments/envinternet/envdoc.htm>, under "Placer County". The document can also be found at the following Placer County Library locations: Auburn Library, 350 Nevada Street, Auburn CA 95603; Colfax Library, 2 W. Church Street, Colfax CA 95713; Loomis Library, 6050 Library Drive, Loomis CA 95650; Penryn Library, 2205 Rippey Road, Penryn CA 95663.

## Chapter 4 – List of Preparers

**Maggie Ritter**, Associate Environmental Planner; Contribution: Environmental Document Preparer and Environmental Document Coordinator

**Suzanne Melim**, Senior Environmental Planner; Contribution: Environmental Branch Chief

**Rodolfo Avila**, Transportation Engineer (Civil); Contribution: Project Engineer for Project and preparer of Project Report, etc.

**Marsha Freese, James Williamson, and Kathleen Grady**, Associate Landscape Architects; Contribution: Visual Impact Assessment

**Gary Grunder**, Associate Environmental Planner (Natural Sciences); Contribution: Natural Environment Study (NES)

**Kevin Evarts**, Transportation Engineer and National Pollutants Discharge Elimination System (NPDES) Storm Water Coordinator; Contribution: Water Quality Assessment

**Benjamin Tam**, Transportation Engineer (Noise); Contribution: Environmental Assessment for Noise

**Sharon Tang**, Transportation Engineer (Air Quality); Contribution: Air Quality Evaluation

**Jim Phillip**, Hydraulic Engineer; Contribution: Floodplain Hydraulic Study

**Jason Lee**, Transportation Engineer (Hazardous Waste/Materials); Contribution: Initial Site Assessment

# APPENDICES

## Appendix A. CEQA Checklist

Supporting documentation of all CEQA checklist determinations is provided in Chapter 2 of this Initial Study. Documentation of “No Impact” determinations is provided at the beginning of Chapter 2. Discussion of all impacts, avoidance, minimization, and/or compensation measures under the appropriate topic headings in Chapter 2.

### CEQA Environmental Checklist

<b>03-PLA-80</b>	<b>8.1/37.8</b>	<b>3E100</b>
Dist.-Co.-Rte.	P.M/P.M.	E.A.

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 indicate no impacts. A “No Impact” answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. 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.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS:</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

**“Less than significant impact” determination in this section is based on the Visual Impact Assessment, May 2010.**

**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"/> |
| 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"/> |
|  | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact                           |
| 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"/> |

***"No Impact" determinations in this section are based on various field reviews and the nature of the project areas surroundings.***

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
|  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <b>III. AIR QUALITY:</b> 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 type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

***"No Impact" determinations in this section are based on the Air Quality Evaluation, August 2009.***

**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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| 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?   | <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) 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<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"/>

***“Less than significant impact with mitigation” determinations in this section are based on the Natural Environmental Study (NES), June 2011.***

**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"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

***“No Impact” determinations in this section are based on the Historic Property Survey Report (HPSR), September 2009.***

**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"/>
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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>

***"No Impact" determinations in this section are based on information provided by the Project Engineer, February 2011.***

**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?

An assessment of the greenhouse gas emissions and climate change is included in the body of environmental document. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, 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 and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the body of the environmental document.

**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?
- 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?
- 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"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<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"/>

***"No Impact" determinations in this section are based on the Initial Site Assessment, August 2007.***

**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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" 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"/>

***"No Impact" determinations in this section are based on the Water Quality Assessment, July 2010.***

**X. LAND USE AND PLANNING:** Would the project:

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>

***"Less than significant impact" determinations in this section are based on the area and nature of the project and information provided by the engineer, February 2011. Bridge closure impacts will be temporary as the closures will take place during construction.***

**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"/>

***"No Impact" determinations in this section are based on the area and nature of the project and information provided by the engineer, February 2011.***

**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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 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 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"/>
) 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"/>

***"No Impact" determinations in this section are based on the Noise Assessment, March 2010.***

**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"/>
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"/>

***"No Impact" determinations in this section are based on the area and nature of the project. During construction detours will be provided for temporary bridge closures.***

**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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>

***"Less than significant impact" determinations in this section are based on the area and nature of the project and the July 2010 Traffic Management Plan. Impacts during construction will be temporary and detours will be provided for all temporary bridge closures.***

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
--------------------------------------	--	------------------------------------	--------------

**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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

***“No Impact” determinations in this section are based on the area and nature of the project. Impacts during construction will be temporary and detours will be provided for all temporary bridge closures.***

**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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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 checked="" type="checkbox"/> | <input 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"/> |

***“Less than significant impact” determinations in this section are based on the area and nature of the project. Impacts during construction will be temporary and detours will be provided for all temporary bridge closures.***

**XVII. 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"/> |
| 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"/> |

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>
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"/>
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"/>
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"/>
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"/>

***"No Impact" determinations in this section are based on the area and nature of the project.***

**XVIII. 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"/>

***"No Impact" determinations in this section are based on the area and nature of the project. Impacts during construction will be temporary and detours will be provided for all temporary bridge closures.***

## **Appendix B. Title VI Policy Statement**

**DEPARTMENT OF TRANSPORTATION**  
OFFICE OF THE DIRECTOR  
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SACRAMENTO, CA 94273-0001  
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*Flex your power!  
Be energy efficient!*

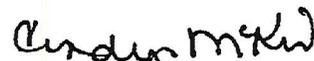
July 20, 2010

## TITLE VI POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, or age, please visit the following web page:  
[http://www.dot.ca.gov/hq/bep/title\\_vi/t6\\_violated.htm](http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm).

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact Charles Wahnnon, Manager, Title VI and Americans with Disabilities Act Program, California Department of Transportation, 1823 14<sup>th</sup> Street, MS-79, Sacramento, CA 95811. Phone: (916) 324-1353 or toll free 1-866-810-6346 (voice), TTY 711, fax (916) 324-1869, or via email: [charles\\_wahnnon@dot.ca.gov](mailto:charles_wahnnon@dot.ca.gov).

  
CINDY MCKIM  
Director

## **Appendix C. Minimization and/or Mitigation Summary**

### **Avoidance / Minimization Measures:**

#### **Traffic Transportation/Pedestrian and Bicycle Facilities**

- On I-80, lane closures will be restricted to off-peak and nighttime hours. Off-peak hours are usually 10am-3pm and 7pm-6am. The maximum length of any lane closure shall be limited to one mile.
- During ramp closures, traffic will be detoured in accordance with detour traffic handling plans prepared in accordance with Traffic Operations. Detour routes are also checked to ensure they meet Highway Design Manual requirements, such as truck turning radii and vertical/horizontal clearances. Detours are required to be in place before construction.
- Detour plans will be provided for any full closures, which include bridge and ramp closures. The proposed detour plans, shown in more detail, are in the “Construction Impacts” section on page 51.
- Access to cross streets and driveways will be maintained during construction. Additional signs and striping will be required to direct bicycle traffic when bikeways are closed for construction work.
- Caltrans will develop a Public Involvement Plan for public communication and outreach. The plan will include coordination with local agencies, public meetings and events, outreach at schools, and various meetings with stakeholders.
- Caltrans media communication about the traffic and detour information may involve a combination of television and radio service announcements, newspaper articles, social networks like twitter and facebook, updates on the website [www.getacross80.com](http://www.getacross80.com), temporary changeable message signs, and other outlets as necessary. Some of these outlets will display closure information as soon as it’s available so people will be informed about the construction closures and detours.
- Information regarding the scheduled bridge closures will be available to the public in adequate time and format(s). As a result of project completion, the bridges would be ADA compliant, providing more fluid pedestrian and bicycle pathways.
- A Traffic Management Plan (TMP) Data Sheet was completed for this project in July 2010. The TMP summarizes the bridge, lane, and ramp closure requirements, traffic

handling practices and/or other traffic managing strategies which will be implemented during construction.

- Because of Loomis Fire Department's concerns regarding the potential for longer fire emergency response times during construction, the project will temporarily fund 2-3 personnel positions, for approximately 12 days, in order to keep a small fire substation in operation while Horseshoe Bar Road is closed during construction. Currently the substation is unmanned and has been unmanned for some time as the primary fire station is located on the north side of the interstate and is operational. The fire substation is located south of I-80 right off Horseshoe Bar Road near Tudsberry Road.

### **Visual Impacts and Aesthetics**

#### *Visual Buffer Replaced*

- Trees removed from the northwest quadrant of the Brace Road Interchange shall be replaced at the edge of the new slope to provide a visual buffer for the existing homes in the area.
- Trees removed from the northeast quadrant of the Brace Road Interchange shall be replaced to provide a visual buffer for the existing single family home.
- Trees removed from the northwest quadrant of the King Road Interchange shall be replaced at the edge of the new slope to provide a visual buffer for the existing home in the area.
- Trees removed from the southwest quadrant of Newcastle Road Interchange shall be replaced at the edge of the new slope to provide a visual buffer for the existing homes and apartments.
- Trees and shrubs should be planted within the southwest quadrant of the interchange at Newcastle Road OC. This will provide a screen of vegetation for the homes and apartments in the area.

#### *Bridge Railings*

- Designs for bridge railings and fences shall be compatible with some of the existing structures already in place to create unity throughout the I-80 corridor. Examples include the Weimar Bridge or more commonly known as West Paoli Lane (stained dry rock concrete texture) or the Sierra College Boulevard (granite block texture)

schemes. Both the bridge railings and attached fences would be replaced with aesthetically pleasing ones.

#### *Revegetation, Oak Trees, and Erosion Control Measures*

- Tree removal will be reduced as much as possible. This could be accomplished by shortening the length and edge of slopes, and/or providing tree wells. The noteworthy trees that cannot be saved because they are within the construction zone of the bridge structure(s) or the cut and fill areas will need to be replaced during the planting phase of the highway construction project. Special consideration will be given to oak tree replacement which will include a variety of oak species, such as blue, black, and valley oak.
- At the end of construction, all areas used for staging, access or other construction activities shall be contour graded and hydro-seeded with a native seed mix. Once the native seeds germinate, the disturbed area will begin to blend into the natural landscape.
- During the design phase of the project the landscape architect will determine where planting material should be utilized to provide screening for appropriate sites (such as residential and commercial areas, and objectionable views).

#### *Best Management Practices*

- Only native plant species, appropriate for the project area will be used in all erosion control, vegetation seed mix, and/or stock.
- Dry farmed straw will not be used on this project. Instead certified weed free mulch will be used for erosion control measures and, hydro-seed mulch used for vegetation activities shall be certified weed-free.
- Cut and fill slopes should be contour graded and rounded so as to reflect the contours of adjacent undisturbed topography, to the best extent feasible. Grading operations should not result in angular landforms but shall be smooth and flowing.
- During the clearing and grubbing operations the contractor will stockpile existing surface soils and duff from the construction site, as part of the excavation work. All new cut and fill slopes shall be resurfaced with stockpiled material to enhance re-vegetation efforts and provide erosion control.

- Erosion control in the form of hydro-seed shall be applied to all disturbed areas. The seed mix used in the hydro-seed will consist of a native grasses and legumes that are indigenous to the area.
- Projects disturbing at least one acre of land require a National Pollution Discharge Elimination System (NPDES) permit. This permit regulates all storm water discharges associated with construction activities. These regulations also protect biological resources as well as set the ground work for re-vegetation and erosion control activities. Storm Water Management Plan and Storm Water Quality standards must also be implemented.

### **Water Quality and Storm Water Runoff**

- Since the project involves more than one acre of Disturbed Soil Area (DSA), adherence to the compliance requirements of the NPDES General Permit CAS No. 000002 (Order No. 2009-0009-DWQ) for General Construction Activities is required.
- A Caltrans approved SWPPP will be required to address temporary pollution control measures for the project during construction. These measures must address soil stabilization, sediment control, tracking control and wind erosion control practices. In addition, the project plans must include non-storm water controls, waste management and material pollution controls, as a minimum. Line Item, Temporary Construction Site BMPs, may be required and incorporated into the PS&E.
- Consideration should be given to include SSP 07-346 (Construction Site Management) during PS&E to control potential sources of water pollution before it encounters any storm water system or watercourse. This requires the Contractor to control material pollution, manage waste and non-storm water at the construction site. The SWPPP also incorporates appropriate Construction Site BMPs to implement effective handling, storage, use and disposal practices during construction activities.
- The project is within the jurisdiction of the Central Valley Regional Water Quality Control Board (CVWQCB). Early project design consultation with CVRWQCB is required.

### **Hazardous Materials**

- A Preliminary Site Investigation (PSI) of the bridges will need to be required to provide further detail about the PACMs. Because of the potential NOA in the area, an

asbestos compliance plan will be required. A dust control plan for any Temporary Construction Easements (TCE) will be required as well. As with all projects a Lead Compliance Plan (LCP) will also be required.

### **Natural Communities**

- In order to avoid potential impacts to the natural communities, the removal of native vegetation will be confined to the minimal area necessary to facilitate construction activities. All disturbed soil areas will be restored to their original condition, as nearly as possible.
- In light of the local oak tree preservation ordinance trees would be saved, where practical, by shortening of the length and toe of slopes or by providing tree wells. However, trees which are directly near the bridge structure, or are in an area where the fill material is very deep, will be removed during the clearing and grubbing operations. To compensate for the loss of impacts to native oak habitat, the area will be re-vegetated with native oaks and associated species.

### **Wetlands and Other Waters**

- Establish Environmentally Sensitive Areas (ESA): ESA provisions will be implemented as a first order of work and remain in place until all construction activities are complete. Additional direct and indirect impacts to sensitive biological resources, including jurisdictional waters, will be avoided or minimized by designating these features outside of the construction impact area as ESAs on project plans and in project specifications. Design personnel will coordinate with environmental personnel during the development of the project to determine the exact locations of proposed ESA areas. ESA information will be shown on contract plans and discussed in the Special Provisions. ESA provisions may include, but are not limited to, the use of temporary orange fencing to exclude work in areas adjacent to sensitive resources. Contractor encroachment into ESAs will be prohibited (including the staging/operation of heavy equipment or casting of excavation materials).
- Storm Water Pollution Prevention Plan (SWPPP): All construction projects with over 1 acre of Disturbed Soil Area (DSA) require a SWPPP to be prepared and implemented during construction. At this time, the project has a total of 21.2 acres of DSA. The SWPPP will be in compliance with the goals and restrictions identified in the Water Quality Control Board's Plan. The SWPPP will meet the standards and

objectives to minimize water pollution impacts set forth in section 7-1.01G of Caltrans Standard Specifications.

### **Plant Species**

- Removal of native vegetation shall be confined to the minimal area necessary to facilitate construction activities. Revegetation measures shall include erosion control containing native species familiar with the area and will be weed free certified with no invasive species.

### **Animal Species**

- No known active nests shall be disturbed prior to, during, and after project construction.
- Removal of native vegetation shall be confined to the minimal area necessary to facilitate construction activities.
- Vegetation removal on the project site shall occur outside the nesting season for migratory bird species in the project area; the nesting season is usually from February 15 to August 31, of any given year. Trees scheduled for removal should be removed between September 1 and February 14.
- However if woody vegetation removal, construction, structures work, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds, a focused survey for active bird nests of such birds will be conducted by a qualified biologist within 30 days prior to the beginning of project-related activities. If active bird nests are found, Caltrans will consult with USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and with CDFG to comply with provisions of the Fish and Game Code of California. If a lapse in project-related work of fifteen days or longer occurs, another survey and/or consultation with USFWS and CDFG will be required before work can be initiated.
- To avoid potential impacts to nesting swallows or roosting bats, exclusionary devices would be installed where feasible to prevent nesting or roosting on overcrossings at the bridge site. The installation of the exclusionary devices would occur during the fall or winter after the fledging and before the initiation of breeding activities. A biological monitor would periodically inspect the exclusionary devices to ensure its effectiveness.

- Nest removal is another method of preventing structure nesting/roosting species. CDFG considers February 15 to August 31 to be the swallow nesting season. Old nests or nests partially developed by the birds would be washed down with water or knocked down with a pole. Swallows are strongly attracted to old nests or the remnants of deteriorated nests, so all traces of mud would need to be removed. Because cliff swallows persistently rebuild nests for most of the breeding season, the nest removal method will require many consecutive days to prevent them from nesting using this method.

### **Threatened and Endangered Species**

#### *VELB*

- Before initiation of any vegetation removal, grading, or any other ground-disturbing activities, a qualified biologist will conduct mandatory worker awareness training for all construction personnel. The awareness training will provide information on how to avoid impacts to biological resources, particularly special-status species. The training will also inform workers of the penalties for not complying with mitigation requirements. If new construction personnel are subsequently added to the project, they too will receive the training.
- Prior to any ground-disturbing activities associated with the project, Caltrans will install 4-foot-tall temporary, plastic mesh construction fence (Environmentally Sensitive Area “ESA” fence) 20 feet, where possible, from the driplines of elderberry shrubs that are not to be removed. The fencing is intended to prevent encroachment by construction vehicles and personnel. The exact location of the fencing will be determined by a qualified biologist, with the goal of protecting VELB habitat. The fencing will be strung tightly on posts set at a maximum interval of ten feet. The fencing will be installed in a way that prevents equipment from enlarging the work area beyond what is necessary to complete the work. The fencing will be checked and maintained weekly until all construction is completed.
- A sign will mark this buffer zone and state the following ‘This is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines and imprisonment’. The fencing and a note reflecting this condition will be shown on the construction plans. Signs will be legible from a distance of 20 ft and must be maintained for the duration of construction.

- Prior to any ground disturbances, Caltrans would ensure that all elderberry shrubs with one or more stems measuring one-inch or more in diameter that cannot be avoided during construction will be transplanted to a conservation area in accordance with Conservation Guidelines for Valley Elderberry Longhorn Beetle (USFWS 1999).
- Dust control measures will be implemented for all ground-disturbing activities in the project area. These measures may include application of water to graded and disturbed areas that are unvegetated. To avoid attracting Argentine ants, at no time will water be sprayed within the driplines of elderberry shrubs.

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- Environmental awareness training will be conducted prior to the onset of project work for construction personnel to brief them on how to recognize red-legged frogs. Construction personnel should also be informed that if a red-legged frog is encountered in the work area, construction should stop and the Service should be contacted for guidance.
- Within 24 hours prior to the onset of vegetation removal, a Service-approved biologist will survey the project area for red-legged frogs.
- The project proponent will submit the name and credentials of the project's biologist(s) to the Service for review and approval at least 15 days prior to the onset of construction activities.
- Staging areas as well as fueling and maintenance activities will be a minimum of 100 feet away from riparian or aquatic habitats. The project proponent will prepare a spill prevention and clean-up plan.
- The project will administer Best Management Practices to protect water quality and control erosion.

### **Invasive Species**

- Weed Free Construction Equipment: All off-road construction equipment will be cleaned of potential noxious weed sources (mud, vegetation) before entry the project area and after entering a potentially infested area before moving on to another area, to help ensure noxious weeds from outside of the project area are not introduced into the project area. The contractor will employ whatever cleaning methods (typically, use of a high-pressure water hose) are necessary to ensure that equipment is free of

noxious weeds. Equipment will be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required. Equipment washing stations will be placed in areas that afford easy containment and monitoring (preferably outside of the project area) and that do not drain into the forest or sensitive (riparian, wetland, etc.) areas.

- Weed Free Erosion Control Treatments: To further minimize the risk of introducing additional non-native species into the area, only native plant species appropriate for the project area will be used in any erosion control or revegetation seed mix or stock. No dry-farmed straw will be used, and certified weed-free straw will be required where erosion control straw is to be used. In addition, any hydro-seed mulch used for revegetation activities must also be certified weed-free.
- Equipment Staging in Weed Free Areas: To avoid spreading known weed infestations into other areas of the project, known noxious weed sites infestations within or adjacent to the project area will be isolated and avoided to prevent spreading weeds within the project. Areas of known noxious weed infestations will be indicated in project plans and specifications, and in the field with the use of temporary orange fencing. The staging or operation of equipment within these isolated areas will be prohibited. Smaller infestations of noxious weeds within the project area will be eradicated if feasible.

### **Mitigation Measures**

The compensation proposed for the loss of VELB habitat follows the mitigation criteria outlined in the VELB programmatic agreement. Caltrans would purchase credits sufficient to compensate for impacts to the one elderberry shrub which has 82 stems. Credits are purchased via VELB “units” from an approved conservation bank. Each VELB mitigation credit/unit translates to 10 elderberry seedlings and 10 associated species plantings. Therefore, 11 VELB units from a bank would compensate for 107 seedlings and associated species. See Threatened and Endangered Species section for mitigation ratios.

## **Appendix D. List of Technical Studies**

Natural Environment Study (Biology, Caltrans 2011)

Initial Site Assessment (Hazardous Waste, Caltrans 2007)

Archaeological Evaluation (Cultural Resources, Caltrans 2011)

Water Quality Assessment (Storm Water Coordinator, Caltrans 2010)

Visual Impact Assessment (Landscape Architecture, Caltrans 2011)

Noise Assessment (Noise Study, Caltrans 2010)

Air Quality Assessment (Air Quality Study, Caltrans 2009)

Floodplain Hydraulic Study (Hydraulics/Floodplain Report, Caltrans 2010)