Interstate 80 Washout Project

Initial Study

Caltrans District 3-Placer-80-Kilometer Post 101.22 to 101.26

(Post Mile 62.89 to 62.92)

EA 0E0200

Prepared: March 2005

General Information About This Document

What's in this document?

This document is an Initial Study with the intent to adopt a Mitigated Negative Declaration, which examines the potential environmental impacts of alternatives for the proposed project located within Placer County, California. The document describes why the project is being proposed, the existing environment that could be affected by the project, and potential impacts from each of the alternatives.

What you should do?

- Please read this IS.
- We welcome your comments. If you have any concerns regarding the proposed project, please send your written comments to Caltrans by the deadline. Submit comments via regular mail to Caltrans, Attn: Jody Brown, Environmental Management, 2389 Gateway Oaks, Suite 100, Sacramento, CA 95833; submit comments via email to jody_brown@dot.ca.gov
- Submit comments by the deadline: **May 6, 2005**

What happens after this?

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

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk, as well as on the World Wide Web at *http://www.dot.ca.gov/dist3/departments/envinternet/envdoc.htm*. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Jody Brown, Environmental Management, 2389 Gateway Oaks, Suite 100, Sacramento, CA 95833; (916) 274-0566 Voice, or use the California Relay Service TTY number, (530) 741-4509.

Draft Negative Declaration

Interstate 80 Washout Project

State of California, Department of Transportation

State Clearinghouse # not yet assigned
03-PLA-80-KP 101.22/101.26 (PM 62.89/62.92)
Expenditure Authorization (EA) 0E0200

Prepared pursuant to the California Environmental Quality Act of 1970 (Division 13 of the Public Resources Code)

Project Description: The purpose of this project is to repair a failing embankment slope located between Kilometer Post (KP) 101.22 and 101.26 (Post Mile [PM] 62.89-62.92) on a section of westbound Interstate 80, roughly 150m (492ft) northeast of Bridge Number 19-124L, in Placer County California. The solution to the existing problem is to place 2 to 4 ton Rock Slope Protection (RSP) at a 1:1.25 slope. The RSP base would be at a 10-degree slope so that the new RSP would lie back into the roadway embankment to decrease the likelihood of falling rock into the river. The new section of RSP will be approximately 35m (115ft) long and will take approximately 2 to 3 weeks to construct.

Determination: An Initial Study (IS) has been prepared by Caltrans. It has been determined that the proposed project will not have a significant effect upon the environment, for the following reasons:

The project will not adversely affect FEMA designated floodplains; hazardous materials, sensitive plant/animal species, traffic or mineral resources. No change will occur in local and regional air quality, population, or planned land use. Seismic and soil related hazards will not increase, nor will the ambient noise in the region permanently increase. There are no designated historic architectural properties or other historical resources within the project limits.

The project may have short-term minimal effects upon scenic resources, water quality, and aquatic species; however, project impacts to these resources will be mitigated to a level of less than significant, as specified in the mitigation measures contained in the Initial Study.

_____ _____

John Webb
Chief, North Region Office of Environmental Services
California Department of Transportation

Date

Interstate 80 Washout Project
Initial Study
District 3 – Placer County

Post Mile (PM) 62.89/62.92 Kilometer Post (KP) 101.22/101.26
E.A. 0E0200

THE STATE OF CALIFORNIA
Department of Transportation (Caltrans)-District 3
Submitted Pursuant to (State) Division 13, Public Resources Code

28 March 2005
Date of Approval

John Webb, Chief
North Region Office of Environmental Services
California Department of Transportation

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List of Abbreviated Terms

ACOE	Army Corps of Engineers
Amsl	Above Mean Sea Level
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNPS	California Native Plant Society
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
KP	Kilometer post
m	Meter
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
OHWM	Ordinary High Water Mark
PM	Post mile
ROW	Caltrans Right of Way
RSP	Rock Slope Protection
SFYR	South Fork Yuba River
SHPO	State Historic Preservation Officer
USC	United States Code
USFWS	United States Fish and Wildlife Service

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) is proposing to correct a failing embankment slope on Interstate 80 (I-80) in Placer County from Kilometer Post (KP) 101.22 to KP 101.26 (Post Mile [PM] 62.89 to 62.92). This project is within the state funded Caltrans Minor program and is therefore subject to CEQA analysis.

1.1.1 Purpose

The purpose of this project is to impede the continuing embankment scour at the aforementioned location adjacent to the South Fork Yuba River (SFYR) and to repair the extent of the damage done to the embankment in order to preserve the integrity of I-80 in this location.

1.1.2 Need

Currently there is a failing embankment slope located on a section of westbound I-80, roughly 150m (492ft) northeast of Bridge Number 19-124L, in Placer County California (see photos in Appendix D). The subject embankment failure was first reported in early March 2003 when significant precipitation occurred that generated high flows in the adjacent SFYR. The high flows resulted in embankment scour, the steepening of the embankment slope, and the undermining of a light standard pole foundation. The light standard pole was subsequently removed from its footing (the light standard is not planned for replacement).

Figure 1: Project Vicinity Map

1.2 Alternatives

There is only one build alternative brought forward for discussion to meet the purpose and need for this project. An alternative to use a retaining wall was considered but later withdrawn for reasons discussed in section 1.2.3.

1.2.1 Build Alternative

The preferred solution to the existing problem is to place 2 to 4 ton Rock Slope Protection (RSP) at a 1:1.25 slope (see layout map in Appendix C). The RSP base would be at a 10-degree slope so that the new RSP would lie back into the roadway embankment to decrease the likelihood of falling rock into the river. The new section of RSP will be approximately 35m (115ft) long and will take approximately 2 to 3 weeks to construct. The construction of the project will take place in late July or early August since Pacific Gas and Electric (PG&E) releases water from their lakes above the project area to prepare for winter precipitation and snowfall. As a result, during September through to early October the flow rate of this segment of the South Fork Yuba River actually increases without significant rainfall.

The Caltrans Landscape Architecture branch has recommended that clean gravel be placed in the RSP near the water line so that willow bundles can take root and

establish themselves in the RSP. In addition, the backfill on top of the wire gabions will be topsoil that will be subsequently hydro-seeded for plant establishment.

The construction/placement of the RSP will take place from the existing I-80 shoulder area and top of the existing embankment behind temporary concrete railing

The construction contractor may use rock from his/her own quarry. However Caltrans proposes that they use an optional borrow site within the existing I-80 right-of-way. Large rock has been stockpiled within the median of I-80 near the Soda Springs interchange (see aerial photo in Appendix C). If this “Soda Rock” is used, it will be loaded and trucked down to project area. The area will then be graded and seeded for plant establishment.

In addition, the construction contractor may use a staging area of his/her choice: nevertheless Caltrans will suggest that they use an existing Caltrans maintenance property located on the southeast side of the Cisco Grove interchange for materials and storage of equipment (See aerial photo in Appendix C).

1.2.2 No-Build Alternative

The No-Build Alternative would not maintain the existing I-80 Freeway infrastructure. The embankment scour would continue to erode the soil and rock adjacent to I-80. Continuous erosion from even moderate or “normal” SFYR flow rates will undermine the roadway, potentially create the need for freeway or lane closures and pose a safety risk to the traveling public. In addition, prolonged periods of precipitation that create a higher than average SFYR flow rate could create the need for emergency work to take place along this segment of I-80. Performing emergency work solves the immediate problem, but generally requires additional or follow up projects to ensure that the integrity of the freeway remains permanently intact. This could potentially create a situation where work to stabilize the freeway may impact the SYR several times over a short period as opposed to the Preferred Alternative which is a permanent fix to the embankment scour.

1.2.3 Alternatives Considered and Withdrawn

A concrete retaining wall was also considered during the scoping phase of this project. The retaining wall would have been 35m (100ft) long and would have protected the roadway embankment from SFYR scouring. However this alternative was not chosen for several reasons:

1) The retaining wall would require excavation into the river in front of the wall.

2) There is a greater potential for material release into the river with the retaining wall option as a result of necessary borings, excavation and rebar placement.

3) It would be difficult and costly to place rebar and reinforcement for the retaining wall because the fill material is expected to contain extraordinarily large boulders and rock material.

4) The California Department of Fish and Game (CDFG) has requested the RSP alternative in order to maintain habitat for fish and wildlife.

1.3 Permits and Approvals Needed

Table 1: Permits and Approvals Needed

Agency	Permit/Approval	Status
United States Army Corps of Engineers	Section 404 Permit for filling or dredging waters of the United States.	Application for Section 404 Permit anticipated after final Environmental Document distribution.
Central Valley Regional Water Quality Control Board (CVRWQCB)	Section 401 Certification	Section 401 Certification applied for concurrently with 404 permit.
California Department of Fish and Game	Section 1602 Streambed Alteration Agreement	Section 1602 Streambed Alteration Agreement applied for concurrently with 404 Permit and 401 Certification.

Chapter 2 Affected Environment, Impacts, and Avoidance and Minimization Measures

This chapter explains the impacts that the project would have on the human, physical and biological environments in the project area. It describes the existing environment that could be affected by the project and potential impacts from each of the alternatives.

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

- Land Use
- Growth
- Farmlands/Timberlands
- Community Impacts
- Utilities/Emergency Services
- Traffic and Transportation/Pedestrian and Bicycle Facilities
- Geology/Soils/Seismic/Topography
- Paleontology
- Air Quality
- Noise and Vibration

2.1 Environmental Setting

The project is located in the northeastern Placer County near the Nevada County line along the westbound direction of Interstate 80 (I-80) at KP 101.22 (PM 62.89) adjacent to the South Fork Yuba River (SFYR). This site is characterized by mountainous alpine terrain, typical of the western slope Sierra Nevada. The physical environment is composed of forested upland areas, river canyons, granitic outcroppings and rock faces, high elevation meadow complexes and historic train routes. This region is considered to have high scenic resource values, based on the above-mentioned elements. This segment of I-80 is eligible for listing on the California State Scenic Highway system.

The dominant plant community in the general project area consists of upper montane coniferous forest. The coniferous forest is dominated by Ponderosa pine (*Pinus ponderosa*), white fir (*Abies concolor)*, incense cedar (*Calocedrus decurrens)*, some lodgepole pine (*Pinus contorta*), and a few scattered black oaks (*Quercus kellogii*). Common understory shrubs include rabbit brush (*Chrysothamnus nauseosus*), mountain whitethorn (*Ceanothus cordulatus*), huckleberry oak (*Quercus vaccinifolia*), and green-leaf manzanita (*Arctostaphylos patula*). Ruderal forbs may be found within the disturbed roadway prism and include cheat grass, (*Bromus tectorum*), alfalfa and sweetclover (*Melilotus* spp), gumweed (*Grindellia squarrosa*), Klamath weed (*Hypericum perforatum*), and whitetop cress (*Cardaria draba*.),

Due to the embankment failure adjacent to the South Fork Yuba River, woody riparian vegetation is scant at the project site. Within the project impact area, the failing embankment supports one mature black cottonwood tree (*Populus trichocarpa*). Outside of the project impact area the South Yuba River supports scrubby alder (*Alnus incana*) and willow (*Salix*, sp.).

2.2 Human Environment

2.2.1 Consistency with State, Regional and Local Plans

All work to place the RSP will be within the existing Caltrans ROW, with the exception of approximately 126 square meters (0.03 acre) of area that Caltrans will be acquiring an Easement from Placer County. This project is consistent with the goals and policies listed in the Caltrans Transportation Concept Report (2001) as well as the needs, goals and policies stated in the Transportation and Natural Resources elements of the Placer County General Plan (1994).

2.2.2 Visual/Aesthetics

To assess the impacts that this project will have on the aesthetic / visual qualities of the surrounding area, a licensed Caltrans Landscape Architect prepared a Visual Impact Analysis report (VIA) September 15, 2004. The visual analysis discusses the area's setting, its scenic qualities and potential impacts resulting from construction of this project. The VIA also suggests measures to minimize those impacts.

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

The project site is located directly above and adjacent to the South Fork Yuba River. The river is highly scenic at this location and is used for an array of recreational purposes such as fishing, hiking, camping and mountain biking. The project is also located directly across the river from a campground, which looks out onto the Yuba River to the proposed area of work. Any New RSP would be visible from the campground, adjacent trails and river.

As a primary gateway to northern California, I- 80, from the state line to Emigrant Gap, is on the eligible list for State Scenic Highway designation and warrants special attention. An eligible highway receives scenic highway designation when the local jurisdiction adopts a scenic corridor protection program, applies to Caltrans for scenic highway approval and receives notification from Caltrans that the highway has been so designated. In order to retain the possibility of becoming a designated scenic highway, every effort should be made to maintain and/or enhance the scenic quality of this section of highway.

Impacts

Construction of the proposed highway improvements will not have any significant direct, indirect, or cumulative impacts on the aesthetics of the surrounding environment.

There may be some impacts to views of the campground and associated recreation across the river as well as impacts to scenic resources due to vegetation changes. Although, these impacts are not considered to be significant, measures will be implemented to retain the scenic highway eligibility for this segment of I-80.

Avoidance and Minimization Measures

Although the project will not have a significant impact on visual resources, the following measures will be implemented as part of the design of the project to ensure that this section of I-80 remains eligible for State Scenic Highway designation.

- All areas disturbed during construction shall receive permanent erosion control measures as necessary. All disturbed soil areas shall be hydroseeded with a permanent seed mix (Type D) composed of native plant species indigenous to the area.

- All efforts shall be made to minimize negative impacts to existing native vegetation in design and construction phases. Design shall minimize cut-fill limits whenever possible to avoid unnecessary disturbance of existing terrain and vegetation.

- In order to accelerate re-vegetation of river banks new RSP shall be backfilled with clean washed gravel in order to create an improved environment for riparian plants to colonize. Gravel shall be installed to 1-meter above normal high water.

- Willow bundles shall be placed into toe of RSP at 3-meter intervals so that the back end of each bundle is in contact with water at the time of installation (see attached sketch). This will accelerate establishment of riparian vegetation to minimize scenic impacts to recreational users.

- Native rock shall be used to the extent possible in order to reduce scenic impacts due to intrusive color variations along the river. The rock located at the Soda Springs exit is considered native rock and would be a preferable choice.

2.2.3 Cultural Resources

In order to determine the potential for impacts to cultural resources as a result of this project, a review of the project information and plans was performed and qualified Caltrans Archaeologists completed a field review in September 2004.

Regulatory Setting

Under California law, cultural resources are protected by the California Environmental Quality Act (CEQA) as well as Public Resources Code Section 5024.1, which established the California Register of Historic Places. Section 5024.5 requires state agencies to provide notice to, and to confer with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historic resources.

Affected Environment

The project area consists of a steep embankment slope above the South Fork Yuba River, and extends for approximately 115 feet long along I-80. During the review of in house documentation, project plans and profiles, as well as the September 14, 2004, field visit of the project area, Caltrans archaeologists did not identify any cultural resources. Although sensitivity for historical resources within the project vicinity ranges from moderate to high, within the project area itself it is low because of the high disturbance of the eroding embankment slope and previous road building.

Impacts

There appears to be no potential for the project to affect any historical resources.

Avoidance and Minimization Measures

Although this project will not have a significant impact to cultural resources, the following measures shall be implemented to minimize impacts to unexpected resources during construction activities:

- If buried, or otherwise unknown cultural material, such as bones, arrowheads, bottles, foundations or other historic or prehistoric remains are discovered during work associated with this project, it is Caltrans policy that work temporarily cease in the area of the find and the environmental branch contacted immediately. A qualified archaeologist will evaluate the nature and significance of the find and coordinate the situation with the SHPO (Environmental Handbook Vol.2, Chapter 1)

- If during any subsurface disturbance or pavement removal, human skeletal remains are encountered, the Contractor's construction activities, within 10 meters shall be halted immediately and the County Coroner shall be notified within 24 hours. Construction activities shall not be resumed until permitted in writing by the Engineer. All provisions of the Health and Safety Code §7054 and 7050.5 and the Public Resources Code (PRC) § 5097.98 and 5097.99 shall be followed. The California Public Resources Code § 5097.98 and 5097.99 require protection of Native American remains, which may be found, and outline procedures that must be followed for handling any burials found.

2.3 Physical Environment

2.3.1 Hydrology and Floodplain

Caltrans Hydraulics staff prepared a Floodplain Hydraulics Study (FHS) for this project in February 2005 by to assess the potential for impacts associated with hydrology and floodplain issues.

Regulatory Setting

The SFYR is under the jurisdiction of the Central Valley Regional Water Quality Control Board, within the project limits, for water quality issues; the US Army Corps of Engineers is the authority for watercourse alterations; the Federal Emergency Management Agency (FEMA) has authority of floodplain issues and the California Department of Fish and Game (DFG) has authority over wildlife issues.

Affected Environment

This project is located in the western face of the Sierra Nevada Mountain Range. This reach of the South Fork Yuba River is located within the western face of the Sierra Nevada mountain range at approximately 1700m Above Mean Sea Level (5600 ft AMSL) near the community of Cisco Grove. The river channel at this location is a man-made channel that was constructed in the early 1960s as part of the construction of the Interstate 80 (Pla-80) highway system.

This segment of I-80 and the South Fork Yuba River are depicted on the USGS Cisco Grove, California 7.5-minute topographic Quadrangle map. The location of the failure is at a point on the left embankment (looking downstream) of the river alignmenton the westbound side of the highway. The eastern (upstream) end of the failure begins at a point in the man made channel where amply sized RSP currently exists. The western (downstream) end of the failure ends abruptly at a large natural rock outcropping where the re-constructed channel alignment rejoins the natural channel. The elevation of the highway traveled way is approximately two (2) meters higher than the natural terrain of the river overflow bank opposite the highway. During very high river flows, when the main river channel is overwhelmed, excess flow spreads out over this lower riverbank rather than flooding the highway.

Impacts

The Federal Emergency Management Agency (FEMA) designates the South Fork Yuba River as a 100-year floodplain within the limits of the proposed project. The

floodplain is recorded by FEMA as Flood Hazard Zone A, no base flood elevations determined.

FEMA Flood Insurance Rate Map (FIRM), 06061C0050F for Placer County, California dated June 8, 1998 indicates I-80 borders the South Fork Yuba River floodplain at the project location. Based on 23 CFR 650 criteria, this project constitutes a longitudinal encroachment. However, the nature of the project, namely the repair of a washed out section of river embankment, constitutes a restoration of the historical river alignment and embankment characteristics.

The risk of increased flooding associated with the execution and completion of this project is less than significant.

Avoidance and Minimization Measures

To avoid impacts to the FEMA Zone A floodplain, channel embankment repairs shall be performed in a manner that will result in the restoration of the creek channel to its original design configuration and capacity.

2.3.2 Water Quality and Stormwater Runoff

Caltrans staff prepared a Water Quality Assessment Report on December 1, 2004 to assess the impacts of this project on water quality of the surrounding area.

Regulatory Setting

Section 402 of the Clean Water Act establishes the National Pollutant Discharge Elimination System (NPDES) permit system for the discharge of any pollutant (except dredge or fill material) into waters of the United States. To ensure compliance with Clean Water Act Section 402 the State Water Resources Control Board (SWRCB) has issued a NPDES Statewide Storm Water Permit to regulate storm water discharges from Department facilities. The permit regulates storm water discharges from the Department right-of-way both during and after construction, as well as from existing facilities and operations.

Caltrans has a Statewide National Pollutant Discharge Elimination System (NPDES) Permit (permit) issued by the State Water Resources Control Board, (Board Order 99-06-DWQ). This permit regulates the storm water and non-storm water discharges associated with Construction activity, discharges associated with normal maintenance

and operations of Caltrans facilities (also know as a Municipal Storm Water Permit), and it also serves as a State of California Waste Discharge Requirement.

During the construction phase of the Cisco Washout repair project compliance with the permit requires the appropriate selection and deployment of both structural and non-structural Best Management Practices (BMPs) that achieve the performance standards of Best Available Technology economically achievable/Best Conventional Pollutant Control Technology (BAT/BCT) to reduce or eliminate storm water pollution.

Due to the infill of rock material into edge of the river an Army Corp of Engineers 404 permit will most likely be required. Therefore an accompanying Water Quality Certification (401 permit) is required from the Central Valley Regional Water Quality Control Board.

Affected Environment

The project is located in northeastern Placer County near the Nevada County line along the westbound direction of I- 80 at KP 101.2(PM 62.89) adjacent to the South Fork of the Yuba River. The South Fork of the Yuba River is a source to Englebright Reservoir located 30.57 KM (19 miles) east and north east of Marysville, California. This reach of the river is not listed as impaired for sediment or any other known pollutant of concern. This reach of the river resides in hydrologic unit 517.34 and has the following existing beneficial uses assigned to it:

MUN, Municipal domestic supply; AGR, Agricultural irrigation and stock watering; POW, Industrial power; REC-1, recreation contact, canoeing and rafting; REC-2 recreation other non-contact; COLD, cold freshwater habitat; SPWN, cold spawning; and WILD, wildlife habitat.

The project resides in a mountain timberline setting at an elevation of approximately 5,640 feet amsl. Average annual precipitation is 68.46 inches and an approximate rainfall intensity of 0.24 inches per hour.

Impacts

Temporary impacts to the surrounding water quality are possible from potential sediments that may enter the water as a result of construction activities. With the implementation of design features and Best Management Practices (BMPs) listed below, impacts to water quality will be less than significant.

Avoidance and Minimization Measures

Adherence to the following is recommended to prevent receiving water pollution as a result of construction activities and/or operation of this section of I-80.

1. The project shall adhere to the conditions of the Caltrans Statewide NPDES Permit CAS # 000003, (Order # 99-06-DWQ), issued by the State Water Resources Control Board.
2. Construction projects with a disturbed area of more than one acre or by request of a Regional Water Quality Control Board require a Caltrans approved Storm Water Pollution Prevention Plan (SWPPP) containing project specific effective erosion and sediment control measures. These measures must address soil stabilization practices, sediment control practices, tracking control practices, and wind erosion control practices. In addition, the project plan must include non-storm water controls, waste management and material pollution controls.
3. Since this project encroaches into the South ForkYuba River it is anticipated that the Regional Board will request a SWPPP level of temporary pollution controls be implemented; Standard Special Provision 07-345 therefore shall be included in the PS&E to address these temporary construction water pollution control measures
4. As directed by Caltrans' Storm Water Management Plan (SWMP) and the Project Planning and Design Guide (PPDG) an evaluation of the project using the most recent approved evaluation guide is essential in determining if the incorporation of permanent storm water runoff treatment measures shall be considered for this project.
5. A report of Notification of Construction (NOC) shall be submitted to the Central Valley Regional Water Quality Control Board (CVRWQCB) at least 30 days prior to the start of construction.

2.3.3 Hazardous Waste Materials

Caltrans staff prepared an Initial Site Assessment for Hazardous Waste on August 25, 2004 to assess impacts related to hazardous materials as a result of this project.

Regulatory Setting

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

Yellow traffic markings (thermoplastic and paint) potentially contain hazardous levels of lead chromate. Yellow traffic markings that are removed separate from the adjacent pavement may have to be managed as hazardous waste. If any yellow traffic markings are going to be removed separate from the adjacent pavement, the levels of lead and chromium need to be determined.

Impacts

It is anticipated that Yellow Traffic Markings will be encountered within the project area and will need to be tested during construction for lead and chromate levels.

Avoidance and Minimization Measures

A Standard Special Provision will be included into contract language for the project on the proper handling and disposal of lead based yellow traffic markings.

2.4 Biological Environment

In order to determine the potential biological impacts as a result of this project, a Caltrans biologist conducted a review of the project design and its effects on the natural environment.

A list of species and habitats potentially occurring within the project vicinity was developed based on information compiled from the California Department of Fish and Game's (CDFG) Natural Diversity Data Base (Rarefind, 2003; Blue Canyon, Cisco Grove, and Soda Springs, 7.5-minute USGS quads), lists provided by the United States Fish and Wildlife Service (USFWS), the California Native Plant Society, and from the current literature.

A district 3 biologist conducted field surveys of the project site to assess existing natural resources and potential impacts on 08/16/2004 . Emphasis was placed on the special status species that may occur. The project site was field reviewed to 1) identify habitat types; 2) identify potential wetlands; 3) identify factors indicating the potential for rare species; 4) identify rare species present; and 6) identify potential problems for the study.

2.4.1 Wetlands and Other Jurisdictional 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 U.S.C. 1344) is the primary law regulating wetlands and 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 hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to 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 no discharge of dredged or fill material can 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 administered by the U.S. Army Corps of Engineers (ACOE) with oversight by the Environmental Protection Agency (EPA).

The limits of jurisdiction of Fish and Game Code section 1602 includes the bed, channel, and bank of any river, stream or lake in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit. The limits of this jurisdiction typically extend to the outer edge of riparian vegetation, or to the top of bank for areas with little or no riparian habitat (California Department of Fish and Game. 1994b). Work within the jurisdiction of Fish and Game Code section 1602 will require the use of a section 1602 "Streambed Alteration Agreement".

Affected Environment

The dominant hydrologic feature within the project area is the South Fork Yuba River. The SFYR within the project area is popular for its recreational uses, including rafting and angling, which may be considered a "connection to interstate or foreign commerce" for this system and its tributaries.

As described in the *1987 Corps of Engineers Wetlands Manual*, a positive determination of jurisdictional waters of the United States in the form of "Riverine - Upper Perennial" (South Fork Yuba River; Cowardin Classification R-3-RS-2) was identified in the project study area based on the presence of a stream bed and bank, and the presence of riparian vegetation. Indicators of the position of the ordinary high water mark (OHWM) such as a natural scour line impressed on the bank, shelving, changes in vegetation, the presence of plant litter and debris, and water staining on rocks and boulders within the river channel were noted. A synthesis of these observed features was used in determining the position of the OHWM within the project study area.

Areas meeting the three-parameter determination (as described in the aforementioned *1987 corps of Engineers Wetlands Manual)* were not detected within the project study area.

Impacts

Work below the OHWM of the South Yuba River within the project study area will consist of the excavation of a toe trench and the subsequent placement of rock slope protection (RSP), The proposed project will result in the permanent placement of 268.13 yd^3 of fill below the OHWM, covering an area of 0.04 acre below OHWM along 115 linear feet of the south bank of the South Yuba River.

Depending on flow conditions, a temporary cofferdam may be required to separate river flows from the proposed work area. The placement of a temporary cofferdam to temporarily de-water a section of the river would result in the temporary placement of 104.64 yd^3 of fill below the OHWM, covering an area of 0.02 acre below the OHWM of the South Yuba River.

Table 2: Locations of Jurisdictional Waters of the United States

(Ephemeral, intermittent, and perennial drainages)

Location	Cause of Impact	Permanent Impact below OHWM (acre)	Volume of Permanent Fill Below OHWM (Yd^3)	Temporary Impact Below OHWM (acre)	Volume of Temporary Fill Below OHWM (Yd^3)
PM 62.89-62.92 South Yuba River	Excavate toe trench, Place RSP	0.04 acre	268.13 yd^3		
PM 62.89-62.92 South Yuba River	De-Watering,			0.02 acre	104.64 yd^3
Totals:		**0.04 acre**	**268.13 yd^3**	**0.02 acre**	**104.64 yd^3**

With the implementation of avoidance measures, project design features and compliance with permit conditions; this project will not have a significant impact on jurisdictional waters of the U.S.

Avoidance and Minimization Measures

Although impacts to jurisdictional waters are not expected to be significant as a result of this project, the following measures as listed in Section 2.4.8 will be executed to ensure that waters will not be negatively impacted.

01-Establish Environmentally Sensitive Areas:
02-Restrict Timing of In-Stream Activities:
03-De-watering Activities
04-Minimize Disturbance to Creek Channel and Adjacent Areas:
05-Containment Measures / Construction Site Best Management Practices:
06-Restore Riparian and Streambank Habitat Disturbed by Construction:

2.4.2 Protected Plant Species

Species protected by the California Native Plant Protection Act are not expected to be impacted by the proposed project, and no consultation with state resource agencies was necessary in accordance with legal requirements set forth under sections 1900-1913 of the California Fish and Game Code. The following summarizes Caltrans' determinations for protected native plant species that may occur within the project vicinity.

Caltrans staff determined that the proposed project will have "no effect"on the following plant species protected by the Native Plant Protection Act. The project area

is outside the range of the species, the lack of suitable habitat or habitat components in the project area, or because of the lack of detection during recent Caltrans surveys.

Oregon Fireweed (CNPS List 1B), Simple Androsace (CNPS List 2), Starved Daisy (CNPS List 1B), Stebbin's Phacelia (CNPS List 1B), Water Bullrush (CNPS List 1B), Wooly Violet (CNPS List 4)

2.4.3 Threatened and Endangered Species

The following summarizes Caltrans' determinations for Threatened and Endangered Species that are afforded protection under the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA) that may occur within the project vicinity.

Regulatory Setting

Federal Endangered Species Act

Biological assessments are required under Section 7(c) of FESA if listed species or critical habitat may be present in the area affected by any major construction activity conducted by, or subject to issuance of a permit from, a federal agency as defined in Part 404.02. Under Section 7(a)(3) of FESA every federal agency is required to consult with the United States Fish and Wildlife Service or National Marine Fisheries Service on a proposed action if the agency determines that its proposed action may affect an endangered or threatened species

California Endangered Species Act

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and their essential habitats. The California Department of Fish and Game (CDFG) is the agency responsible for implementing CESA.

Affected Environment/ Impacts

Federal Endangered Species Act

When it was determined that federally listed species may be present within the vicinity of the proposed project, a threatened and endangered species list was

downloaded from the Sacramento Office USFWS website on 08/24/2004. The following summarizes Caltrans' determinations for federally listed, candidate, and species of special concern that according to USFWS lists, may occur within the project vicinity (Blue Canyon, Cisco Grove, and Soda Springs USGS 7.5-minute topographic quadrangles).

1) Because the project area is outside the range of the species, the lack of suitable habitat or habitat components in the project area, the lack of detection during recent Caltrans surveys or because the project is minor in scope and would not harm individuals or alter the species' habitat, Caltrans has determined that the proposed project will have **"no effect"** on the following Federally listed threatened or endangered, candidate, or proposed species or their critical habitat:
Delta Smelt (FT), Central Valley Steelhead (FT), Green Sturgeon (FC), Mountain Yellow Legged Frog (FC, FSS), California Red Legged Frog (FT), Bald Eagle (FPD)

2) Because the project area is outside the range of the species, the lack of suitable habitat or habitat components in the project area, the probable absence of a species from historic range, the lack of detection during recent Caltrans surveys or because the project is minor in scope and would not harm individuals or alter the species' habitat, Caltrans has determined that the proposed action will have **"no effect"** on the following Federal Species of Concern:
Sacramento Splittail , Longfin Smelt, Mount Lyell Salamander, Foothill Yellow Legged Frog, Northern Goshawk, Oak Titmose, American Dipper, Black Swift, Peregrine Falcon, Flammulated Owl, California Spotted Owl, Townsend's Big Eared Bat, Spotted Bat, Greater Western Mastiff Bat, Small Footed Myotis, Long Eared Myotis, Fringed Myotis, Long Legged Myotis, Yuma Myotis, California Wolverine, Sierra Nevada Snowshoe Hare, American Marten, Pacific Fisher, Sierra Nevada Red Fox, Stebbin's Phacelia, Wooly Violet,

3) The proposed activities would result in some loss of habitat or reductions in the habitat quality or timing of nesting, denning, roosting and/or foraging opportunities for the following species. The scale of this reduction and/or loss is small within the analysis area and design features and conservation measures exist to reduce both direct and indirect impacts. Also, the proposals are consistent with conservation strategies and direction as provided in Placer County goals, policies, and ordinances. Therefore, Caltrans has determined that the proposed activities **"may affect but is**

not likely to adversely affect" individuals of the following Federal Species of Concern*:

Lewis Woodpecker, White Headed Woodpecker, Rufous Hummingbird

California Endangered Species Act

No state listed species are expected to be impacted by the proposed project, and no consultation with state resource agencies was necessary in accordance with legal requirements set forth under sections 2050-2098 of the California Fish and Game Code. The following summarizes Caltrans' determinations for state listed species that may occur within the project vicinity.

1) Because the project area is outside the range of the species, the lack of suitable habitat or habitat components in the project area, the lack of detection during recent Caltrans surveys, or because the project is minor in scope and would not harm individuals or alter the species' habitat, Caltrans has determined that the proposed project will have **"no effect"** on the following California State listed or proposed listed threatened or endangered species:

California Wolverine (CT), Bald Eagle (CE)

2) Because the project area is outside the range of the species, the lack of suitable habitat or habitat components in the project area, the probable absence of a species from historic range, the lack of detection during recent Caltrans surveys or because the project is minor in scope and would not harm individuals or alter the species' habitat, Caltrans has determined that the proposed action will have **"no affect"** on the following California State Species of Special Concern:

Button's Sierra Sideband Snail, Foothill Yellow Legged Frog, Northern Goshawk, Black Swift, Small Footed Myotis, Long Eared Myotis, Fringed Myotis, Long Legged Myotis, Yuma Myotis, American Marten, Pacific Fisher

* Federal Species of Concern are not formally afforded protection under the Endangered Species Act, however they could be listed at any time and therefore are discussed and given consideration under the avoidance measures similar to that of species protected under the MBTA for this project.

Avoidance and Minimization Measures

Although no significant impacts are expected to Federal or State Listed Threatened or Endangered Species, measures (as listed in detail in section 2.4.8) shall be implemented to avoid potential impacts to Federal Species of Concern.

06-Restrict timing of woody vegetation removal, or
07- Nesting Bird/ Roosting Bat Survey

2.4.4 Other Animal Species

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 Section 2.4.3 above. 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.

The potential for impacts to the Mountain Yellow Legged Frog (MYLF), a federal candidate for Endangered Species Act listing was discussed in a 24, August 2004 telephone conversation between Caltrans staff and a USFWS biologist. Historical and recent records for the MYLF in the South Fork Yuba watershed exist at Rattlesnake Creek (1974; 0.70-mile northeast of project site), Rattlesnake Pond (2001; 3.95 miles northeast of project site), and in the Fordyce/Sterling Lakes area (2001; 5.65 mile northeast of project site). Because MYLF breeding habitat is more commonly encountered in ponded, low flowing, or meadowed aquatic habitats, because the presence of predatory fish decreases the likelihood of MYLF breeding in the SFYR, because of the small scope of the proposed project, and because no records for this species exist in the South Yuba River proper, direct and indirect impacts to MYLF are unlikely to occur. Because the MYLF is a candidate species FHWA and Caltrans are obliged consult with the USFWS at their discretion to determine the need to prepare section 7 documentation. Based on the above parameters USFWS and Caltrans biologists concurred in an August 24, 2004 telephone conversation that section 7 consultation would not be required for this project.

Avoidance and Minimization Measures

Although it is unlikely that the presence of MYLF exists and will be negatively impacted by this project, as a precautionary measure the following measures that have been previously identified to avoid impacts to jurisdictional waters will also serve to reduce the potential to impacts to other animal species.

02-Restrict Timing of In-Stream Activities:
03-De-watering Activities
04-Minimize Disturbance to Creek Channel and Adjacent Areas:
05-Containment Measures / Construction Site Best Management Practices:
06-Restore Riparian and Streambank Habitat Disturbed by Construction

2.4.5 Common Vegetation

Affected Environment

Removal of woody vegetation (trees and shrubs) during the course of embankment repair is unavoidable.

Impacts

Embankment reconstruction will require the removal of a single, mature black cottonwood tree.

Avoidance and Minimization Measures

Restore Riparian and Stream Habitat Disturbed by Construction: Upon completion of the construction project, streambanks will be permanently stabilized and the riparian areas will be re-planted with appropriate native species. Clean gravel shall be placed in the RSP near the water line of the South Yuba River so that willow bundles can take root and establish themselves in the RSP. Tree and shrub species that will be used for the restoration will include willow, alder, and cottonwood

2.4.6 Wildlife Resources

Minor impacts to sensitive and common wildlife species, including migratory birds, bats and fish within the project area are possible but unlikely to occur. Project avoidance and minimization measures will be implemented to reduce any potential impacts.

Populations of wildlife species within the within the project area are not likely to adversely impacted by the proposed project.

Regulatory Setting

<u>MBTA</u>

The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). If impacts to active nests or

individual birds are expected, Caltrans shall consult with USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918.

Bats

In addition to bat species listed as sensitive by the resource agencies, state laws protect bats and their occupied roosts from harassment and destruction. Protection under California Law is found in the Fish Game code Section 2000, 2002, 2014 and 4150, and under California Code of Regulations section 251.1. It is anticipated that tree roosting bats may use the forested areas within the project area.

Fisheries Resources

Under sections 1600-1603 of the Fish and Game Code, Caltrans and other agencies are required to notify DFG prior to any project that would divert, obstruct or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, DFG is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications and bid documents for the project

Affected Environment

MBTA

It is anticipated that migratory birds or raptors may try to nest in vegetation within the project area between March 1st and August 15th. The federal Migratory Bird Treaty Act (MBTA) of 1918 protects migratory bird species (16 USC 703-711). The list of birds protected by this act appears in Title 50 of the Code of Federal Regulations, Section 10.13, and include the following Federal and State Species of Concern appearing on the USFWS list of "Endangered and Threatened Species that may occur in or be affected by projects in the Selected Quad" for this project:

Oak Titmouse, Black Swift, Black Tern, Flammulated Owl, Lewis's Woodpecker, White Headed Woodpecker, Rufous Hummingbird, American Dipper

Bats

Several species of bats require trees as daytime roosts, and several other species day roost in trees occasionally or use trees as important night roosts. The following are tree roosting bat species that may be expected to occur in the project area (Grindall, 1996; CDFG, 2002 and Zeiner et al. 1990):

Obligate Tree Roosting Species	Tree Important
Lasionycteris noctivagans	*Antrozous pallidus*
Lasiurus cinereus	*Eptesicus fuscus*
Lasiurus blossevillii	*Myotis lucifugus*
	Myotis yumanensis
	Myotis californicus
	Myotis ciliolabrum
	Myotis evotis
	Myotis thysanodes
	Myotis volans

Fisheries Resources

The South Fork Yuba River is known to support populations of non-anadromous salmonids (trout).

The CDFG was contacted during the scoping phase of this project, at which time Caltrans was looking at the possibility of building a retaining wall at this location. CDFG expressed their preference for the RSP alternative in order to retain habitat for fish.

Impacts

MBTA

Removal of woody vegetation (trees and shrubs) during the course of embankment repair, is unavoidable. Embankment reconstruction will require the removal of a single, mature black cottonwood tree. By observing the avoidance, minimization and mitigation measures below, no direct impacts to migratory bird species are expected to occur. Because suitable foraging habitat for bird species exists within and adjacent to the project area these species may be potentially indirectly impacted, although the extent of these impacts is expected to be minor. Construction noise and activities within the project area may disrupt normal foraging, movement, or nesting patterns within the project vicinity. Populations of migratory bird species along the PLA-80 corridor are not likely to adversely affected by the proposed project.

Bats

Although the removal of woody vegetation (one black cottonwood tree) is required for the embankment repair, this tree does not possess appropriate structures for use as a bat day roost (exfoliating bark, cavities, or fissures) for tree roosting bats, and may be more likely to be used as a temporary night roost. Construction noise and activities within the project area may temporarily disrupt normal foraging, movement, or roosting patterns within the project vicinity, but is unlikely due to the proximity of the project site to the highway system. Populations of bat species within the along the NEV-80 corridor are not likely to adversely impacted by the proposed project.

Fisheries Resources

A total of 0.04-acre of permanent fill will be placed below the OHWM of the South Fork Yuba River; however, fisheries resources within the within the project area are not likely to adversely effected by the proposed project.because the addition of the rock will provide some habitat for fish within this area.

There is a potential for minor impacts to fish as a result of construction activities.

Avoidance and Minimization Measures

MBTA

If any work will alter vegetation, the Contractor shall take measures as necessary to prevent impacts to migratory birds and raptors, including any part, nest, or egg or any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, or any such bird or any part, nest, or egg thereof. The following avoidance and minimization measures (described in detail in Section 2.4.8) are designed to reduce impacts to nesting and roosting raptors and migratory bird species, and shall be implemented in all areas where the removal of woody vegetation is proposed:

06-Restrict timing of woody vegetation removal, or
07- Nesting Bird/ Roosting Bat Survey

Bats

The following measures (detailed in section 2.4.8) are proposed to offset potential impacts to woody vegetation suitable for roosting bats, and shall be implemented in all areas where the removal of woody vegetation is proposed:

06-Restrict timing of woody vegetation removal, or
07- Nesting Bird/ Roosting Bat Survey

Fisheries Resources

To reduce the potential for adverse impacts to fisheries resources during construction, the following measures (detailed in section 2.4.8) shall be implemented in all waters where construction activities are proposed:

02-Restrict Timing of Instream Activities
03-Minimize Disturbance to Creek Channel and Adjacent Areas
04-Containment Measures / Construction Site Best Management Practices
05-Restore Riparian and Stream Habitat Disturbed by Construction

2.4.7 Noxious Weeds

Noxious weeds are plants considered as "troublesome, aggressive, intrusive, detrimental, or destructive to agriculture, silviculture, or important native species, and difficult to control or eradicate". Plant species to be considered as "noxious weeds" for this assessment were compiled from U.S. Forest Service (USFS), California Department of Food and Agriculture (CDFA), and U.S. Department of Agriculture (USDA) lists.

Impacts to native vegetation and jurisdictional waters within the project area due to an increase in noxious weed spread as a result of the proposed project are possible, but will be reduced by implementing avoidance strategies and design features for reducing the spread of noxious weeds as described below. Although no noxious weed species were detected at the site of the failing embankment, a number of noxious weed species are known to be common along the I-80 corridor including spotted knapweed (*Centaurea maculosa*), whitetop cress (*Cardaria draba*) and Klamath weed (*Hypericum perforatum*), sqaurrose knapweed and yellow star thistle (*Centaurea squarrossa, C. solstitialis*), quackgrass (*Elytrigia repens*), and Canada thistle (*Cirsium arvense*). The potential introduction to the project site of noxious

weed material from outside of the project area, and the spread of noxious weed material from within the project area shall be avoided or minimized by implementing the following measures as detailed in section 2.4.8:

08-Weed Free Construction Equipment
09-Weed Free Erosion Control Treatments
10-Equipment Staging in Weed Free Areas

2.4.8 Avoidance and Minimization Measures for Biological Resources

The following is a detailed listing of the avoidance and minimization measures mentioned in the above sections that shall be implemented to prevent negative impacts to biological resources.

01-Establish Environmentally Sensitive Areas

Additional direct and indirect impacts to sensitive biological resources, including wetlands and jurisdictional waters, throughout the project area will be avoided or minimized by designating these features outside of the construction impact area as "environmentally sensitive areas" (ESAs) on project plans and in project specifications. 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 delineate the proposed limit of work in areas adjacent sensitive resources, or to delineate and exclude sensitive resources from potential construction impacts. Contractor encroachment into ESAs will be prohibited (including the staging/operation of heavy equipment or casting of excavation materials). ESA provisions shall be implemented as a first order of work, and remain in place until all construction activities are complete. ESA fencing shall be positioned to exclude all upland areas of the functioning existing embankment slopes adjacent to the South Fork Yuba River not required for access or construction activities.

02-Restrict Timing of In-Stream Activities

To reduce potential impacts to fisheries and wildlife resources and water quality, no work will be performed within surface water drainages within the project area until flows have reached post-spring runoff seasonal low flows. It is predicted that in most years, the seasonal low period of these drainages occurs between July 15th and October 15th, however work within these drainages will be subject to stream

conditions and permit restrictions.

03–De-watering Activities

Temporary de-watering of work area may be necessary depending on flow condition. All water intakes shall be screened to avoid the uptake of all life classes of any fish specoies present in the South Fork Yuba River. A CDFG approved fisheries biologist shall be on-site during de-watering activities to relocate fish from the de-watered area to the main river channel.

04-Minimize Disturbance to Creek Channel and Adjacent Areas

Disruption of the streambed and adjacent riparian corridor will be minimized. All mechanized equipment shall be operated from the existing roadway or shoulder area above the top of the streambank. All stream and riparian habitat areas outside of the construction limits will be designated as ESA's as detailed in measure 01.

05-Containment Measures / Construction Site Best Management Practices

Measures will be employed to prevent any construction material or debris from entering surface waters or their channels. BMP's for erosion control will be implemented and in place prior to during, and after construction in order to ensure that no silt or sediment enters surface waters.

Caltrans' Standard Specifications require the Contractor to submit a Water Pollution Control Plan. This plan must meet the standards and objectives to minimize water pollution impacts set forth in section 7-1.01G of Caltrans' Standard Specifications. The Water Pollution Control Plan must also be in compliance with the goals and restrictions identified in the Central Valley Water Quality Control Board's Basin Plan. Caltrans and its contractor will comply with any additional measures included in the 401 certification, 1601 Agreement, or 404 permit will be complied with. These standards/objectives, at times referred to as "Best Management Practices" (BMP's), include but are not limited to:

- RWQCB-approved physical barriers adequate to prevent the flow or discharge of sediment into aquatic systems shall be constructed and maintained between working areas and streams, lakes and wetlands. During construction of the barriers, discharge of sediment into streams shall be held to a minimum. Discharge will be contained through the use RWQCB-approved measures that will keep sediment from entering protected waters.

- Oily or greasy substances originating from the Contractor's operations shall not be allowed to enter or be placed where they will later enter a live or dry stream, pond, or wetland.

- Asphalt concrete shall not be allowed to enter a live or dry stream, pond, or wetland.

06-Restore Riparian and Streambank Habitat Disturbed by Construction

Upon completion of the construction project, streambanks will be permanently stabilized. Planting willow bundles at the base of the proposed RSP slope will enhance riparian vegetation. Adjacent side slopes and the reconstructed embankment between the top of the proposed RSP system and the highway shoulder shall receive permanent erosion control measures, including fiber rolls, and will be revegetated with appropriate native grasses, legumes, and forbs.

07-Restrict Timing of Woody Vegetation Removal

The removal of any woody vegetation (trees and shrubs) required for the project shall be completed between September 1st and February 28th prior to project construction. This time period is considered to be outside of the predicted nesting season for raptors and migratory birds, and during the predicted winter migration period for many bat species in this area. Vegetation removal outside this time period may not proceed until a survey by a qualified biologist determines no nests or structures appropriate for bat day roosts are present or in use (also see measure 08 below).

08-Nesting Bird / Roosting Bat Survey

If woody vegetation removal, construction, grading, or other project-related improvements are scheduled during the nesting season of protected raptors, migratory birds and roosting bats (March 1st to August 30th), a focused survey for active nests and roosts shall be conducted by a qualified biologist within 30 days prior to the beginning to project-related activities. If active nests are found, Caltrans shall 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 thirty days or longer occurs, another survey and, if necessary, consultation with USFWS and CDFG will be required before the work can be reinitiated.

09-Weed Free Construction Equipment

All off-road construction equipment is to 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 shall employ whatever cleaning methods (typically with the use of a high-pressure water hose) are necessary to ensure that equipment is free of noxious weeds. Equipment shall be considered free of soil, seeds, and other such debris when a visual inspection does not identify such material.

10-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 shall 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.

11- 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 shall 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 shall be restricted. Smaller infestations of noxious weeds within the project area shall be eradicated if feasible.

2.5 Cumulative Impacts

Cumulative impacts are those that are produced by the aggregation of individual environmental impacts resulting from a single project or from two or more projects in conjunction. Analysis of cumulative impacts is required under the California

[*] A Draft Restoration Plan has been prepared by Caltrans Staff for Submittal with ACOE Nationwide Permit #33 application. The Final plan will be incorporated into permit conditions and shall be included into the special provisions and contract documents for this project.

Resources Agency Guidelines, Title 14, § 15130 and § 15355. The following is an excerpt from § 15355 explains what cumulative impacts are:

> *Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment, which results from the incremental impacts of the projects when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

CEQA details two ways in which to evaluate cumulative impacts. One of these is to summarize growth projections in an adopted general plan or in a prior certified environmental document. The second method, which will be utilized for this Initial Study, involves the compilation of a list of projects producing related or cumulative impacts [please see Section 15130 B 1(a) of the CEQA guidelines]. The projects considered for this cumulative impact analysis are listed in Table 3.

Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time. A cumulative effect related to aesthetics/scenic resources, biological resources, jurisdictional waters and water quality adjacent to I-80, in combination with the other projects listed in Table 3, could be considered significant. However through the implementation of re-vegetation plans, avoidance measures, mitigation measures and design modifications implemented for each project, there will not be cumulative negative effect on any sensitive resources.

Projects listed in Table 3 are necessary to maintain the existing Interstate facility. Actions such as rehabilitating roadway sections or drainage features have a cumulative beneficial effect by reducing the chance of roadway or drainage failures.

Table 3. Projects Considered for Cumulative Impacts

Reference Number	Project Name	Description	Location	Status/ Schedule
1 EA 3C930	Eagle Lakes Chain off area.	Construct a chain off area near the Eagle Lakes interchange	I-80 in Nevada Co. near Placer Co. line from	Planned for construction in 2005

			PM 61.0-61.5 &63.5	
2 EA 4A700	Nyack Roadway Rehab	Portland Concrete Cement overlay, Median Barrier improvements, bridge replacement,	I-80 in Placer Co. from PM 54.6-68.5	This project is still in the early stages of completing the environmental document. Is currently planned for the 2007 construction year.
3 EA 1C500	Anti Icing Project	Add anti-icing system to over crossing structure at Yuba Pass.	I-80 in Placer Co. at PM 59.5	Project is planned to be completed in early 2006
4 EA 4A650	Culvert Rehabilitation Project	Rehabilitate Culverts	I-80 in Placer Co. from PM 56.0-69.0	This project is scheduled to be constructed in 2007
6 EA 0C770	Rainbow Rehab	Pavement and drainage rehab, Upgrade lighting & MBGR some widening	I-80 in Placer Co. from PM R066.3/068.5	This project is scheduled to be constructed in the 2006 construction year
7 EA 0E060	Kingvale SOC project	Install TOS elements	Var locations on I-80	This project is scheduled to be constructed in the 2005 year
8 EA 1E240	Truck Climbing Lane (TCL)	Extend TCL	I-80 in Pla Co. at PM 57.8-58.9	This project is in the early planning stage.
9 EA 2C860	Yuba Gap CAPM	Slab Replacement/ AC overlay	I-80 in Pla Co. at PM 56.1-66.3	This project is in the early planning stage.
11 EA 0E020	Cisco Retaining Wall	Place RSP to repair failing embankment slope	I-80 in Placer Co. at PM 62.89-62.92	Proposed project discussed in this IS. It is planned to be built the 2005 construction year.

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 to determine the scope of environmental documentation, the level of analysis, 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 and interagency coordination meetings. This chapter summarizes the results of Caltrans' efforts to fully identify, address and resolve project-related issues through early and continuing coordination. After public circulation of this document, any comments will be included in the section and reflected in the final document.

07/12/04: The CDFG was contacted during the project scoping process regarding project alternatives to reduce potential impacts to fisheries resources. Caltrans proposed two alternatives for repairing the project's failing embankment slope, one proposing a retaining wall, and the other proposing an RSP system. Based on a 12, July 2004 correspondence with CDFG fisheries biologist John Hiscox, CDFG preferred the RSP alternative, stating "*Water is at a premium most of the year in this reach of the South Yuba. The large rock will create some holding and feeding habitat for trout. Such habitat is unavailable with a "wall", which would also likely increase high water temperature concerns.*" . Within this context, fisheries resources within the within the project area are not likely to adversely effected by the proposed project.

08/24/04: USFWS was contacted regarding the need for a Section 7 consultation for Mountain Yellow Legged Frog (MYLF). It was determined that no formalized documentation would be required.

12/19/04: Bill McDaniel of the Tahoe National Forest was contacted by telephone to discuss the impacts of this project on the Yuba- Donner Scenic Loop. In consideration of the project information it was determined that no further coordination for the Federal Scenic Byway would be required.

Chapter 4 List of Preparers

The following Caltrans North Region staff prepared this document:

Jody Brown, Senior Environmental Planner

Contribution: Project Senior Environmental Planner, Document Review

Richard V. Olson, Associate Environmental Planner, Archaeology

Contribution: , PQS: Co-Principal Investigator - Prehistoric and Historic Archaeology, Cultural Resource compliance for CEQA and section 106*

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Contribution: Project Biologist, Natural Environmental Study*, Restoration Plan

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Contribution: Hazardous Waste Site Assessment*

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Contribution: Water Quality Technical Study*

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Contribution: Floodplain Hydraulic Study*, Floodplain Evaluation Report

Jerry Snow, Associate Environmental Planner

Contribution: Chapter 1 of this IS

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* Denotes reports that are bound separately and available by written request to Jody Brown, Office of Environmental Management, 2389 Gateway Oaks Dr, Suite 100, Sacramento CA 95833

Appendix A CEQA Checklist

The following checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. The California Environmental Quality Act impact levels include “potentially significant impact,” “less than significant impact with mitigation,” “less than significant impact,” and “no impact.”

The California Environmental Quality Act requires that environmental documents determine significant or potentially significant impacts. In many cases, background studies performed in connection with the project indicate no impacts. A mark in the “no impact” column of the checklist reflects this determination. Any needed explanation of that determination is provided at the beginning of Chapter 2.

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X
AGRICULTURE 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. 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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
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)?				X
d) Expose sensitive receptors to substantial pollutant concentration?				X
e) Create objectionable odors affecting a substantial number of people?				X
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?				X
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 U.S. Fish and Wildlife Service?			X	
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?			X	
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?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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?				X
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?				X
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:				X
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.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?				X
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?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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.	☐	☐	☐	X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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?			X	
b) Create a significant hazard to the public or the environment through reasonably forseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?				X
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?				X
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?				X
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?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
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?				X
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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)?				X
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?			X	
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?			X	
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?				X
f) Otherwise substantially degrade water quality?			X	
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?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
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?				X
j) Inundation by seiche, tsunami, or mudflow?				X

LAND USE AND PLANNING - Would the project:

a) 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?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
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?				X
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?				X
NOISE - Would the project:				
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?				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				X
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?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
PUBLIC SERVICES -				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X
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?				X
b) Does the project include recreational facilities or				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patters, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incomplete uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
UTILITY AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
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?				X
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?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
e) Result in 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?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X
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, or cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?				X
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)?				X
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X

Appendix B Avoidance and/ or Minimization Summary

Resource	Potential Impacts	Minimization, and Avoidance Measures
Aesthetics/Visual Resources (See also section 2.2.2)	• New RSP will impact views of campground and associated recreation across the river. • New RSP will impact scenic resources along the river by not allowing vegetation to grow along banks and slopes as it does up and down stream of the site. • Color of imported RSP will not match existing native rock, resulting in an interruption of visual continuity along the river	• All areas disturbed during construction shall receive permanent erosion control measures as necessary. All disturbed soil areas shall be hydro-seeded with a permanent seed mix (Type D) composed of native plant species indigenous to the area. • All efforts shall be made to minimize negative impacts to existing native vegetation in design and construction phases. Design shall minimize cut-fill limits whenever possible to avoid unnecessary disturbance of existing terrain and vegetation. • RSP shall be backfilled with clean washed gravel in order to create an improved environment for riparian plants to colonize. Gravel shall be installed to 1-meter above normal high water. • Willow bundles shall be placed into toe of RSP at 3 meter intervals so that the back end of each bundle is in contact with water at the time of installation. • Native rock shall be used to the extent possible in order to reduce the scenic impacts due to intrusive color variations along the river. Rock located at the Soda Springs exit is considered Native and is a preferable choice.
Biological Resources (See also section 2.4)	• Approximately 0.04 acre of jurisdictional waters will be permanently affected due to the excavation of the toe trench and the placement of permanent RSP. • Embankment reconstruction will require the removal of one black cottonwood tree. • The South Fork Yuba River is known to support populations of non-anadromous salmonids (trout). Due to the .04 acres of fill that will be placed below the OHWM of the SFYR, fisheries resources may be affected.	• ESA fencing shall be used to exclude all upland areas of the functioning existing embankment slopes adjacent to the South Fork Yuba River not required for access or construction activities. • Restrict timing of in-stream activities to post-spring runoff seasonal low flow. This usually occurs between July 15th and October 15th, but is subject to stream conditions and permit restrictions. • A CDFG approved fisheries biologist shall be on-site during de-watering activities to relocate fish from the de-watered area to the main river channel • Minimize disturbance to creek channel and adjacent areas. All mechanized equipment shall be operated from the existing roadway or shoulder area above the top of the streambank. All stream and riparian habitat areas outside

Resource	Potential Impacts	Minimization, and Avoidance Measures
	• It is anticipated that migratory birds or raptors may try to nest in vegetation within the project area between March 1st and August 15th. The Federal Migratory Bird Treaty Act (MBTA) of 1918 protects migratory birds. • Impacts to native vegetation and jurisdictional waters within the project area due to an increase in noxious weed spread as a result of the proposed project are possible, but will be reduced by implementation of avoidance strategies.	of construction limits will be designated as ESA's • Measures will be employed to prevent any construction material or debris from entering surface waters or their channels. • Restore riparian and stream habitat disturbed by construction. Upon completion of construction, streambanks will be permanently stabilized and will be re-planted with appropriate native species. • Restrict timing of Woody vegetation removal (trees and shrubs) to a time period between September 1st and February 28th prior to project construction for protection of nesting birds and roosting bats. • Nesting Bird/ Roosting bat survey – If woody vegetation removal are scheduled during nesting season of migratory birds and bats (March 1st-August 30th) a focused survey by a qualified biologist will be required within 30 days prior to project-related activities. • All off-road construction equipment shall be cleaned of potential noxious weed sources (mud, vegetation) before entry to the project area and after moving on to another area. • Only native plant species appropriate for the project area will be used in any erosion control or revegetation seed mix or stock. • Areas of known noxious weed infestation shall be isolated and avoided to prevent spreading weeds within the project.
Hazards and Hazardous Materials (See also section 2.3.3)	• Yellow traffic markings (thermoplastic and paint) potentially contain hazardous levels of lead chromate. Yellow traffic markings that are removed separate from the adjacent pavement may have to be managed as hazardous waste. • Accidental release of Hazardous materials	• If any yellow traffic markings are to be removed separate from adjacent pavement, the levels of lead and chromium will need to be determined. • Standard Special Provision 15-300 will need to be included into the contract. • Construction contractor, or the contractor's listed environmental sub-contractor, shall prepare a Site Safety Plan. The Site Safety Plan, at a minimum, must identify, evaluate, and control safety and health hazards, and provide for emergency response for hazardous waste operations.

Resource	Potential Impacts	Minimization, and Avoidance Measures
Cultural Resources (See also section 2.2.3)	• Although this project will not have a significant impact to cultural resources, measures shall be implemented to minimize impacts to unexpected resources during construction activities.	• If buried, or otherwise unknown cultural material, such as bones, arrowheads, bottles, foundations or other historic or prehistoric remains are discovered during work associated with this project, it is Caltrans policy that work temporarily cease in the area of the find and the environmental branch contacted immediately. A qualified archaeologist will evaluate the nature and significance of the find and coordinate the situation with the SHPO (Environmental Handbook Vol.2, Chapter 1) • If during any subsurface disturbance or pavement removal, human skeletal remains are encountered, the Contractor's construction activities, within 10 meters shall be halted immediately and the County Coroner shall be notified within 24 hours. Construction activities shall not be resumed until permitted in writing by the Engineer. All provisions of the Health and Safety Code §7054 and 7050.5 and the Public Resources Code (PRC) § 5097.98 and 5097.99 shall be followed. The California Public Resources Code § 5097.98 and 5097.99 require protection of Native American remains, which may be found, and outline procedures that must be followed for handling any burials found.
Water Quality and Storm water Runoff (See also section 2.3.2)	• Potential for erosion or siltation on or off the project site during construction.	• Preparation of a SWPPP that details the monitoring and implementation of BMPs for erosion and siltation prevention. • Special conditions in the ACOE 404 permit, CDFG 1602 permit and NCRWQCB certification will have to be adhered to.

Appendix C Project Maps

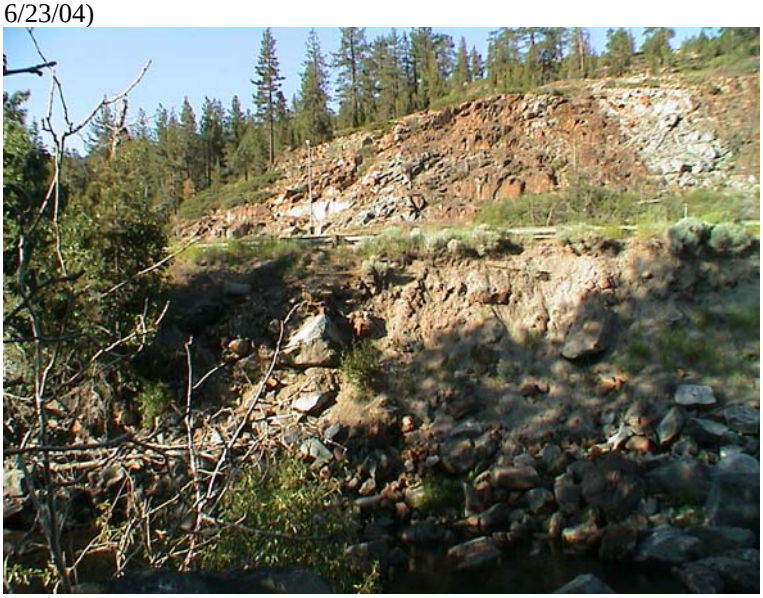
The following are maps related to the project and referenced throughout this document.

These maps include (in order of placement in this Appendix):

- Location Map
- Layout Map
- Aerial photograph of Caltrans sand shed for possible use as contractor's storage site.
- Aerial photograph of Soda Springs Over-crossing for possible use as contractors borrow site.

Appendix D Project Photographs

Embankment Failure and Proposed RSP Repair Location (Photo Taken by Caltrans Hydraulics staff 6/23/04)



Fill Embankment Failure Along WB Shoulder of Pla-80 and So. Fork Yuba River (Photo from Location Hydraulics Report prepared by Caltrans Hydraulics February 2005.

Appendix E Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

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January 14, 2005

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, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

WILL KEMPTON
Director

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