

# **Truckee River Canyon Project**

Road and Culvert Rehabilitation Project on Interstate 80 in Nevada County  
and Sierra Counties

03-NEV and SIE 28.1 to 31.8 and 0.0 to 1.6 at the State line  
EA 03-3A2200

## **Focused Initial Study with Proposed Negative Declaration**



Prepared by the  
State of California Department of Transportation

August 2007



# General Information About This Document

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

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed road and culvert rehabilitation project located in Nevada County and Sierra 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, and the proposed avoidance, minimization, and/or mitigation measures.

## ***What should you do?***

- Please read this Initial Study. Additional copies of this document as well as the technical studies are available for review at the Caltrans District 3 Office of Environmental Planning at 2389 Gateway Oaks Drive, Room 100, Sacramento, CA 95833 and at the Truckee Library at 10031 Levon Avenue, Truckee, CA 96161, phone (530) 582-7846 and at the Verdi Community Library at 270 Bridge Street, Verdi, NV 89439, phone (775) 345-8104.
- We welcome your comments. If you have any concerns regarding the proposed project, send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address:

Karen Thomas, Senior Environmental Planner  
North Region Environmental Planning  
California Department of Transportation  
P.O. Box 942874  
Sacramento, CA 94274-0001

Submit comments via email to: [Karen.Thomas@dot.ca.gov](mailto:Karen.Thomas@dot.ca.gov).

- Submit comments by the deadline: September 17, 2007

## ***What happens next?***

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

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Tammy Massengale, North Region Environmental Planning, P.O. Box 911, Marysville, CA 95901; (530) 741-4041 Voice, or use the California Relay Service TTY number, 1-800-735-2929.

SCH:  
03-NEV & SIE 80 28.1 to 31.8 & 0.0 to 1.6  
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Truckee River Canyon Road and Culvert Rehabilitation Project  
03-NEV and SIE 28.1 to 31.8 and 0.0 to 1.6 at the State line  
EA 3A2200

**FOCUSED INITIAL STUDY  
with Proposed Negative Declaration**

Submitted Pursuant to: (State) Division 13, California Resources Code  
(Federal) 42 USC 4332(2)(C)

THE STATE OF CALIFORNIA  
Department of Transportation

15 August 2007  
Date of Approval

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

## Negative Declaration

Pursuant to: Division 13, Public Resources Code

### **Project Description**

The California Department of Transportation (Caltrans), District 3, proposes a pavement and culvert rehabilitation project on Interstate 80 (I-80), beginning at the end of the Truckee River Bridge (No. 17-63) post mile (PM) 28.1 to PM 31.8 in Nevada County and from PM 0.0 to 1.6 in Sierra County. The project is 5.4 miles long. The project proposes to remove and replace the structural section with Portland Cement Concrete (PCC) pavement; replace the metal beam guardrail, replace the existing median barrier and rehabilitate critical drainage systems as necessary. Subsurface water under the westbound lanes will be intercepted along the base of the cut slopes with drainage ditches as needed. Storm water treatment will include placement of permanent Best Management Practices (BMP) facilities, as well as temporary treatment for erosion during construction.

Caltrans Hydraulics estimated 20 culverts in the project area that require rehabilitation. Approximately 14 of these culverts have zero lifespan and will require alternative lining or replacement. Approximately 6 culverts have some remaining lifespan left, but will also need repair or alternative lining. In addition, Caltrans is proposing to build sand traps and inlet drains at several culverts within the project limits to provide appropriate storm water treatment measures.

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

### **Determination**

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

The proposed project would have no effect on agricultural resources, air quality, biological resources, cultural resources, geology/soils, hazardous waste, land use/planning, mineral resources, noise, utilities/service systems, or visual aesthetics; and a less than significant effect on hydrology/water quality, public services, recreation, and transportation and traffic.

  
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John D. Webb

Chief, Office of Environmental Services -  
North Region Environmental Planning  
California Department of Transportation

24 September 2007  
Date

## **Initial Study**

### ***Project Title***

Truckee River Canyon Road and Culvert Rehabilitation

### ***Lead Agency Name, Address and Contact Person***

California Department of Transportation  
2389 Gateway Oaks Drive, Suite 100  
Sacramento, CA 95833  
Karen Thomas, Chief Branch S-2  
(916) 274-0568

### ***Project Location***

The project is site is located in Nevada County from PM 28.1 to 31.8 and in Sierra County from PM 0.0 to 1.6, ending at the State Line. The start of the proposed project is located approximately 1.5 miles east of the community of Floriston, California.

### ***Project Sponsor's Name and Address***

California Department of Transportation  
John Webb, Chief, North Region Environmental Management  
2389 Gateway Oaks Drive, Suite 100  
Sacramento, CA 95833

### ***Purpose and Need***

I-80 within the project limits was originally constructed in 1956 to 1958, and aside from various overlays and repairs performed by Caltrans maintenance, has not received a major rehabilitation effort since. The project area, due to its high elevation, is subject to snowstorms and the associated high level of wear from vehicle chains and snow removal equipment. Therefore, an appropriate PCC structural section is required to address a failing roadway surface and provide a pavement that will better withstand the weather extremes experienced within the project limits.

### ***Description of Project***

The California Department of Transportation (Caltrans), District 3, proposes a 5.4-mile long pavement and culvert rehabilitation project on Interstate 80 (I-80), in Nevada County beginning at PM 28.1 (at the end of the Truckee River Bridge No. 17-63) to PM 31.8 and in Sierra County beginning at PM 0.10 to PM 1.6 in Sierra County. The project proposes to remove and replace the structural section with

Portland Cement Concrete (PCC) pavement, replace the metal beam guardrail, replace the existing median barrier and rehabilitate critical drainage systems as necessary. Subsurface water under the westbound lanes will be intercepted along the base of the cut slopes with drainage ditches as needed. Storm water treatment will include placement of permanent Best Management Practices (BMP) facilities, as well as temporary treatment for erosion during construction.

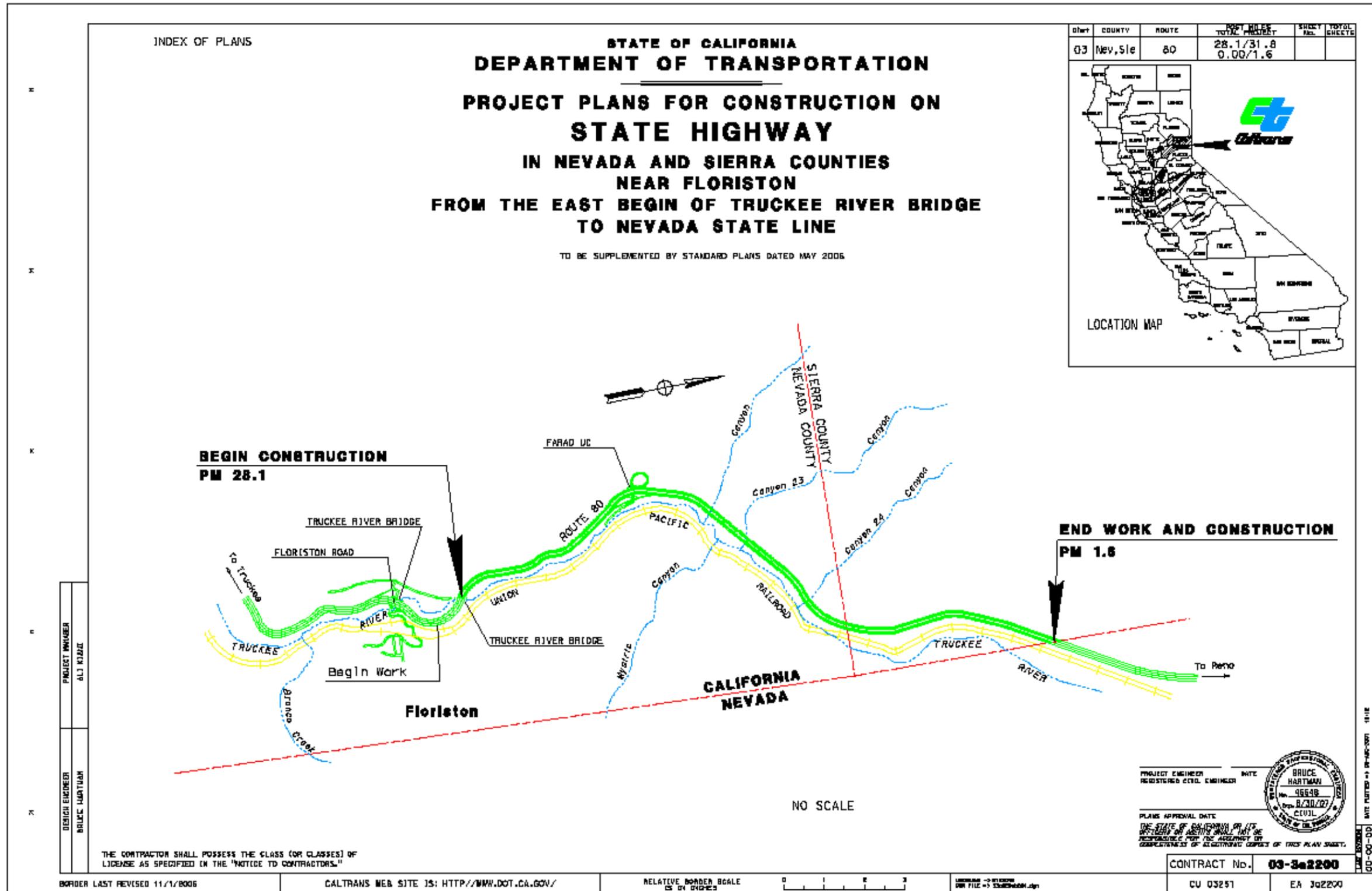
Caltrans Hydraulics estimated there are 20 culverts in the project area requiring rehabilitation. The culverts range in size and material, from 6 x 6 ft. reinforced concrete box (RCB) types to 24" corrugated metal pipe (CMP) types. Approximately 14 culverts have zero lifespan and require alternative lining or replacement and approximately 6 culverts might have some remaining lifespan left, but will also need repair or alternative lining. In addition, Caltrans is proposing to build sand traps, sand vaults, and inlet drains at several culverts within the project limits to provide appropriate storm water treatment measures. The project is located in the jurisdiction of the Lahontan Regional Water Quality Control Board (LRWQCB).

### ***Permits and Approvals Needed***

Upon completion of final design for this project, the following agencies will be contacted in order to obtain their jurisdictional permits or approvals:

- United States Army Corps of Engineers (USACE): Clean Water Act of 1977, Section 404 Permit
- Lahontan Regional Water Quality Control Board: Clean Water Act of 1977, Section 401 certification
- California Department of Fish and Game: California Fish and Game Code 1602 Streambed Alteration Agreement

Project Location Map



# Environmental Factors Potentially Affected

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The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems
- Mandatory Findings of Significance

## Impacts Checklist

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The impacts checklist starting on the next page 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.”

A brief explanation of each California Environmental Quality Act checklist determination follows each checklist item. The checklist is followed by a focused discussion of biology, cultural, and hydrology issues relating to this project.

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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**I. AESTHETICS** — Would the project:

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Have a substantial adverse effect on a scenic vista?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

*“No Impact” determination in this section is based on the Visual Impact Assessment, July 2007.*

**II. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

d) Expose sensitive receptors to substantial pollutant concentrations?

e) Create objectionable odors affecting a substantial number of people?

*“No Impact” determinations in this section are based on the Air Quality Study, August 2007.*

**IV. BIOLOGICAL RESOURCES** — Would the project:

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

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

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?

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?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

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?

*“No Impact” determinations in this section are based on the Natural Environmental Study (NES), July 2007.*

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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**V. CULTURAL RESOURCES** — Would the project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries?                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

***“No Impact” determinations in this section are based on the Finding of Effects Report, August 2007.***

**VI. GEOLOGY AND SOILS** — Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) Strong seismic ground shaking?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii) Seismic-related ground failure, including liquefaction?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iv) Landslides?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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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?

*“No Impact” determinations in this section are based on the scope and location of the project.*

**VII. HAZARDS AND HAZARDOUS MATERIALS —**

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

d) Be located on a site that 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?

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?

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?

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

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?

*“No Impact” determination in this section is based on Initial Site Investigation, April-May 2007, and Site Investigation of ADL, July 2007*

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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**VIII. HYDROLOGY AND WATER QUALITY —**

Would the project:

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

*“No Impact” determinations in this section are based on the Water Quality report, July 2007.*

**IX. LAND USE AND PLANNING —** Would the project:

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

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

*“No Impact” determinations in this section are based on conversations with Project Engineer, June-July 2007.*

**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?
- 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?

*“No Impact” determinations in this section are based on scope and location of project.*

**XI. NOISE** — Would the project result in:

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- 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?
- 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?

*“No Impact” determinations in this section are based on the scope and location of the project.*

**XII. 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

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

***“No Impact” determinations in this section are based on the scope and location of the project.***

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

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

***“No Impact” determinations in this section are based on the scope and location of the project.***

**XIV. RECREATION** —

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

***“No Impact” determinations in this section are based on the scope and location of the project.***

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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**XV. TRANSPORTATION/TRAFFIC** — Would the project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Cause an increase in traffic that 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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in inadequate emergency access?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Result in inadequate parking capacity?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

***“No Impact” determinations in this section are based on the Traffic Study, July 2007 and the Socioeconomic Report, August 2007.***

**XVI. UTILITY AND SERVICE SYSTEMS** — Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in a determination by the wastewater   |                          |                          |                          |                                     |

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

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

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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***“No Impact” determinations in this section are based on the scope and location of project7.***

**XVII. MANDATORY FINDINGS OF SIGNIFICANCE —**

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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# Affected Environment, Environmental Consequences, and Mitigation Measures

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## **Biological Resources**

### ***Regulatory Setting***

Because the proposed project is located adjacent to the Truckee River, there are several federal, state, and local agencies that have jurisdiction over the project site. The Clean Water Act (CWA) established the basic mandates for regulating discharges of pollutants into the waters of the United States. The CWA set requirements for water quality standards for all contaminants in surface waters. In 1999, the State Water Resources Control Board (SWRCB) issued a National Pollution Discharge Elimination System (NPDES) permit that regulates storm water discharges from Caltrans facilities. The permit requires Caltrans to maintain and implement an effective Storm Water Management Plan (SWMP) that identifies and describes the Best Management Practices (BMPs) used to control the discharge of pollutants to waters of the United States.

The following permits will apply to this project:

- (1) Section 404 permit issued by the US Army Corps of Engineers (USACE).
- (2) Section 401 certification (from the Clean Water Act of 1977), issued by the Lahontan Regional Water Quality Control Board. (LRWQCB)
- (3) 1602 Stream bank Alteration Agreement, issued by California Dept. of Fish and Game (DFG).

Upon completion of the final design for this project, these agencies will be contacted to obtain their jurisdictional permits or approvals.

### ***Affected Environment***

The portion of I-80 affected by the proposed project is in the Truckee River Canyon east of the crest of the Sierra Nevada Mountain Range. Sensitive natural communities in the region consist of the Truckee River, intermittent and perennial streams tributary to the Truckee River, and seeps, springs, and marshes. The

vegetation within the proposed project boundaries has been heavily disturbed by highway maintenance and snow removal.

Approximately 20 culverts will be rehabilitated. These culverts support small streams that are both perennial (year round) and intermittent. Several of these culvert streams connect with the Truckee River. Because of their habitat features and connectivity with Truckee River, some of these small streams are determined to be waters of the U.S.

### ***Avoidance and Minimization Measures***

Culvert rehabilitation will comply with 1602, 404, and 401 permit or approval conditions and with a Storm Water Pollution Prevention Program Plan (SWPPP) which will outline Best Management Practices (BMPs) to follow before, during, and after construction to ensure water quality. These measures are described in detail in the Water Quality section of this document.

### **Environmental Sensitive Areas**

Environmental sensitive areas (ESAs) are identified as an area within and near the limits of construction where access is prohibited or limited for the preservation of existing vegetation, or protection of wildlife habitat as shown on the plans. No work shall be conducted within the ESA.

ESAs shall be delineated on the contract plans. Prior to any clearing and grubbing activity, the ESAs shall be clearly marked in the field using orange construction fencing. Placement of these barriers will be the responsibility of the Contractor. Any damage to the barriers shall be repaired or replaced by the Contractor at Contractor expense within 24 hours of first being observed by a Caltrans Inspector or Resident Engineer. These barriers will remain in place until construction is complete.

### **Aesthetic/Visual Impacts**

The physical environment is composed of mountainous terrain typical of the eastern Sierra Nevada landscape including forested upland areas, river canyons, granite rock outcroppings, high elevation meadow complex, and historic train routes. The region has high scenic values. The project site contains several key visual elements:

- Native Vegetation: the site is characterized by “Great Basin” vegetative communities. Native vegetation at the project site represents a critical visual

component as it provides critical cover for wildlife, screens the view of the railroad and adjacent properties, and ties the site into the surrounding landscape pattern.

- Truckee River: in addition to its biological importance, the Truckee River represents a key visual resource along this segment of roadway.
- Rock Outcroppings: the site is punctuated by large granite rock outcroppings typically found in the area. These outcroppings are considered a high resource value as they enhance the driver's view of the surrounding landscape.

### ***Affected Environment***

Visual impacts associated with this alternative would include the following:

- Removal of native vegetation to accommodate construction vehicles while obliterating and reconstructing roadbed and road surface.
- Extensive grading along shoulder to construct new concrete shoulder barriers, increasing likelihood of pronounced long-term erosion and potential water quality impacts to the Truckee River stream environment.

### ***Avoidance and Minimization Measures***

1. All disturbed areas shall use temporary erosion control measures during construction to minimize impacts to visual resources.
2. All areas disturbed during construction shall receive permanent erosion control measures. All finished slopes and contour-graded areas shall be hydroseeded with a permanent seed mix composed of native plant species. In addition, a follow-up revegetation project may be needed to install containerized native plants to supplement the seeding process. A conceptual revegetation plan should be submitted concurrent to the biological permits for this project.
3. All efforts shall be made to minimize impacts to native vegetation and rock outcroppings in design and construction phases. Design shall minimize cut-fill limits whenever possible to avoid unnecessary disturbance of existing terrain. The use of retaining walls and other structures should be employed to minimize extent of grading disturbance.

4. Finished slopes shall reflect sensitivity to the natural topography of the site. All finished slopes shall mimic natural terrain by minimizing harshly angled slopes and hinge points. Maximum slope angle shall be 1:2 in an effort to promote revegetation of disturbed areas.
5. Replaced or new culvert down drains pipe that are visible to motorists shall be buried, where possible, or colorized with an architectural staining product in an effort to match the oxidized coloration of existing stone at the site to blend into the natural environment.
6. The outlet end of culverts in the vicinity of the Truckee River stream environment shall be sensitive to Storm Water Pollution Treatment Prevention policy.

### **Storm Water/Water Quality**

The project scope includes roadway and culvert rehabilitation. It will rehabilitate critical drainage systems and provide treatment of storm water, as necessary. Subsurface water under the westbound lanes will be intercepted along the base of the cut slopes with drainage ditches, as needed.

### ***Regulatory Setting***

Under Section 402 of the Clean Water Act, the National Pollution Discharge Elimination System (NPDES) was established to create a regulatory and permitting system for the discharge of any pollutant (except for dredge or fill material) into waters of the United States). Caltrans has a Statewide NPDES Permit issued by the State Water Resources Control Board Order No. 99-06-DWQ. This permit regulates the storm water and non-storm water discharges associated with construction activities and discharges associated with maintenance and operations of Caltrans conveyance structures and facilities.

This project falls under the Lahontan Regional Water Quality Control Board (LRWQCB) jurisdiction. The LRWQCB would issue the Water Quality Certification Permit for this project.

Under the NPDES General Permit, Caltrans is required to do the following for the project:

- Caltrans shall participate in early project design consultation with LRWQCB.

- The project shall comply with Erosion Control Guidelines specified by LRWQCB for Truckee River Hydrologic Unit.
- Unless granted a variance by LRWQCB Executive Officer, there shall be neither removal of vegetation nor disturbance of existing ground surface conditions between October 15 and May 1, except when there is an emergency situation that threatens the public health or welfare.

### ***Impacts***

The disturbed soil area is approximately 39.3 acres.

### ***Avoidance and Minimization Measures***

Adherence to the following is recommended to prevent water pollution as a result of construction activities of the Truckee River Canyon project.

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. Adherence to the compliance requirements of the NPDES General Permit CAS #000002, Order #99-08-DWQ, for General Construction Activities is also required.
2. The disturbed soil area is approximately 39.3 acres, and a Storm Water Pollution Prevention Plan (SWPPP) will be required for the project. Standard Special Provisions 07-345 shall be included in the plans, specifications and estimates (PS&E) to address these temporary construction water pollution 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. As directed by Caltrans' Storm Water Management Plan and the Project Planning and Design Guide, 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.
4. The treatment Best Management Practices shall be designed to treat sediment (total suspended solids). Infiltration Devices, Austin Sand Filter, Delaware

Filter, Wet Basin, Detention Devices, Biofiltration Strip, MCTT and biofiltration swale are treatment measures that are approved to treat total suspended solids.

5. Since traction sand is applied more than twice a year in this location, traction sand traps shall be considered to temporarily detain runoff and allow traction sand that was previously applied to snowy or icy roads to settle out.
6. The project shall meet the following region specific requirements: Storm water/urban runoff collection, treatment, and/or infiltration disposal facilities shall be designed, installed, and maintained for the discharge of stormwater runoff from all impervious surfaces generated by the 20-year, one-hour design storm within the Truckee River Hydrologic Unit (3/4-inch of rain). Runoff in excess of the design storm and generated within the project site shall only be discharged to storm drain or stabilized drainage adequate to convey 100-yr 24-hour flow. If site conditions do not allow for adequate onsite disposal, all site runoff must be treated to meet applicable Effluent Limits and/or receiving Water Limitations specified in the Basin Plan. The LRWQCB Executive Officer may approve alternative mitigation measures.
7. The Project shall comply with Erosion Control Guidelines specified by the LRWQCB for Truckee River Hydrologic Unit.
8. Unless granted a variance by the LRWQCB Executive Officer, there shall be neither removal of vegetation nor disturbance of existing ground surface conditions between October 15 of any Year and May 1 of the following year, except when there is an emergency situation that threatens the public health or welfare.
9. A Notification of Construction (NOC) shall be submitted to the LRWQCB at least 30 days prior to the start of construction
10. Upon completion of the project, submittal of a Notice of Construction Completion (NOCC) to the LRWQCB is required to indicate that project construction is completed and the Storm Water Pollution Prevention Plan (SWPPP) is no longer in effect.

## **Cultural Resources**

The Farad Hydroelectric Facility (Farad), designated by SHPO to be eligible for the National Register of Historic Places, is located within the proposed project limits. The Farad Facility consists of four primary (but interdependent) components: a diversion structure and dam, a forebay and penstocks, a raised wooden flume, and a powerhouse building. These span a distance of approximately two miles on both the east and west sides of I-80.

The construction activities related to the roadwork and drainage work will take place primarily within the roadway's prism. Work at a number of the culvert outlets adjacent to the flume, forebay and penstocks, powerhouse, and substation may require access to the area below the highway adjacent to the Truckee River. Access to this area will require driving vehicles and carrying equipment under the Farad flume along the existing maintenance road north. The access road that passes through an opening in the Farad flume that is 15 feet wide and 13.6 feet high and supported by metal I-beams in concrete footers.

The proposed undertaking does not have the potential to diminish or alter the integrity of the historic property's significant historic features through the introduction of visual, atmospheric, or audible elements. The new construction is not out of character with the property and setting. The highway and drainage systems have long been a part of the historic property's setting, and do not affect its ability to convey a sense of its historical significance.

### ***Avoidance and Minimization Measures (Construction Techniques specific to the protection of the Farad Flume)***

Access to the area beneath the bridge may be required to facilitate the installation of culvert lining. There is an existing road at the east end of the bridge (accessible from the west bound lane) that provides access under the flume for Farad maintenance vehicles. The road crosses under the flume via an opening 15 feet wide and 13.6 feet tall and is supported by metal I-beams in concrete footers. Construction crews and equipment for the culvert rehabilitation portion of the project may use this access road. The existing opening under the flume is adequate to provide access for construction equipment and does not need to be modified. However, construction equipment used by the Contractor must be smaller than 15 feet wide and 13.6 feet tall in order to fit through the opening of the flume. The condition on the size equipment will be formalized as a written Non-Standard Specification for the Contractor.

In a number of locations, work crews and equipment may require access through the flume's supports to reach a culvert's outlet. In those locations, orange fencing will be placed in the areas where access between the flume supports is needed to reach the culvert outlets.

## **Traffic**

I-80 is a primary transcontinental arterial and is a principal east-west route, as well as a major axis in the movement of goods and services connecting the east coast of the United States with the Pacific Rim. Locally, the route has extensive large truck volumes and serves transportation access to the north shore of Lake Tahoe Basin and the incorporated cities of Truckee, California and Reno, Nevada.

Since the project will involve excavating out of the old surface and new pavement, construction activity will be extensive. Construction will take place over three seasons from 2009 to 2011. One lane is expected to be closed (in the direction where road work is occurring) throughout the construction seasons, annually between May 1 to October 15. Work in the lanes is expected to be accomplished primary at night between Sunday night and Friday morning. Delays are estimated to be between 11 and 44 minutes, depending on the time of travel.

The pavement along this section of I-80 is in poor condition with rutting and numerous pavement failures. Failure to rehabilitate the pavement may lead to increased vehicular damage and large expenditures in emergency repairs that are characterized by additional construction delays and short pavement life.

This section of I-80 operates at a level of service (LOS) of "D" on weekends during peak season, while a LOS of A and B are predominant on weekdays. The Highway Capacity Manual defines LOS "D" as "bordering on unstable flow; speed, and maneuverability are severely restricted"). This section of I-80 has a peak traffic count of 3,500 vehicles per day. Commercial trucking are estimated to be 18.5 percent of annual average daily traffic count.

It is expected that implementation of the proposed project will have a positive effect on circulation and access by improving the safety and operation of the roadway. Necessary improvements to the traveled way would enhance roadway conditions and extend the life of the roadway surface.

## ***Cumulative Impacts***

Construction activity on the heavily traveled corridors of Lake Tahoe that involves any series of traffic delays may have an impact on the local economy.

Cumulative effects are impacts that result from the incremental consequences of an action when added to other past and reasonably foreseeable federal and non-federal future-time projects (actions) that may occur in the project area. There are six other pavement rehabilitation and highway improvement projects scheduled for similar or overlapping time frames as proposed projects along the I-80 corridor in Placer and Nevada Counties. These projects will also all involve extensive construction activity.

Since the stability and the sustainability of the Reno/Lake Tahoe area economy has become greatly dependent on revenue from tourism, activities that restrict access over an extended period of time to the hubs of commerce could impact local revenues, employment, and growth.

In order to minimize and reduce construction period-related cumulative economic impacts to the Reno-Lake Tahoe area, specific TMP and Community Involvement Plan (CIP) related measures are recommended.

Because the scope of “related project” activity is requiring relatively small amounts of R/W acquisition and is not capacity increasing, permanent substantial cumulative adverse impacts to land use are not expected.

## ***Avoidance and Minimization Measures***

Caltrans requires TMPs for all construction activity on the State Highway System. Where several consecutive or linking projects or activities within a region or corridor create a cumulative need for a TMP, CT coordinates individual TMPs or develops a single interregional TMP. A TMP, when implemented, results in minimized project related traffic delay and accidents by the effective combination of public and motorist information, alternative route strategies, system management, and construction strategies.

It is recommended that CT develop an “interregional TMP” because of the considerable scope of proposed concurrent related project activity in the greater project area. An interregional TMP would be expected to more directly promote interagency coordination and planning between other lead agencies that are scheduled to conduct construction during the same time frame as the proposed CT projects, such

as Placer County, El Dorado County, and Nevada Department of Transportation (NDOT).

- The Interregional TMP should include strategies for rapid removal of stalled vehicles by having tow truck service near the lane closure area.
- Caltrans will develop a Community Involvement Plan (CIP) to provide accurate and timely information to the public on the scope and nature of these projects. There are public outreach efforts recommended under the CIP that involve informational brochures, radio, newspaper, and updates to the Caltrans Tahoe Basin web site. In the CIP, Caltrans shall take into account businesses, residences, schools, public services, and special events during construction to minimize traffic delays. The outreach efforts recommended for the CIP are detailed in the Community Impact Assessment technical study written as a supporting document for this Focused Initial Study (Negative Declaration)
- Caltrans shall provide design and traffic management information to the Project Engineer, Resident Engineer, and also provide project specific Non-Standard Special Provisions (NSSPs) in the project contract.

## **Hazardous Waste**

Caltrans staff performed an Initial Site Assessment for hazardous waste. Due to the heavy vehicle traffic of I-80, it was determined there was some potential for Aerially Deposited Lead (ADL). The conclusion of the site investigation determined that ADL still exists in the soil at non-hazardous levels below three feet deep. If the top three feet of soil profile were excavated as a whole during construction, the soil may be disposed of as non-hazardous. A Specification will be prepared requiring a Lead Compliance Plan (LCP) to comply with Caltrans' requirements and Cal OSHA standards.

## ***Avoidance and Minimization Measures***

In accordance with the Caltrans requirement, the contractor(s) should prepare a project-specific Lead Compliance Plan (CCR Title 8, Section 1532.1, the "Lead in Construction" standard) to minimize worker exposure to lead-impacted soil. The plan should include protocols for environmental and personnel monitoring for personal protective equipment and other health and safety protocols and procedures for the handling of lead-impacted soil.

## List of Preparers

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

**Georgette Neale**, Associate Environmental Planner. Contribution: Environmental Study Coordinator and Document Writer

**Karen Thomas**, Senior Environmental Planner, Environmental Branch Senior

**Mike Bartlett**, Project Manager. Contribution: Project Manager

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**Gary Grunder**, Associate Environmental Planner (Natural Science). Contribution: Project biologist, Natural Environment Study (NES)

**Andrew Agustinovich**, Transportation Planner. Contribution: Community Impact Assessment

**Sharon Tang**, Transportation Engineer. Contribution: Air Quality

**Benjamin Tam**, Transportation Engineer. Contribution: Noise Report

**Bruce Hartman**, Senior Transportation Engineer. Contribution: Project Senior and Project Engineer

**Chris Rockey**, Hydraulics Engineer. Contribution: Culvert Surveys and Water Quality Plans

**Daniela Guthrie**, Transportation Engineer. Contribution: NPDES Storm Water Coordinator

**Rizia da Cruz Ferreira**, Transportation Engineer. Contribution: Design Plans

**Noelia Bradley**, Transportation Engineer. Contribution: Design Plans

**Rajive Chadha**, Transportation Engineer. Contribution: Initial Site Assessment (Hazardous Waste) and Task Order Manager for Site Investigation

**Lisa Worthington**, Landscape Associate. Contribution: Visual Impact Analysis Report