DN-199 Rock Outcropping Removal

U.S. Highway 199 in Del Norte County
01-DN-199-KP 36.4/37.0 (PM 22.6/23.0)
EA 45000

Initial Study with Proposed Negative Declaration

Prepared by the
State of California Department of Transportation

June 2006

General Information About This Document

What's in this document?

This document is an Initial Study (IS), which examines the existing environment and environmental impacts, presents avoidance, minimization and/or mitigation measures that could result from the proposed project located in Del Norte County, California. It meets the requirements of the California Environmental Quality Act (CEQA) which requires the preparation of an IS when a project could have significant impacts to the environment.

What you should do?

- Please read this Initial Study/Environmental Assessment. Additional copies of this document are available for review at the Caltrans District 1 Office of Environmental Management, 1656 Union Street, Eureka, CA 95502.

- We welcome your comments. If you have any comments regarding the proposed project, please send them to the Caltrans District 3 Office of Environmental Management by the deadline.

- Submit comments via postal mail to:

  Susan D. Bauer, Sr. Environmental Planner

  California Department of Transportation – District 3 Office of Environmental Management

  P.O. Box 911

  Marysville, CA 95901

- Submit comments via e-mail to sue_bauer@dot.ca.gov
- Submit comments by the deadline: July 7, 2006

This document will be available for public and agency review for 30 days from June 5, 2006 to July 7, 2006. It is expected that with the proposed avoidance, minimization and/or mitigation measures the project would not result in significant impacts to the environment, as documented in the Proposed Negative Declaration, which is included in this IS.

What happens next?

Following approval of this document, Caltrans may 1) give environmental approval to the proposed project, 2) undertake additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans may design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Susan D. Bauer, Environmental M-1 Branch, P.O. Box 911, Marysville, CA 95901; (530) 741-7113 Voice, or use the California Relay Service TTY number, 1-800-735-2929

SCH#
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Rock Outcropping Removal on U.S. Highway 199 in Del Norte County, California
KP 36.4/37.0 (PM 22.6/23.0)

INITIAL STUDY
WITH PROPOSED
NEGATIVE DECLARATION

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

THE STATE OF CALIFORNIA
Department of Transportation

23 May 2006
Date of Approval

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

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State of California
Department of Transportation

SCH Number:
01-DN-199-36.4/37.0
(22.6/23.0)

Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) is proposing to remove rock outcroppings at various locations within a 0.3-mile segment to achieve a two to three-foot increase in roadway width on SR-199 in Del Norte County (KP 36.4/37.0)(PM 22.6/23.0). Construction activities will consist of roadway rehabilitation and rock chiseling at various locations within the project area and construction of new roadbed section within the widened area. Caltrans has identified 11 specific locations within the project area ranked by priority where the work would take place. Work is proposed on an around the clock schedule due to the narrow work area that lacks shoulders for room for vehicles to pass.

Determination

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

- The proposed project will have **no effect** on air quality, floodplains, utilities, noise levels, public services, farmland, planned land use, neighborhood integrity, or social, recreational or educational facilities;
- The proposed project will not increase seismic hazards or induce growth, and does not include any hazardous waste sites;
- The proposed project will have **no significant effect** on water quality, cultural resources, geology and soils, wetlands, or wildlife.

_____ _____

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

Date

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List of Abbreviated Terms

ac	Acre
AC	Asphalt concrete
ADT	Average Daily Traffic
APE	Area of Potential Effects (cultural resources)
BMP	Best management practices (water quality)
Caltrans	California Department of Transportation
CDFG	California Department of Fish & Game
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	Carbon monoxide (air quality)
dBA	Decibels (noise level measurement)
DI	Drainage Inlet
ES	Edge of shoulder
ESA	Environmentally Sensitive Area
ESA	Endangered Species Act
ETW	Edge of traveled way
FG	Finished grade
FHWA	Federal Highway Administration
FPPA	Farmland Protection Policy Act
ft	foot/feet
HDM	Highway design manual
HP	Hinge point
HPSR	Historic property survey report
IS	Initial Study
km	kilometer(s)
KP	kilometer post
Leq	Equivalent noise level
LOS	Level of service
m	meter(s)
MBTA	Migratory Bird Treaty Act
mi	mile(s)
NAC	Noise abatement criteria
NEPA	National Environmental Policy Act
NES	Natural Environment Study (biological resources)
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NRA	Natural Resources Conservation Service
PG&E	Pacific Gas & Electric
PM	post mile
ppm	Parts per million
PRC	Public Resources Code
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board

SHPO	State Historic Preservation Office
SR	State Route
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish & Wildlife Service
WSRA	Wild and Scenic Rivers Act of 1968

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) is proposing to remove rock outcroppings at various locations within a 0.3-mile segment to achieve a two to three-foot increase in roadway width on SR-199 in Del Norte County (KP 36.4/37.0)(PM 22.6/23.0). Construction activities will consist of roadway rehabilitation and rock chiseling at various locations within the project area and construction of new roadbed section within the widened area. Caltrans has identified 11 specific locations within the project area ranked by priority where the work would take place. (See Figure 1-1) Work is proposed on a round the clock schedule due to the narrow work area that lacks shoulders for room for vehicles to pass.

The project will be funded from the Caltrans District 1 Minor A Program (projects with construction costs not exceeding $1 million). Construction is expected to occur in 2008.

1.2 Purpose and Need

State Route (SR) 199 in the project area is a curvilinear two-lane highway traversing the steep and rocky Smith River Canyon. The existing roadway alignment of SR-199 within the project limits was built in the early 1920's. State Route 199 in the vicinity of this project is designated as a United States Forest Service (USFS) Scenic Byway as well as a National Recreation Area. Highway attributes including cliffs, rocky outcrops, and a sharp curvilinear alignment that spans from the north of Patrick Creek to six miles south of the Oregon border, characterize this area. (See Figure 1-2)
This segment of SR-199 has a curvilinear alignment with total roadway widths as narrow as 21 ft. The roadway is confined by Metal Beam Guardrail (MBGR) on the right (river) side and vertical rock face on the left (cliff) side with no paved shoulders on either side. Westbound vehicles, especially larger vehicles and trucks, shy away from the rock face and veer towards the double yellow stripe. Eastbound vehicles, constrained by the MBGR, cannot move over to allow opposing traffic to pass.
(See Figures 1-3 & 1-4)

The goal of this project is to provide a minimum roadway width of 24 ft. throughout this segment of SR-199. Removing these outcroppings would allow more room for the passage of opposing vehicles.

Figure 1-1. Proposed Work and Priorities

Location	P.M.	Priority	Proposed Work
1	22.80	1	Lane widths measured 3.8 m and 2.85 m. Will need to cut 9-12 m (30 to 40') high about 61 m (200') wide.
2	22.82	M to L	Same as Above
3	22.84	2	Lane widths – 10.9'/10.9'. Maintenance considers worst spot. Will need to cut up to 100' high about 200' wide by manlifts.
4	22.86	M to L	Roadway width – 21' across. Need to cut 40' high to 30' wide. Maybe just add some pavement. Any minor cuts would unstabalize the slopes.
5	22.89	3	Lane widths – 3.0m/3.1m. Geotech recommended no work in this area due to unstable rock on the slopes. Try to get a foot of pavement if possible.
6	22.91	3	Roadway width – 22.25'. Maintenance considered this location a Low priority.
7	22.97	3	Roadway width - 20.6. Will need to do 30'-40' of blasting with dynamite up to the threes. Could cut the rock vertically about a foot to get some width.
8	22.98	3	Roadway width – 21.7'. Will need cut 50' wide – 61' high. Lots of vegetation between the slopes and roadway that means trucks probably don't go off of the pavement. Probably not a critical location.
9	23.00	4	Roadway width – 22.0'. Will need to cut 60' high by 60' wide either by manlift or blasting. Dwayne said to him it was a low priority.
10	23.02	4	Roadway width – 21.6'. Will need to cut 120' high by 120' wide.
11	23.05	4	Roadway width – 22.8'. Will need to cut 30' to 40' high by 45' wide. It is a medium to low priority.

H – High M – Medium L - Low

Figure 1-2. Project Location

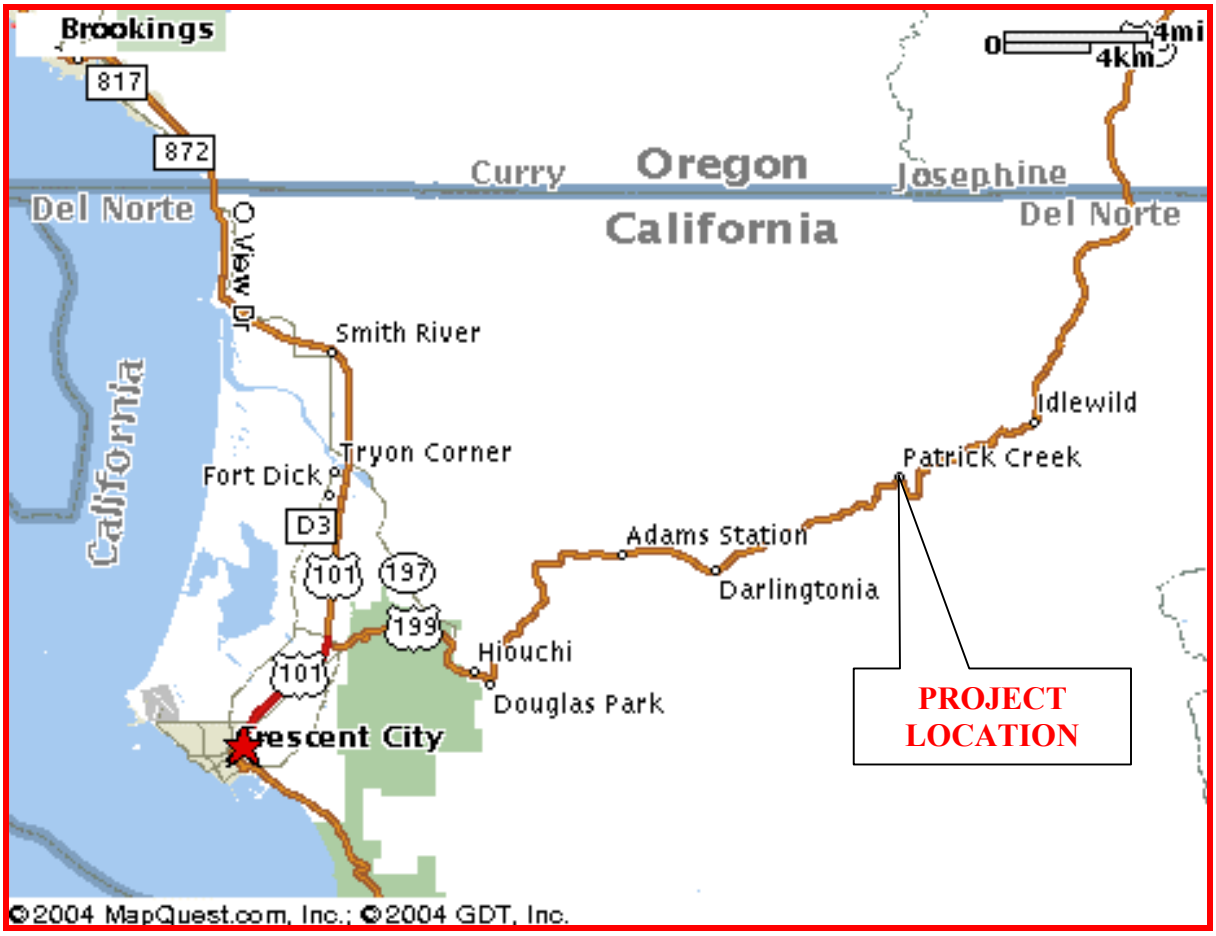


Figure 1-3. Color Layout

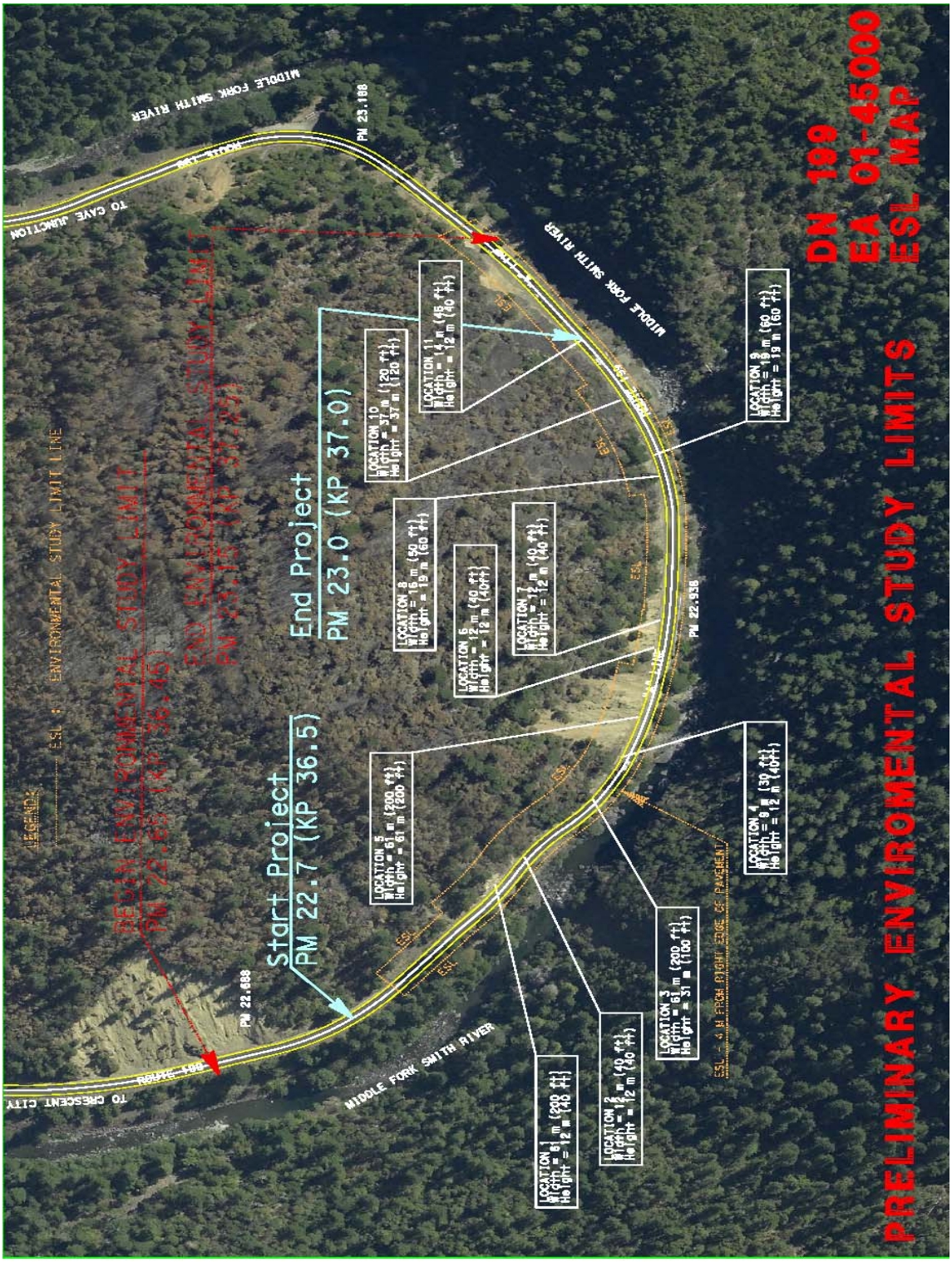
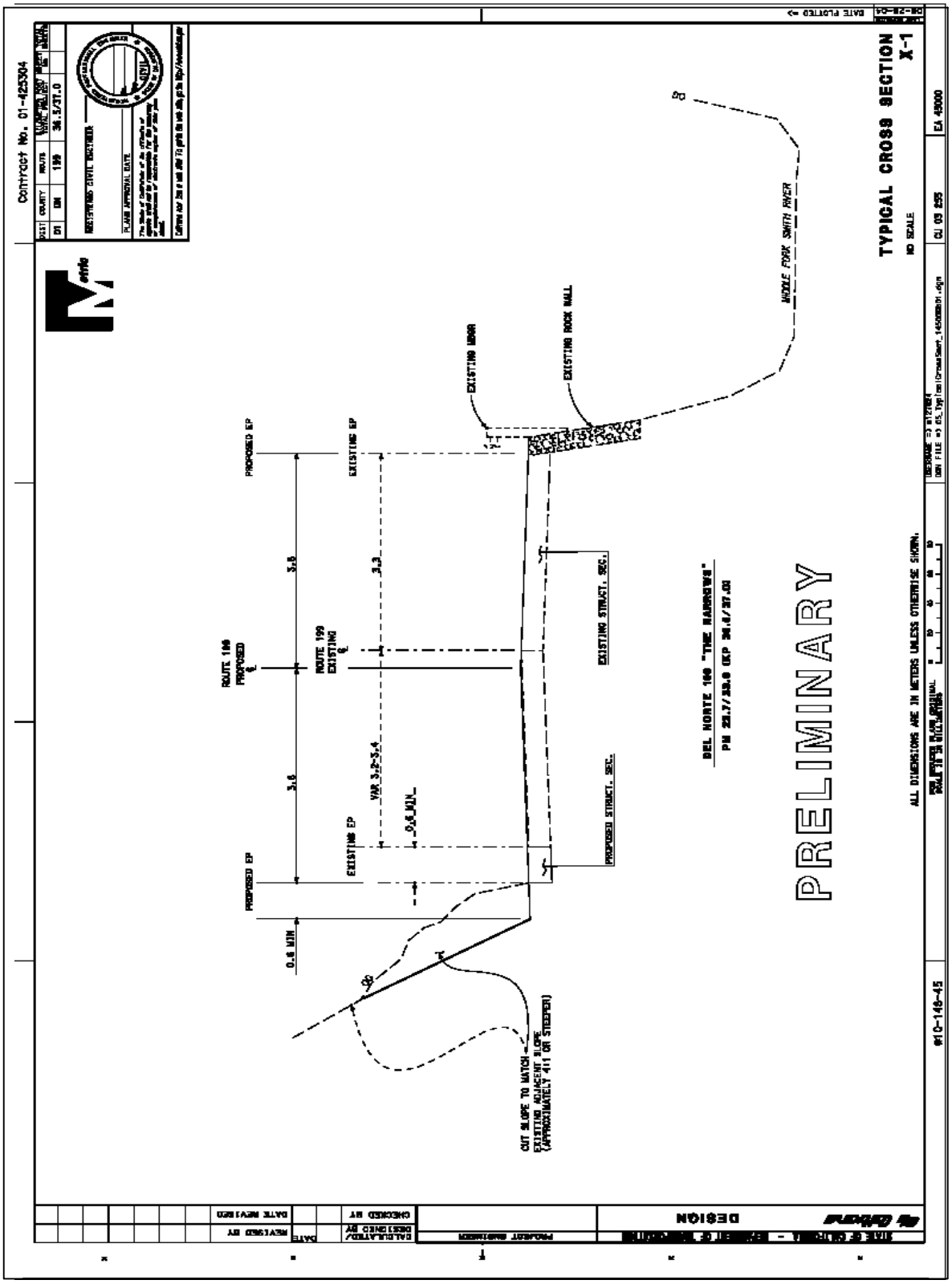


Figure 1-4. Cross Section



1.3 Alternatives

The project will be divided up over time (due to funding) and work will be done on only 2 or 3 high priority rock face sections the first year of work. Eleven locations were identified within the project limits to be worked on. The eleven locations were prioritized and a cost estimate was prepared for four alternatives. The two high priority locations are 1 and 3.

Alternative 1 Build Alternative

Alternative one proposes to remove rock outcroppings at 3 locations and provide two 12 ft. traffic lanes. Alternative 1 includes locations 1-3 and would provide a variable slope of 0.4:1 (horizontal:vertical) or less. (See Fig.1-1) Most of the rock removal will be done with a drill attached to a crane; this can be done up to 40 ft. high. There are a few sections where the rock outcroppings rise over 40 ft. high (one of the high priority sections is 100 ft. high), which is to be removed by blasting.

The estimated cost of Alternative 1 for rock removal is $740,000. The project is funded from the Minor A HB4N fund in the 2006-2007 fiscal year.

No-Build Alternative

A No-Build Alternative is included to provide a baseline for comparison of the impacts of a proposed project. With a No Build Alternative, the rock outcropping would not be removed and the other associated improvements would not be constructed. It is expected that the vehicle accident rate would continue to be three times higher than normal within the project limits. This alternative would not meet the purpose of the project, which is to improve the safety and operation of the highway.

Alternatives Considered and Withdrawn

Alternative 2 would include Locations 1-11 with a variable slope of 0.5:1 or less. The only difference between this alternative and Alternative 1 Build Alternative is that the total estimated cost is higher due to including more locations and flatter sideslopes. Preliminary analysis indicated that this alternative would cost around $2.14 million, which is three times as much as Alternative 1. Due to excessive cost this alternative was withdrawn from consideration

Alternative 3 would include Locations 1-3 with variable sideslopes of 0.5:1 or less. The only difference between this alternative and Alternative 1 Build Alternative is that the total estimated cost is higher due to flatter sideslopes. Preliminary analysis indicated that this alternative would cost around $1.38 million, which is twice as much as Alternative 1. Due to excessive cost this alternative was withdrawn from consideration.

Alternative 4 would include Locations 1-3 with variable sideslopes of 0.45:1 or less. The only difference between this alternative and Alternative 1 Build Alternative is that the total estimated cost is higher due to the flatter sideslopes. Preliminary analysis indicated that this alternative would cost around $1.14 million, which is 1.5 times as much as Alternative 1. Due to excessive cost this alternative was withdrawn from consideration.

1.4 Permits and Approvals Needed

The proposed project would require the following environmental permits/approvals:

Agency	**Permit / Approval**
U.S. Army Corps of Engineers	Section 404 Nationwide Permit
North Coast Regional Water Quality Control Board	Section 401 Certification; obtain coverage under department's NPDES Permit (Order No. 00-06-DWQ)
Calif. Dept. of Fish & Game	Section 1602 Streambed Alteration Agreement
United State Forest Service	Scenic Byway and Wild & Scenic River Concurrence
United States Fish & Wildlife Service	Informal Section 7 Consultation for Threatened and Endangered Species

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Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation 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 to resources.

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

- **Growth** - The purpose of the proposed project is to improve safety. The project would not provide for an increase in traffic capacity (such as additional through-traffic lanes) and would not contribute to growth in the surrounding area.
- **Community Impacts** - The proposed project is located in a rural area east of the community of Gasquet, CA, and does not include any work in the community.
- **Geology/Soils/Seismic/Topography** – There are no geotechnical elements in the project area that need to be addressed as stated in a Preliminary Geotechnical Report (Caltrans 2005). No impacts related to soil type are anticipated.
- **Paleontology** - The Architectural Study Report (Caltrans 2005) indicated that paleontological studies were not applicable to the proposed project.
- **Utilities** – The Environmental Study Request (ESR, Caltrans 2004) states that the proposed project would not impact any utilities.
- **Farmland** – There is no farmland within the project area, therefore, there would be no impact to farmlands.
- **Hazardous Waste** – An Initial Site Assessment (ISA) (Caltrans, 2005) indicated that the project area is free of any hazardous waste.
- **Cumulative Impacts** –The proposed project would not contribute to cumulative impacts to resources in the project area.

2.1 Human Environment

Scenic Byway

Affected Environment

The Smith River Scenic Byway is 33mi. long and is the shortest route in the 10-route United States Forest Service Scenic Byway Network. It encompasses spectacular views of majestic redwood forests and the jade green waters of the crystal-clear Smith River. There is the ancient redwood grove of Jedediah Smith State Park, named after the famous mountain man and explorer said to be the first European to come to California overland. In a subtle change in scenery, redwoods and rolling hills are replaced with Douglas fir-covered ridges and steep canyons. The middle and south forks of the Smith River come together at an area known as the "Forks". The Smith River is the purest river in California and one of the only remaining free-flowing river systems in the State. Its unique, light green color is the result of exceptionally clean, sediment-free water flowing over a smooth granite river bottom. The closeness of the highway to the river and numerous turnouts along the route allow motorists to view deep green pools contrasted against white water rapids. The route continues to parallel the Middle Fork of the Smith River. Two notable geographic sights along the way are the gigantic, rounded boulders of the "Gorge" just north of the Forks and a section of steep, moss-covered river canyon north of Patrick's Creek called the "Narrows." Winter brings heavy rains and a number of cascading waterfalls along the route. The area is a haven for birds and birdwatchers. The Smith River Scenic Byway officially ends at Collier Tunnel at the edge of the Smith River Watershed just short of the California/Oregon border.

The project is within the Smith River Wild and Scenic River corridor managed by the USFS and is protected by the Wild and Scenic Rivers Act (WSRA) of 1968. The National Park Service states, "The idea is not to halt development and use of a river; instead, the goal is to preserve the character of the river. Compatible uses with the management goals of the river are allowed and change is expected to happen. Development not damaging to the outstanding resources of the designated river, or curtailing its free flow, are usually allowed."

Impacts

The project will not substantially affect the Scenic Byway. As manager of the resource, the USFS District Ranger granted concurrence of this project with their Scenic Byway guidelines on November 28, 2005 (See Figure 1-5).

Avoidance, Minimization and/or Mitigation Measures

None Required

Section 4(f)

Affected Environment

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C. 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project…requiring the use of publicly owned land of the public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land.
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Impacts

Temporary construction easements are required from the USFS as the project is within the Smith River National Recreation Area and a Wild and Scenic River corridor. However, the project will not affect any public access to the river or river recreation activities such as fishing or boating. There are no designated river access or public trails within the project limits. Therefore, there will not be Section 4(f) involvement for this project.

Avoidance, Minimization and/or Mitigation Measures

None Required

Traffic and Transportation/Pedestrian and Bicycle Facilities

Affected Environment

SR-199 in Del Norte County is a 2-lane conventional highway with intermittent passing lanes and a "D" level of service. It is an important inter-state transit route

connecting central Oregon with the north coast of California. (Route Concept Report 1999).

A Traffic Accident Analysis and Surveillance System (TASAS) report covering 1/01/2000 through 12/31/04 listed 9 collisions in a five-year time frame. There were no fatal collisions, one injury collision and eight property damage-only collisions. The primary collision factors associated with these collisions include five other violations, two "excessive speed", one "other than driver" and one "unknown". The environmental conditions during these collisions were five "wet", four "dry", six "dark" and three during "daylight" hours. The data also reflects that this highway segment operates at over three times the statewide average for total collisions when compared to similar facilities within the state.

Eight of these nine collisions were multi-vehicle, which were proceeding opposite directions, indicating turn movements for unknown reasons were involved.

Pedestrians and bicyclists are currently allowed to use the roadway within the project limits, though there are no official bicycle/pedestrian designations.

Impacts

Removal of the existing rock outcropping should further assist in reduction of these unknown turn movements and future vehicle conflicts. Additionally, repairing the roadway surface should improve traction during inclement weather conditions.

Avoidance, Minimization and/or Mitigation Measures

A Transportation Management Plan has been developed for this project and would be updated during the final project design.

It is anticipated that during staged construction to allow for blasting operations, traffic will be required to stop and the road may be closed for periods not to exceed 30 minutes. After each closure, all accumulated traffic shall be allowed to pass through the work zone before another closure is made.

All impacted emergency response agencies would be notified in advance of any planned traffic control operations. The Contractor would prepare an emergency response action plan prior to the beginning of construction. This plan would address the facilitation of emergency vehicle access through the construction zone.

Visual/Aesthetics

Affected Environment

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)]

The project area is located on SR-199, which parallels the Smith River from Post Mile 5 to Post Mile 30. SR-199 links northwest California and southwest Oregon to Grants Pass, Oregon and the I-5 corridor. It is also part of the Redwood Highway corridor, which extends from San Francisco to Grants Pass and follows both the Route 101 and SR-199 corridors.

The mountains visible from the project area are part of the Siskiyou Range which extends into California and Oregon. The mountains visible from the highway range from 2,500 to 3,500 feet and are covered by mostly Douglas fir forest, which includes madrone, rhododendron, azalea, big-leaf maple, alder, willow and a variety of wildflowers. The mean annual precipitation ranges between 60 and 100 inches depending on altitude and aspect. Most of the precipitation is rain at lower elevations although snow is common at higher elevations.

The main focal point along SR-199 is the Smith River, which flows approximately 100 feet downhill from the highway. Views of the river are common although existing roadside vegetation and local topography often obstruct views of the middleground and background. Exposed rock outcrops with patches of native vegetation are also common along the roadside and provide a scenic resource for the driving public. Most commercial and residential development is limited to small towns including Gasquet and Hiouchi, which are located along the western half of SR-199 corridor. No development is visible within the project site; however Patrick Creek Lodge is less than a mile to the west of the project area. Most of the visible built elements are limited to highway infrastructure including metal beam guardrails, highway signage, culverts and asphalt pavement surface with traffic striping. From the Smith River, large cut slopes, metal beam guardrail and existing retaining walls are the most common built elements visible from the water and shores.

The 305,000-acre Smith River National Recreation Area (NRA) highlights the Smith River and is one of the largest Wild and Scenic River systems in the United States. The Smith River NRA is located within the Six Rivers National Forest. The 27-mile

Smith River National Scenic Byway begins near Crescent City at the junction of Route 101 and Route 199 and follows the highway northeast past Gasquet to the California/ Oregon state border

Impacts

Visual Impacts

Impacts to the visual character of the highway will be low to moderate. The existing rock outcrop will be cut back several meters to allow for wider traffic lanes. The project goal is to allow for improved roadway width conditions for passenger vehicles and large trucks. This project will have the added benefit of improving sight distance on the sharper curves where the existing rock formation blocks adequate views of the roadway ahead. The visual character of the road with a rock outcrop adjacent to the roadway will remain although the hillside will be slightly farther from the edge of the roadway. Existing vegetation including trees, shrubs, grasses and moss has pioneered within cracks of the rock surface and on flatter surfaces where soil has collected. Vegetation will be impacted where the rock is to be removed. The new rock surface will be void of the vegetation however it is expected that over time, native vegetation will pioneer on the new rock surface.

Temporary Impacts

Temporary impacts created during project construction will include areas used for staging of equipment and materials. Passing vehicles will observe the storage of heavy equipment, dirt, and other materials required in the construction of the viaducts, retaining walls and metal beam guardrails. Temporary erosion control measures such as straw bails and fabric used where materials are stored may be visible from the roadway. During construction, local pullouts will not available for public use. These temporary visual impacts are part of the general construction landscape and do not require mitigation. Temporary traffic signage will be used to direct motorists through the construction site. Although the temporary traffic signals will not blend into the surrounding landscape, they are required for traffic safety and will not create adverse visual impacts.

Natural Resource Impacts

The project scope includes shaving off part of an existing rock outcrop. Rock outcrops are viewed as a scenic resource on the California Highway System due to their interesting form, line and color. Currently, the rock outcrop is immediately adjacent to the roadway and is subject to collisions with passing trucks and passenger vehicles. Although this project will impact the rock outcrop, there will be no adverse impacts to the outcrop as a scenic resource.

Avoidance, Minimization and/or Mitigation Measures

The scope of this project does not require mitigation to address impacts to the visual character of the highway. The new rock outcrop surface will have a similar surface and texture compared to existing conditions. Although there will be some minor impacts to existing vegetation, mitigation planting is not feasible due to the steepness of terrain and rocky nature of the site. Over time, native plants will naturally pioneer where conditions allow. During blasting of the rock outcrop, there should be an attempt to provide rock surface characteristics that allow for pioneering of native plants. Small benches or pockets should be created during the blasting process to allow for collection soil. Over time the soil buildup will allow for natural plant growth.

Cultural Resources

Regulatory Setting

The proposed project is a federal undertaking subject to 36 CFR Part 800, implementing regulations for Section 106 of the National Historic Preservation Act and will be processed under the *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act* (January 1, 2004) (PA). In addition, the project is subject to state historic preservation laws and regulations set forth in the California Environmental Quality Act (PRC§21000 et seq.). According to Section 15064.5 of CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. Lead agencies are required to identify any historic resources that may be affected by any undertaking involving state or county lands, funds, or permitting. Furthermore, the significance of such resources that may be affected by the undertaking must be evaluated using the criteria for listing on the California Register of Historical Resources (PRC§5024.1, Title 14 CCR, Section 4852).

Affected Environment

A record search was completed at the North Coastal Information Center of the California Archaeological Inventory, Yurok Tribe on February 14, 2005 (Attachment 2). The record search included documentation of known archaeological sites, prior investigations, historic landmarks, historic markers, ethnographic accounts (Drucker 1937; Waterman 1925) as well as any properties listed in the California Register of Historic Places within a 1/2-mile of the project area. As a result of the records search, no previous cultural resource surveys have been conducted in the current Area of Potential Effect (APE), and no prehistoric or historic sites have been identified. Four studies (King 1972; Gmoser 1979; Oshins 1975; Unknown, N.D., No Title) have been conducted within the project vicinity, with a hydraulic mining site (CA-DNO-95H), and a historic trail (CA-DNO-283H) noted within one-half mile of the APE. In addition, a camping spot for inter-tribal trade was noted at Patrick's Creek, along with Patrick's Guards Station, and an undefined archaeological site have been noted within the project vicinity. A 1935 GLO plat map of T17N/R3E notes trails, a guard station, and a mining ditch and flume within a ½ mile from the APE. No historic landmarks, historic markers or properties listed in the California Register of Historic Places were identified in the project area.

The California Native American Heritage Commission (CalNAHC) was contacted to request a search of the sacred land files for the project area. Although the search failed to yield information on Native American cultural resources located within or adjacent to the project area, the CalNAHC provided a list of individuals and organizations in the Native American community that may be able to provide information about unrecorded sites in the project vicinity. Groups contacted included the Elk valley Rancheria of the Smith River Tolowa, the Smith River Rancheria of California, and the Melochundrum Band of Towola Indians. A letter was received dated August 17, 2005 stating that the Smith River Rancheria currently had slight to no concern of possible archeological or historical significance in the area. However they requested that if archeological materials are found during construction that all work stop, and they along with other entities are contacted. No additional comments were received.

On January 24, 2005, Kathy McCovey from the Six Rivers National Forest was contacted by phone regarding cultural resources within and/or adjacent to the project area. According to the Forest Service, the project area has not been previously surveyed, and no known cultural resources have been identified. Two sites, CA-DNO-283H (FS 05-10-51-175), and CA-DNO-95H (FS 05-10-51-31), were noted

within the project vicinity. CA-DNO-283H, the Smith River Trail, runs from Patrick Creek to Monkey Creek, over the ridge, approximately 1/2 mile north of the APE. CA-DNO-95H (FS 05-10-51-31), which Ms. McCovey described as a California Conservation Corp campground with stone work and concrete, is located to the west.

On February 8, 2005 and June 24, 2005, the entire project area including two proposed staging areas were subjected to an intensive pedestrian survey under the guidance of the *Secretary of the Interiors Standard's for the Identification of Historic Properties*. At that time, the ground surface was examined for indications of surface or subsurface cultural resources. The general morphological characteristics of the ground surface were inspected for an indication of subsurface deposits that may be manifested in the road cuts and cleared ground. Whenever possible, the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances were examined for artifacts or for indications of buried deposits. The area above the road cut on SR-199 was not examined due to steep terrain, and loose rocks. No subsurface investigations or artifact collections were undertaken during the pedestrian survey.

As a result of the field survey, a stone retaining wall was identified within the project APE. The wall is exempt from evaluation as pursuant to Stipulation VIII, Attachment 4 (Property Type 1) of the *PA* as determined by Gail St. John, Caltrans PQS (Principal Architectural Historian). In addition, the wall should not be affected by construction activities, which will take place on the opposite site of the roadway. No other cultural resources were identified during the surveys of the project and staging areas.

The project area is situated on SR-199, which is incised into a steep slope above the Smith River. The area has been altered from its natural form due to road construction, with ground visibility with in the project area limited to the bedrock cut on the north side of the highway. No cultural resources were identified with the area proposed for the curve realignment with the exception of the exempt Caltrans retaining wall. In addition, the proposed Patrick's Creek staging area and the paved pull-put at PM 23.0 have been heavily modified from their natural form due to grading and paving, and are not considered sensitive for subsurface archaeological deposits.

Despite the proximity to the Smith River, the area designated for curve realignment and staging areas are not considered sensitive for cultural resource, due to the steep

slope, and the removal of sediments during the creation of the roadway. Therefore, based on examinations of exposed areas, subsurface archaeological deposits at these locales are highly unlikely.

Avoidance, Minimization and/or Mitigation Measures

In the unlikely event that human remains are discovered during project construction, procedures in accordance with provisions of the State Health and Safety Code, Sections 7052 and 7050.5 and the State Public Resources Code Sections 5097.9 to 5097.99 will be followed. Sections 7052 and 7050.5 of the State Health and Safety Code define the disturbance of Indian cemeteries as a felony. The code further requires that construction or excavation is stopped in the vicinity of discovered human remains and the Sheriff and Coroner is notified immediately. The Coroner must determine whether the remains are those of a Native American within 48 hours. If the remains are determined to be Native American, the Coroner shall contact the California Native American Heritage Commission within 24 hours. Subsequent procedures shall be followed, according to State Public Resources Code Sections 5097.9 to 5097.99, regarding the role of Native American participation.

2.2 Physical Environment

Hydrology and Water Quality

Regulatory Setting

National Pollution Discharge Elimination System (NPDES) permits for storm water discharges must meet all applicable provisions of Section 301 and 402 of the Clean Water Act (CWA). In 1996, Caltrans requested that the State Water Resource Control Board (SWRCB), consider adopting a single NPDES permit for storm water discharges from all Caltrans properties, facilities, and activities that would cover both the MS4 requirements and the Statewide Construction General Permit requirements. As such, all storm water and non-storm water discharges from Caltrans right-of-way, properties, facilities, and activities are regulated by the Caltrans Statewide NPDES Permit (Order No. 99-06-DWQ, NPDES No. CAS000003).

Caltrans has a revised the Storm Water Management Plan (SWMP, May 2003) that includes new and revised Best Management Practices (BMPs) categories, including:

1. Design Pollution Prevention BMPs – Preservation of existing vegetation, concentrated flow conveyance systems, slope/surface protection, etc.;

2. Treatment BMPs – Infiltration and detention basins, traction sand traps, biofiltration, etc.;
3. Construction Site BMPs – Temporary soil stabilization and sediment control, non-storm water management, and waste management; and
4. Maintenance BMPs – Litter pickup, materials handling, waste management, street sweeping, etc.

Affected Environment

For the purpose of this project, the water quality study limits are located on SR 199 from KP 36.4 to 37.0 (PM 22.6 to 23.0). The project is located along the Middle Fork of the Smith River in Hydrologic Area (HA) 103.30, and within the jurisdictional boundary of the North Coast Regional Water Quality Control Board (NCRWQCB). The NCRWQCB has the authority to implement water quality protection standards through the issuance of permits to protect waters of the State. Water Quality Objectives for the North Coast Region are specified in the Water Quality Control Plan (WQCP) for the North Coast Region (Basin Plan) prepared in compliance with the Federal CWA and the State Porter-Cologne Water Quality Control Act. The Basin Plan establishes water quality objectives and implementation programs to meet stated objectives and to protect the beneficial uses of both surface waters and groundwater.

The receiving water for the project limits is the Middle Fork of the Smith River. The Middle Fork of the Smith River is a tributary to the Smith River, which enters the Pacific Ocean about 3.5-miles south of the Oregon Border. The river has the greatest annual discharge per square mile of any major California Basin. The average annual precipitation in the watershed is approximately 100-inches, most of which falls between October and March. The average annual precipitation in the project area is approximately 90-inches.

Section 303(d) of the CWA requires States to identify and list surface waters that are considered impaired and therefore not attaining water quality objectives. The listed surface waters are considered water quality-limited and are reported on the CWA 303(d) list. The Smith River is not listed on California's CWA 303(d) list.

The beneficial uses of any specifically identified water body generally apply to all its tributaries. The beneficial uses for the Smith River as listed in the Basin Plan are the following:

- MUN - Municipal and Domestic Supply

- AGR - Agriculture – Irrigation / Stock Watering
- IND - Industrial Service Supply
- REC1 and REC2 - Recreation – Contact / Other non-contact
- COMM - Commercial and Sport Fishing
- WARM and COLD - Freshwater Habitat – warm and cold
- WILD - Wildlife Habitat
- RARE - Rare, Threatened, or Endangered Species Habitat
- MIGR - Migration of Aquatic Organisms
- SPWN - Spawning, Reproduction, and/or Early Development
- EST - Estuarine Habitat
- AQUA - Aquaculture

Impacts

The Middle Fork of the Smith River is the receiving water for this project, and flows year round. The Middle Fork is located south of the highway alignment and flows relatively adjacent to the highway at this location. The project is located in a steep narrow canyon. There is a near-vertical rock face adjacent to the westbound lane with no paved shoulder. The eastbound lane (river side) is bounded by guardrail with no shoulder. This project proposes to remove the outcropping close to the existing pavement and increase the horizontal clearance to 7.3-meters (24-feet). As such, this project will result in virtually no exposure of erodible soils resulting in a very low potential for increased sedimentation to the Middle Fork. The increase in impervious additional pavement surface is approximately a difference of 14%, resulting in an increase storm water flow for the 24-hour, 85th-percentile storm of 0.1 cubic-meters-per-second (0.4 ft^3/sec). Existing drainage structures should be designed to accommodate the increase in storm water runoff.

Given the existing and proposed storm water drainage systems within the project limits and the regional water quality concerns associated with this area, the following water quality checklist response comments were completed specific to the proposed project.

Would the project:

a) Violate any water quality standards or waste discharge requirements?

No Impact. Water Quality Standards consist of beneficial uses and Water Quality Objectives. Water Quality Objectives are identified in the Central Valley Regional Water Quality Control Board (CVRWQCB) Basin Plan. Typically, storm water runoff from temporary construction projects will be within the Water Quality Objectives identified in the Basin Plan and specific waste discharge requirements will likely not be required. The North Coast Basin Plan has specific water quality objectives for the Smith River and the Main Forks of the Smith River. The following parameters are listed: Specific Conductance, Total Dissolved Solids, Dissolved Oxygen, Hydrogen Ion (i.e. pH), Hardness, and Boron. Generally, construction and post-construction operation of highway facilities will not influence any of the above parameters, with the possible exception of pH. The pH range set for the Smith River is 6 to 8.5 pH units. Typically, unless large volumes of concrete are required for construction, pH will likely not be a concern. The proposed project does not involve any significant volumes of concrete. The North Coast Basin Plan also contains general water quality objectives for the following parameters: Color, Tastes and Odor, Floating Material, Suspended Material, Settleable Material, Oil and Grease, Biostimulatory Substances, Sediment, Turbidity, pH, Dissolved Oxygen, Bacteria, Temperature, Toxicity, Pesticides, Chemical Constituents, and Radioactivity. For the proposed project, storm water runoff during construction and post-construction operation of highway facilities will not involve most of these parameters as constituents of concern. Other parameters, such as Floating Material, Suspended Material, Oil and Grease, etc., are already listed as constituents of concern in the Department's Statewide NPDES Permit and are conditioned in that Permit, with the exception of a numerical limit for turbidity. However, as explained above, the proposed excavation for this project involves rocky material with very minimal to no erodible soils present. The proposed project should not result in any increase in turbidity to the Middle Fork of the Smith River.

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?

No Impact. The project will have no impact on groundwater resources for this area.

c) Substantially alter the existing drainage pattern of the site area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or sedimentation on or off-site?

No Impact. The project will not alter the existing drainage pattern within the project limits.

d) Substantially alter the existing drainage pattern of the site area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of runoff in a manner, which would result in substantial erosion or sedimentation on or off-site?

No Impact. The project will not alter the existing drainage pattern within the project limits. Also, as discussed above, the proposed project results in only a minor increase in the water quality volume within the project limits.

e) Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

No Impact. As discussed above, the proposed project results in only a minor increase in the water quality volume within the project limits.

f) Otherwise substantially degrade water quality?

No Impact. Concerns due to erosion and sedimentation are of primary importance during the construction phase of the project. As discussed above, the project is located within a narrow rocky canyon and very little, if any erodible soils will be exposed during construction.

Avoidance, Minimization and/or Mitigation Measures

The primary constituent of concern for the project is sediment, both during and after construction. Construction activities will provide all the necessary erosion and water quality control practices to minimize the potential for sedimentation through the use of construction Best Management Practices (BMPs) identified in the Caltrans Construction Site BMPs Manual.

The use of heavy construction equipment can present a potential for spills and leaks of lubricant, oil and grease, and other fluids associated with vehicles and equipment during construction. Fueling or maintenance of vehicles may occur in the project area during construction and there could be a risk of accidental spills or releases of fuels, oils, or other potentially hazardous materials. An accidental release of these materials may pose a threat to water quality if contaminants enter storm drains and/or receiving waters. A spill on the roadway would trigger immediate response actions to report, contain, and mitigate the incident. Caltrans has contingency plans, procedures, and emergency response crews trained for incident response. These procedures designate a chain of command for notification, evacuation, response, and cleanup of spills resulting from the use and/or transport of hazardous materials.

It is expected that the proposed project will result in a disturbed soil area of less than 0.4-hectares (1-acre). Standard Special Provision (SSP) 07-340 will be included as part of the Plans, Specifications, and Estimates to address water pollution control work and implementation of a Water Pollution Control Plan (WPCP) during construction. The WPCP will be reviewed and approved by the Resident Engineer prior to construction.

Air Quality

Affected Environment

This project is located in Del Norte County, which is situated in the North Coast Air Basin. Under National Ambient Air Quality Standards, Del Norte County is unclassified/attainment for all transportation related criteria pollutants (CO, Ozone, PM_{10}). Under California Ambient Air Quality Standards, it is classified as attainment for CO and Ozone, non-attainment for PM_{10}.

Air Quality for transportation projects is evaluated on both a regional impact basis and local (project-level) impact basis. Regional impacts are related to transportation criteria air pollutants significant on a regional basis, these being Ozone and PM_{10}. Local impacts are related to transportation criteria air pollutants on a local basis and

for the proposed project. This is CO. PM_{10} is being required to be considered and evaluated on a local impact basis for projects in federal PM_{10} non-attainment areas, however, for projects in Federal PM_{10} non-attainment areas, PM_{10} must also be considered and evaluated on a local impact basis.

Regional analysis and local (project-level CO) analysis are as follows:

Regional Analysis

The proposed project is in an area which is not subject to Federal Transportation Conformity requirements. The area is designated as Unclassified/Attainment for all Federal criteria pollutants. In addition, the project area is not within Metropolitan Planning Organization boundaries, and falls under the rural-area provisions of Federal transportation planning and programming procedures.

Local (Project-Level CO) Analysis

The methodology of this analysis is based on the Caltrans Transportation Project-Level Carbon Monoxide Protocol, UCD-ITS-RR-97-21 by the Institute of Transportation Studies, UC Davis.

From Figure 3 Local CO Analysis and Section 4.7.1 of the Protocol, this project:

a) does not significantly increase vehicles operating in cold start mode
b) does not significantly increase traffic volumes
c) does not worsen traffic flow

Impacts

The planned project is not likely to worsen air quality and no local (project-level CO) impacts are anticipated.

The proposed project may result in the generation of short-term construction-related air emissions, including fugitive dust and exhaust emissions from construction equipment. Fugitive dust, sometimes referred to as windblown dust or PM_{10}, would be the primary short-term construction impact, which may be generated during excavation, grading and hauling activities. However, both fugitive dust and construction equipment exhaust emissions would be temporary and transitory in nature. Caltrans Standard Specifications, a required part of all construction contracts, should effectively reduce and control emission impacts during construction.

Naturally Occurring Asbestos is known to exist in serpentine rock, a greenish greasy-looking rock, found within the utltramafic rock. Ultramafic rocks are found in the northern and central area of Del Norte County.

Avoidance, Minimization and/or Mitigation Measures

The provisions of Section 7-1.01F, Air Pollution Control, and Section 10 Dust Control require the contractor to comply with all pertinent rules, regulations, ordinances, and statues of the local air district.

If asbestos is found during construction, Rule 1000 of the North Coast Unified Air Quality Management District must be adhered to when handling this material.

Noise and Vibration

Affected Environment

This project does not meet the definition of a Type 1 Project. A Type 1 project is defined by 23 CFR 772 as follows: A proposed Federal or Federal-aid highway project for the construction of a highway on a new location, or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment, or increases the number of through traffic lanes. This project therefore does not require project level traffic noise analysis.

Impacts

During construction, noise may be generated from the contractors' equipment and vehicles as well as blasting.

Avoidance, Minimization and/or Mitigation Measures

Noise generated during construction would be minimized because the contractor would be required to conform to the provisions of Caltrans Standard Specifications, Section 7-1.01 I, "Sound Control Requirements". This section requires the contractor to comply with all local sound control and noise level rules, regulations and ordinances, which apply to any work performed pursuant to the contract. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler or a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without a muffler.

2.3 Biological Environment

A list of species and habitats potentially occurring within the project vicinity was developed based on information from federal and state resource agencies. The United States Fish and Wildlife Service (USFWS), Sacramento website provided a list of sensitive species for U.S.G.S 7.5-minute Hurdygurdy Butte Quadrangle (dated 3/21/05 and 5/2/06). The California Department of Fish and Game Natural Diversity Database (CNDDB) (v 3.0.5 April 8, 2005) was queried for occurrences of listed and other sensitive species in the Hurdygurdy Butte 7.5-minute USGS quadrangle and the surrounding eight quadrangles. Another resource used was the California Native Plant Society's "Inventory of Rare and Endangered Plants of California" (2003).

In order to comply with the provisions of various state and federal environmental statutes and executive orders, potential impacts to natural resources of the project area were investigated and documented. Prior to conducting field surveys, a list of species and habitats potentially occurring within the project vicinity was developed based on information compiled from the United States Fish and Wildlife Service (USFWS), USFS, CDFG California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS), National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries), and from current literature. The project site was field reviewed to

- Identify habitat types;
- Identify potential waters and wetlands;
- Identify factors indicating the potential for rare species;
- Identify rare species present;
- Identify potentially sensitive water quality receptors;
- Identify potential problems for the study.

A field review took place February 8, 2005 with Atifa Farouz, Design Engineer; Jim Hibbert, Landscape Architect; Chris Carroll, Environmental Coordinator; Chris Fox, Biologist and Erin Dwyer, Archeologist.

Chris Fox and Chris Carroll conducted a later field study on May 19, 2005. All plant species blooming at that time were identified to a level sufficient to determine if they qualified as a special status species. All habitats encountered were assessed for their potential to support special status plant and animal species.

On June 23rd, Jo Braden and Melinda Molnar, Caltrans Biologists, revisited the site to do additional plant surveys in the project area.

Hydrology

The Middle Fork of the Smith River flows westward on the south side of the highway. This stretch is a designated Wild and Scenic River. Little Jones Creek enters the Middle Fork across the river from the PM 23.0 end of the project.

Staging and Disposal Sites

Staging sites for the project will be at the northwest and northeast corners of the Patrick Creek Road/SR-199 intersection (PM 22.2) and at a wide pullover area just northeast of the project at PM 23.2.

Rock and other debris removed will be placed at the Siskiyou Fork disposal site (approximately PM 25.5), environmentally cleared by Caltrans Environmental in August 2001.

Limitations That May Influence Results

The topography of the project area, as well as the road safety issues, make thorough plant and animal surveys difficult. We were unable to get to the area at the top of the excavation, so surveys had to be done from the road. However, nearby sites with similar characteristics to the inaccessible project areas were included in surveys.

2.4 Animal Species

Affected Environment

Several sensitive species have the potential to occur in the general vicinity of the project.

Coho salmon – Southern Oregon/California Coastal ESU (Oncorhynchus kisutch) FT/SSC

The SONCC ESU is one of two coho salmon ESUs that are found in California. The Central California Coast ESU is found south of Punta Gorda, California, while the SONCC ESU is found north of Punta Gorda. Adult coho enter fresh water September through January in order to spawn. Eggs incubate in gravel from November through April, and fry emerge between March and July. They first seek out shallow water, forming schools and then the schools break up and the salmon move to deeper water in July and August. After one year in fresh water, they begin migrating downstream to the ocean in late March/early April. Most remain in the ocean for two years, although some return to spawn after the first year. Thus coho typically have a three-year life cycle, and a complete generation consists of three consecutive, non-overlapping brood years. *The Recovery Strategy for California Coho Salmon* (CDFG, 2004).

Survey Results

No specific surveys by Caltrans biologists. Coho salmon is known to inhabit the Middle Fork of the Smith River. Juvenile coho salmon are present in this section of the Middle Fork of the Smith River all year, while adult salmon spawning runs occur between October and May (M. McCain, personal communication)

The Smith River Alliance has performed Summer Surveys of Adult Trout and Salmon (http://www.smithriveralliance.org) in this and other stretches of the Middle Fork of the Smith River, but adult coho have not been found during the summer surveys. Juvenile chinook and steelhead have been observed in the Middle Fork, but no juvenile coho have been observed.

Impacts

Between two and ten cubic yards of rock is expected to fall into the river during blasting. Although improbable, a small chance of mortality of juvenile salmon may occur. More likely, if there are any juveniles present, they may be temporarily disturbed by sounds and turbidity increases resulting from rock fall. Rock and

sediment stirred up may be washed downstream, causing a short-term increase in turbidity and sedimentation

Large woody debris obtained from tree removal in the project will be placed in an appropriate site along the Middle Fork. This will have a positive effect on rearing habitat.

Because the project was designed with appropriate features to reduce potential impacts, this project "**may affect but not likely to adversely affect**" SONCC ESU coho salmon or designated essential fish habitat (EFH) for the species.

Avoidance, Minimization and/or Mitigation Measures

Caltrans will avoid and minimize potential impacts to the coho salmon and its habitat to the greatest extent possible during project construction. The following measures will minimize any impacts to fisheries:

- Fiber rolls will be put underneath the MBGR to help prevent the debris from going off the roadway and down the slope above the river
- A vacuum sweeper will be used to clean the pavement
- No material is to be placed where it may enter the river
- The blasting is proposed to all be done in one season to minimize the impacts
- Noise blankets are being considered to help reduce the noise from blasting
- If feasible during blasting activities, K-rail is to be placed near the centerline and a cyclone fence on top of that.

No vegetation will be removed from the slope below the highway

Chinook salmon – Southern Oregon/California Coastal ESU (Oncorhynchus tshawytscha) PT/E

Chinook salmon are easily distinguished from other *Oncorhynchus* species by their large size, with some individuals growing to more than 100 pounds. Although federal and California state listing of this ESU has been deemed not warranted as of 9/16/99, the Middle Fork of the Smith River is designated as part of the Essential Fish Habitat for this species.

Survey Results

No specific surveys by Caltrans biologists were conducted. Chinook salmon inhabit the Smith River year round. The section of the Middle Fork of the Smith River in the project area provides essential fish habitat for juvenile freshwater and adult chinook.

Both adult and juvenile chinook have been observed in recent summer fish surveys conducted by the Smith River Alliance.

Impacts

Caltrans has determined that this project will have no adverse effect on the SOCC ESU of chinook salmon.

Avoidance, Minimization and/or Mitigation Measures

Caltrans will avoid and minimize potential impacts to the chinook salmon and its habitat during project construction by the measures outlined above for Coho salmon.

Steelhead – Klamath Mountains Province and Northern California ESU (Oncorhynchus mykiss) FT/SSC

Steelhead and rainbow trout are the same species, but rainbow are freshwater only, and steelhead are anadromous, or go to sea. Unlike most salmon, steelhead can survive spawning, and can spawn in multiple years. They generally prefer fast water in small-to-large rivers, and medium-to-large tributaries. In streams with steep gradient and large substrate, they spawn between these steep areas, where the water is flatter and the substrate is small enough to dig into. The steeper areas then make excellent rearing habitat for the juveniles.

Survey Results

No specific surveys by Caltrans biologists were conducted. Steelhead salmon is known to inhabit the Middle Fork of the Smith River.

Impacts

Caltrans has determined that this project will have no adverse effect on steelhead salmon.

Coastal Cutthroat Trout (Oncorhynchus clarki clarki) SC/FSS

Of the 13 subspecies of cutthroat trout indigenous to North America, only the coastal cutthroat is anadromous. But coastal cutthroat have complex life histories, and not all fish are anadromous. In any given body of water, some may migrate to sea, while others become resident fish. Sea-run cutthroat spawn over a long period, from winter through May. They seek smaller streams where the flow is minimal and the substrate is small, almost sand. They prefer the upper-most portions of these streams, areas that are too shallow for other salmonids.

Survey Results

No specific surveys by Caltrans biologists. Coastal cutthroat trout is known to inhabit the Middle Fork of the Smith River.

Impacts

Caltrans has determined that this project will have no adverse effect on the Coastal cutthroat trout.

Avoidance, Minimization and/or Mitigation Measures

Caltrans will avoid and minimize potential impacts to the Coastal cutthroat trout and its habitat to the greatest extent possible during project construction, by measures previously outlined for coho salmon.

Northern red-legged frog (Rana aurora aurora) SSC/FSS/SSC

The red-legged frog is a medium-to-large sized frog. It is divided into two subspecies, northern red-legged frog, *R. a. aurora*, which attains lengths around 3 inches and the California red-legged frog, *R. a. draytonii*, reaches lengths in excess of 5 inches. It is found in humid forests, woodlands, grasslands, and streamsides with plant cover. It is most common in lowlands or foothills, and frequently found in woods adjacent to streams. Breeding habitat is in permanent water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. It is found from sea level to 1427 m. (4,680 ft.).

Survey Results

A query of the CNDDB (2005) revealed no occurrences of northern red-legged frogs in the Hurdygurdy Butte quadrangle and adjoining quadrangles. No suitable habitat for northern red-legged frog is in the project area. Caltrans has determined that this project will have no adverse effect on the red-legged frog.

Bald Eagle (Haliaeetus leucocephalus) FT/SE

Bald eagles are yearlong residents in California, breeding mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou and Trinity counties. It breeds February through July. It often chooses the largest tree in a stand to build a stick platform nest 50 – 200 feet above ground (Polite & Pratt, 1990). No critical habitat is designated for the bald eagle. It is currently being proposed for delisting.

Survey Results

No specific surveys by Caltrans biologists. Bald eagles were seen near the project vicinity in the summer of 2005 (Brenda Devlin, pers. comm), but no nests have been located near the project area.

Avoidance, Minimization and/or Mitigation Measures

Caltrans will avoid and minimize potential impacts to the bald eagle and its habitat to the greatest extent possible during project construction. No trees suitable for nesting will be removed.

Impacts

Caltrans has determined that this project will have no adverse effect on the bald eagle.

American peregrine falcon (Falco peregrinus anatum) FE/SE/FSS

This species occurs worldwide, and is a yearlong California resident. It breeds from early March to late August, mostly in woodland, forest and coastal areas near wetland, lakes, rivers or other water on high cliffs, banks and dunes. Nests are usually scraped on a ledge in an open site, but occasionally utilize tree cavities or old nests of other raptors (Polite & Pratt, 1990).

Survey Results

No specific surveys by Caltrans biologists. Suitable nesting habitat is not in the project area. There have been no occurrences reported to CNDDB of peregrine falcons within 10 miles of the project area.

Impacts

Caltrans has determined that this project will have no adverse effect on the American peregrine falcon.

Northern goshawk (Accipiter gentillis) SSC/FSS

Northern goshawk nests mostly in conifers in deep woods, between 18 and 75 feet above ground. During winter it may frequent lowlands with riparian and broken woodlands. It ranges the length of the state, but breeds primarily at the higher elevations. It breeds April to September, with peak activity June through July (Polite & Pratt, 1990).

Survey Results

No specific surveys by Caltrans biologists were conducted. There have been no occurrences reported to CNDDB of northern goshawk within 10 miles of the project area.

Impacts

Caltrans has determined that this project will have no adverse effect on the northern goshawk.

Avoidance, Minimization and/or Mitigation Measures

Caltrans will avoid and minimize potential impacts to the northern goshawk and its habitat to the greatest extent possible during project construction.

*Marbled murrelet (*Brachyramphus marmoratus*) FT/SE*

The marbled murrelet was listed as threatened under the FESA on September 30, 1992. Critical habitat was designated by the USFWS on May 24, 1996. Marbled murrelet have a unique life history strategy in that although they feed primarily on fish and invertebrates in near shore marine waters, they fly inland to nest on large limbs of mature conifers.

The majority of marbled murrelets are found within or adjacent to the marine environment, although there have been detections of marbled murrelets on rivers and inland lakes. Marbled murrelets spend the majority of their lives on the ocean, and come inland to nest. Marbled murrelets typically nest in old-growth forest compared to mixed-age and young forests. Stand size is also and important factor for marbled murrelets. These birds commonly occupy larger stands (500 acres) than smaller stands (100 acres); Marbled murrelets are commonly absent from stands less than 60 acres. Density of old-growth trees and tree species composition may be the strongest predictors of murrelet presence and occupancy. The presence of redwood as the dominant tree species seems to be a factor for predicting higher mean detection levels and stand occupancy. There is a strong pattern of declining murrelet presence with distance from the coast. The number of stations more than 40 km (approximately 25 miles) inland with murrelet detections was only about 2 percent. Current studies at inland stands in California have increased the sample of stations located in potential habitat over 25 km from the coast and results continue to indicate that few murrelets are nesting at these distances in California (Miller et al 1996). Breeding occurs from late March to late September and a clutch size of one is normal. Nests are not built

but an egg is laid in a depression of moss or other debris on the limb of a large conifer.

The project location is approximately 22 straight-line miles from the ocean, which puts it almost as far from the ocean as marbled murrelets have been detected in California. The risk to marbled murrelets from the project may be fairly low

When asked about this species in the project area, Brenda Devlin from the local Six Rivers National Forest office stated: "We have no recent surveys in that area, but it is adjacent to suitable habitat for the NSO and MAMU. If it will only take 1 month to complete, it would be best to wait until after September 15th (the end of the MAMU breeding period) to blast. Blasting is way above background noise, so to get a "no effect" a full limited operating period would be required. If that date presents problems with your schedule, the other option is to survey for both species to see if you can lift the LOP. Taking trees from the top of the bluffs should not be a problem because … it is not suitable habitat".

Survey Results

No specific surveys by Caltrans biologists. There have been no occurrences reported to CNDDB of marbled murrelet within 10 miles of the project area. No suitable nesting trees for use by marbled murrelet are located within ¼ mile of the site, but may occur within one mile.

Impacts

This project with the avoidance windows for construction as proposed would have "no affect" on marbled murrelet.

Avoidance, Minimization and/or Mitigation Measures

In order to avoid potential impacts to listed species the following schedule will be utilized. Blasting will not be done between January 31 and September 15 to avoid potential impacts to marbled murrelet. Construction activities are to be restricted to within 2 hours of sunrise and sunset during the critical breeding season for marbled murrelet (April 1st – August 5th). This project with the avoidance windows for construction as proposed would have "no affect" on northern spotted owl and marbled murrelet.

*Northern Spotted Owl (*Strix occidentalis caurina*) FT/SSC*

The northern spotted owl was listed as threatened under the Federal Endangered Species Act (FESA) on June 22, 1990. Critical habitat was designated by the

USFWS on January 15, 1992. Northern spotted owls are known to nest, roost, and feed in a variety of habitats but prefer older forest stands with multi-layered structure and closed canopy for foraging, roosting, and nesting (Solis and Gutierrez 1990, Thome et al 1999).

Northern spotted owls generally have large home ranges and use large tracts of land containing significant acreage of older forest to meet their biological needs. The attributes of superior nesting and roosting habitat typically include a moderate to high canopy closure (60 to 80 percent closure); a multi-layered, multi-species canopy with large overstory trees; a high incidence of large trees with various deformities (e.g., large cavities, broken tops, mistletoe infections, and debris accumulations); large accumulations of fallen trees and other debris; and sufficient open space below the canopy for owls to fly (Thomas, et al. 1990).

Survey Results

According to historical surveys reported to CDFG, Northern Spotted Owls have been observed in 1978, 1979, and 1983 near cedar Rustic Campground, approximately a mile from the project limits. Recently, there have been no known NSO nesting sites within the action area (Brenda Devlin Pers Comm.).

Impacts

This project with the avoidance windows for construction as proposed would have "no affect" on northern spotted owl.

Avoidance, Minimization and/or Mitigation Measures

Blasting will not be done between January 31 and September 15 to avoid potential impacts to northern spotted owl and marbled murrelet. Construction activities are to be restricted to within 2 hours of sunrise and sunset during the critical breeding season for spotted owls (March 1st – June 30th).

2.5 Animal Species

Affected Environment

There are a number of potential plant species with special status that may occur in the project area. The Hurdygurdy Butte quadrangle was used to query this database. A total of 10 special status plant species were identified as potentially occurring in the project vicinity (Table 2). Some of the plants which were considered, though not formally listed as rare or endangered under the California Endangered Species Act,

meet the definitions of Section 1901, Chapter 10 (Native Plant Protection) of the California Fish and Game Code, and are eligible for State listing. Some species are considered Sensitive Species by the US Forest Service.

Caltrans biologists compared specific habitat requirements, life history notes, elevation, species distribution, and species lists to determine if any special status plant species may be present in the project area. There are no known locations for any special status plant species (CDFG-CNDDB) in the project vicinity (within ½ mi). No special status plant species were found or identified during any survey.

Koehler's stipitate rock cress (*Arabis koehleri var. stipitata*) CNPS 1B

Koehler's stipitate rock cress is a perennial herb found on dry, rock moderate to steep slopes or ridges of serpentine, peridotite, or occasionally rock of dioritic or metasedimentary origin at elevations 500 to 1,800 m (1,600 to 6,000 ft). It flowers June to July with scarlet to deep purple flowers. There are 5 reported (CNDDB) occurrences of Koehler's stipitate rock cress within 5 miles of the project area, from 1995 and 2002. The closest record is approximately 1.3 miles west southwest (over 2 miles downstream) of the project area. This species was not found during surveys.

Marbled wild-ginger (*Asarum marmoratum*) CNPS 2

Marbled wild-ginger (*Asarum marmoratum*) is a perennial herb associated with lower montane coniferous forests in northern California and Oregon. It is found at elevations ranging from 200-1800 m (650-5,900 ft). There have been several reported occurrences along Shelly Creek, 5 miles north of the project, and one occurrence reported on Knopki Creek, about 5 miles NE of the project. This species was not found during surveys.

Siskiyou Indian paintbrush (*Castilleja miniata* spp. *elata*) CNPS 2

Siskiyou Indian paintbrush (*Castilleja miniata* ssp. *elata*) is a perennial herb native to California. It is associated with fresh emergent wetlands (bogs, fens, seeps) and lower montane coniferous forests in northern California and Oregon. It usually occurs on serpentine substrates at elevations ranging from 0-1750 m (0-5,741 ft). There have been reported occurrences of this species about three miles to the east of the project. This species was not found during surveys.

Fascicled lady's slipper (*Cypripedium fasciculatum*) CNPS 4, USFS Sensitive

Fascicled lady's slipper occurrences are widely scattered throughout lower montane and north coast coniferous forests at elevations ranging from 100 – 2435m. No plants of this species have been reported located within ten miles of the project site. This species is not present in the project area.

Mountain lady's slipper (*Cypripedium montanum*) CNPS 4, USFS Sensitive

Mountain lady's slipper is a rhizomatous herb in the orchid family that occurs in various forest habitats in Northern California between 185 and 2225 m. No plants of this species have been reported located within ten miles of the project site. It was not found during surveys.

Howell's fawn lily (*Erythronium howellii*) CNPS 1B

Howell's fawn lily (*Erythronium howellii*) is a perennial herb native to California. It is associated with North Coast coniferous forests and lower montane coniferous forests in northern California and Oregon. It may occur on serpentine substrates at elevations ranging from 200-1145 m (656-3,757 ft). This plant prefers shade and semi-shaded areas. This species is known from several occurrences around the Patrick Creek area, but was not found during surveys.

Siskiyou iris (*Iris bracteata*) CNPS 3

Siskiyou iris occurs in broadleaved upland forest and lower montane coniferous forest from 180 – 1070 m. No plants of this species have been reported located within ten miles of the project site. This species is not present in the project area.

Pedicularis howellii (*Howell's sandwort*)) CNPS 4, USFS Sensitive

Howell's lousewort is a perennial found in upper montane coniferous forest 1500 – 1900 m. Some occurrences of this species have been reported about 7 miles west of the project site. This species is not present in the project area.

Seacoast ragwort (*Senecio bolanderi*) CNPS 2

Seacoast ragwort is found in coastal scrub and north coast coniferous forest from 30 – 650 m. It has been found about 9 miles east of the project site. None were found during surveys.

2.6 Regulatory Requirements

Under the current scope of work, a California Department of Fish and Game 1602 Streambed Alteration Agreement will be needed before work on the proposed project may proceed.

The project will require a U.S. Army Corps of Engineers (USACE) Nationwide Section 404 Permit for activities in waters of the U.S. required for modification or improvement of linear transportation projects. An associated State Water Resource Control Board's (SWRCB) water quality (401) certification will also be required.

2.7 Migratory Bird Treaty Act

Migratory birds may nest in trees and shrubs, within or adjacent to the project limits, although no nests were observed. Tree removal as well as work in close proximity to an active nest could disturb a nesting bird.

Per the federal Migratory Bird Treaty Act, the Contractor will be instructed that migratory birds and their (active) nests, eggs and young, are protected and measures must be implemented to avoid the harassment or take of any birds. Tree and shrub removal should occur from September 1 to February 28 to avoid taking nesting birds. If vegetation removal cannot work within this window, then surveys by the Caltrans biologist will be required prior to the removal of any trees. If nesting birds are present, tree and shrub removal will not be permitted until a Caltrans biologist has given authorization to proceed.

Chapter 3 Comments and Coordination

This chapter summarizes the results of Caltrans' efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

The Initial Study with Proposed Negative Declaration will be available for public and agency review and comment for 30 days. Caltrans will ensure that the document is made available to all appropriate parties and agencies, including the following: 1) Responsible agencies, 2) Trustee agencies that have resources affected by the project, 3) other state, federal and local agencies which have regulatory jurisdiction, or that exercise authority over resources which may be affected by the project, 4) the general public. Copies of the document will also be available at the Caltrans District 1 office, P.O. Box 3700, Eureka, CA 95502 and at the Caltrans District 3 Office of Environmental Management, P.O. Box 911, Marysville, CA 95901.

After the review period, Caltrans will consider all comments prior to approval of the project.

Resource Agency Coordination

Wild and Scenic River Concurrence was granted by the United States Forest Service on November 28, 2005. (See Figure 1-5)

Informal consultation with NOAA Fisheries and the California Department of Fish and Game (CDFG) has occurred throughout the project.

Mike McCain, USFS Fisheries Scientist, of The Smith River National Recreation Area and Gasquet Ranger District of the Six Rivers National Forest was consulted in February 2005 regarding fisheries along this stretch of the Smith River. Brenda Devlin, wildlife biologist of the same district was consulted about birds and other animals that may be in the project area.

John McRae, botanist for the Six Rivers Forest Service in Eureka was consulted in May and June of 2005 about Forest Service sensitive plant species that may be in the project area. He emailed a list of these species.

Ray Bosch, of the Eureka office of the U.S. Fish and Wildlife Service was contacted in February 2005 regarding Federally listed species that may be in the area.

Caltrans requested a species list for this project area from NOAA-Fisheries, Arcata Office in February of 2005, and received a list by email on 3/1/2005. Caltrans Environmental and Engineering personnel met with Dan Free of NOAA-Fisheries for a field review and discussion of the project on May 19, 2005. A biological evaluation for listed salmonids was submitted in April 2006. Concurrence was granted on May 19, 2006 by NOAA-Fisheries.

Carol Heidsiek of the Arcata Office of the Army Corps of Engineers was also at the May 19 field meeting for advice on 404 permitting requirements. A nationwide permit can be used if Caltrans submits documentation that the Wild and Scenic status of the Middle Fork of the Smith River will not be adversely impacted.

Donna Cobb of DFG, Redding was contacted 5/23/05 regarding the applicability of a 1602 Streambed Alternation Permit to this project. Caltrans should submit a 1602 application.

Six Rivers National Forest has authority over the Wild and Scenic status of the Middle Fork of the Smith River. Based on the information Caltrans provided, they have determined that the proposed project will not have a direct and adverse effect on the values for which the river was designated, and will not adversely impact its Wild and Scenic status.

Gordon Gould of DFG, Sacramento was contacted regarding Northern Spotted Owl observations in the area. He sent a list of sites and observations in the area on 5/5/2005.

Figure 1-5. Wild & Scenic River Concurrence

United States Department of Agriculture | Forest Service | Six Rivers National Forest

Smith River National Recreation Area
P.O. Box 228
Gasquet, CA 95543-0228
(707) 457-3131 Text (TTY)
(707) 457-3131 Voice

File Code: 1920
Date: November 28, 2005

Chris Fox
Associate Environmental Planner
California Department of Transportation, District 3
703 B Street
Marysville, CA 95901

Dear Chris

This letter is regarding the proposed project at Post Mile 22.7/23.0 along US 199 in the area known locally as the "Narrows". It is our understanding that the project objective is to widen this section of road by 2 to 3 feet. This would involve removal of rock from the north side of the highway by mechanical means, and blasting within a 200 ft wide section. On completion the road is to be resurfaced.

On the question of easement, a new easement deed was signed and is effect as of August 25, 2005. The road easement for this section is described in the deed as: From Post Mile 23.3 to 23.7, being a strip of land lying 600 feet left and 100 feet right of the centerline of said U.S. Highway 199.

The Smith River is a component of the National Wild and Scenic Rivers System. The segment that borders the project area is designated "Recreational". A designated recreational river segment does allow for transportation facilities such as U.S. Highway 199. The values for which the Smith River was designated are primarily its "outstanding remarkable" anadromous fishery. Secondary factors in the designation are the river's notable recreational and scenic values.

The proposed project does not involve construction in the bed or on the banks of the river (below the ordinary high water line), and is not considered to be a water resources project, and therefore not subject to review under Section 7 of the Wild and Scenic Rivers Act.

Based on the information provided, we have determined that the proposed project will not have a direct and adverse effect on the values for which the river was designated. If at any point the project scope should change you are required to notify this office.

If you have any further questions, please contact Don Pass at (707) 465-3131. ext. 135

Sincerely,

MARY KAY VANDIVER
District Ranger

Caring for the Land and Serving People

Printed on Recycled Paper

Figure 1-6. Newspaper Ad

State of California • Department of Transportation

PUBLIC NOTICE

NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION

What is Planned

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) are proposing safety improvements to remove rock outcroppings at various locations within a 0.3 mile segment along State Route 199 just north of Patricks Creek in Del Norte County.

What is Available

The environmental document, referred to as a Draft Initial Study (IS), is available for review from 6/5/06 to 7/7/06 at the Del Norte County Library at 190 Price Mall, Crescent City, CA 95531. It is also available for review and copying weekdays between 8 a.m. and 4 p.m. at the Caltrans Office of Environmental Management, 1656 Union Street, Eureka, CA 95501. The document is also available on the Internet: http://www.dot.ca.gov/dist1/d1projects/envdocs.htm.

Special Accommodations

For individuals with sensory disabilities, this document can be made available in Braille, large print, audiocassette or computer disk. To obtain a copy in one of these alternative formats, please call or write: Ann Jones, Public Information Officer, Caltrans District 1, P.O. Box 3700, Eureka, CA 95502, (707) 445-6444 (Voice phone) or (530) 741-4509 (TTY).

Comments

Please submit your written comments to Susan D. Bauer at Caltrans, Office of Environmental Management, P.O. Box 911, Marysville, CA 95901. Comments may also be submitted via e-mail to sue_bauer@dot.ca.gov. All comments must be received by 7/10/06. For more information about this project please contact Kevin Church, Project Manager at (707) 445-6440.

Charles Fielder, District 1 Director
California Department of Transportation
P.O. Box 3700, Eureka, CA 95502

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Chapter 4 List of Preparers

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

Christopher Carroll, Associate Environmental Planner. Contribution: Environmental Study Coordinator and Document Writer

Susan D. Bauer, Senior Environmental Planner. Contribution: Environmental Branch Chief

Erin Dwyer, Associate Environmental Planner (Archaeology). Contribution: Historic Property Survey Report (HPSR)

Gail St. John, Associate Environmental Planner (Architectural Historian) Contribution: Historic Architecture Review

Chris Fox, Associate Environmental Planner (Natural Science). Contribution: Natural Environment Study (NES), Wetland Delineation

Ed Speer, Transportation Engineer. Contribution: Project Engineer

Lyle Stockton, Transportation Engineer. Contribution: Initial Site Assessment (Hazardous Waste)

Jim Hibbert, Landscape Associate. Contribution: Visual Impact Analysis Report

Keyth March, Senior Transportation Engineer. Contribution: Senior Design Engineer.

David Melendrez, Transportation Engineer. Contribution: Water Quality and Storm Water Reports

Ralph Martinelli, Senior Transportation Engineer. Contribution: Former Project Manager

Sharon Tang, Transportation Engineer. Contribution: Air Quality and Noise Reports

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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?	☐	☐	☐	➨
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	☐	☐	➨	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	➨	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	➨	☐

"No Impact" determinations in this section are based on the Visual Impact Analysis, March 2005.

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?	☐	☐	☐	➨
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	➨
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?	☐	☐	☐	➨

"No Impact" determinations in this section are based on field reviews, February 2005 and May 2005

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district might be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☐
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)?	☐	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentration?	☐	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☐

"No Impact" determinations in this section are based on the Air Quality Report, March 2005.

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
BIOLOGICAL RESOURCES - Would the project:				
a) Has 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?	☐	☐	☐	➨
"No Impact" determinations in this section are based on the Natural Environmental Study (NES), May 2006.				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	➨
"No Impact" determinations in this section are based on the Natural Environmental Study (NES), May 2006.				

	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?	☐	☐	☐	➨

"No Impact" determinations in this section are based on the Natural Environment Study, May 2006.

COMMUNITY RESOURCES - Would the project:

a) Cause disruption of orderly planned development?	☐	☐	☐	➨
b) Be inconsistent with a Coastal Zone Management Plan?	☐	☐	☐	➨
c) Affect lifestyles or neighborhood character or stability?	☐	☐	☐	➨
d) Physically divide an established community?	☐	☐	☐	➨
e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?	☐	☐	☐	➨
f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?	☐	☐	☐	➨
g) Affect property values or the local tax base?	☐	☐	☐	➨
h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites or sacred shrines?	☐	☐	☐	➨
i) Result in alterations to waterborne, rail, or air traffic?	☐	☐	☐	➨
j) Support large commercial or residential development?	☐	☐	☐	➨
k) Affect wild or scenic rivers or natural landmarks?	☐	☐	☐	➨
l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours, and temporary access, etc.)?	☐	☐	➨	☐

"No Impact" determinations in this section are based on review of the Environmental Study Request attachments; field reviews of the project area, and Caltrans' Standard Special Provisions for construction activities.

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☐

"No Impact" determinations in this section are based on the Architectural Study Report, September 2005

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:	☐	☐	☐	☐
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.	☐	☐	☐	☐
ii) Strong seismic ground shaking?	☐	☐	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐
iv) Landslides?	☐	☐	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☐
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?	☐	☐	☐	☐
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.	☐	☐	☐	☐

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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 Geotechnical Report, March 2001

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 material, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	➨
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?	☐	☐	☐	➨
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" determinations in this section are based on the Initial Site Assessment, June 2005

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	➨
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)?	☐	☐	☐	➨
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?	☐	☐	☐	➨
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?	☐	☐	☐	➨
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?	☐	☐	☐	➨
f) Otherwise substantially degrade water quality?	☐	☐	☐	➨
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?	☐	☐	☐	➨
h) Place within a 100-year flood hazard area any structures that would impede or redirect flood flows?	☐	☐	☐	➨
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?	☐	☐	☐	➨
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	➨

"No Impact" determinations in this section are based on the; Hydrology Report, April 2006; and the Water Quality/Storm Water report, March 2005

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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?	☐	☐	☐	☐
b) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☐
"No Impact" determinations in this section are based on review of the Del Norte County General Plan.				
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 the Geotechnical Report, March 2001				
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?	☐	☐	☐	☐
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne 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,				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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 Noise Report, March 2005

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)?	☐	☐	☐	☑
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

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

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?	☐	☐	☐	☑
Police protection?	☐	☐	☐	☑
Schools?	☐	☐	☐	☑
Parks?	☐	☐	☐	☑
Other public facilities?	☐	☐	☐	☑

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

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

TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic which his 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)?	☐	☐	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☐
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?	☐	☐	☐	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incomplete uses (e.g., farm equipment)?	☐	☐	☐	☐
e) Result in inadequate emergency access?	☐	☐	☐	☐
f) Result in inadequate parking capacity?	☐	☐	☐	☐
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☐

"No Impact" determinations in this section are based on the Environmental Study Request, January 2005; Traffic Report, May 2005 and Draft Project Report, November 2005

UTILITY AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☐

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

"No Impact" determinations in this section are based on the scope of the project and the Water Quality/Storm Water Report, March 2005

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?	☐	☐	☒	☐
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)?	☐	☐	☐	☒
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

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Appendix B Title VI Policy Statement

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

DEPARTMENT OF TRANSPORTATION
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Flex your power!
Be energy efficient!

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

Appendix C Minimization and/or Mitigation Summary

1. Avoidance / minimization measures:

Cultural Resources

It is Caltrans' policy to avoid cultural resources whenever possible. If buried cultural materials are encountered during construction, it is Caltrans' policy that work stop in the area until a qualified archaeological can evaluate the nature and significance of the find. Additional surveys would be required if project limits are extended beyond the present study limits.

Although no indications of human remains were identified on the surface, subsurface human remains may become evident during construction activities. Applicable procedures should be followed upon the unanticipated discovery of human remains, in accordance with provisions of State Health and Safety Code, Sections 7052 and 7050.5 and the State Public Resources Code Sections 5097.9 and 5097.99. Sections 7052 and 7050.5 of the State Health and Safety Code define the disturbance of Indian Cemeteries as a felony. The code further requires that construction or excavation is stopped in the vicinity of discovered human remains and the Sheriff and Coroner notified immediately. The Coroner must determine whether the remains are those of a Native American, the Coroner shall contact the California Native American Heritage Commission within 24 hours. Subsequent procedures shall be followed, according to State Public Resources Code Sections 5097.9 and 5097.9, regarding the role of Native American participation.

Biological Resources

A California Department of Fish and Game (CDFG) 1602 Permit Strembed Alteration Agreement will be needed before work on the proposed project may proceed.

The project will require a U.S. Army Corp of Engineers (USACOE) Nationwide Section 404 Permit for activities in waters of the U.S. required.

A State Water Resource Control Board (SWRCB) Water Quality 401 Certification is required.

Caltrans will use Best Management Practices (BMP's) to avoid and minimize impacts to fish.

Per the federal Migratory Bird Treaty Act, the Contractor will be instructed that migratory birds and their (active) nests, eggs and young, are protected and measures must be implemented to avoid the harassment or take of any birds. Tree and shrub removal should occur from September 1 to April 30 to avoid taking nesting birds. If vegetation removal cannot work within this window, then surveys by the Caltrans biologist will be required prior to the removal of any trees. If nesting birds are present, tree and shrub removal will not be permitted until a Caltrans biologist has given authorization to proceed.

Traffic/Transportation

A Transportation Management Plan has been developed for this project and would be updated during the final project design.

It is anticipated that during staged construction to allow for blasting operations, traffic will be required to stop and the road may be closed for periods not to exceed 30 minutes. After each closure, all accumulated traffic shall be allowed to pass through the work zone before another closure is made.

All impacted emergency response agencies would be notified in advance of any planned traffic control operations. The Contractor would prepare an emergency response action plan prior to the beginning of construction. This plan would address the facilitation of emergency vehicle access through the construction zone

Hydrology/Floodplain

The primary constituent of concern for the project is sediment, both during and after construction. Construction activities will provide all the necessary erosion and water quality control practices to minimize the potential for sedimentation through the use of construction BMPs identified in the Department's Construction Site BMPs Manual.

The use of heavy construction equipment always presents a potential for spills and leaks of lubricant, oil and grease, and other fluids associated with vehicles and equipment during construction. Fueling or maintenance of construction vehicles may occur in the project area during construction and there would be a risk of accidental spills or releases of fuels, oils, or other potentially hazardous materials. An accidental release of these materials may pose a threat to water quality if contaminants enter

storm drains and/or receiving waters. A spill on the roadway would trigger immediate response actions to report, contain, and mitigate the incident. The Department has contingency plans, procedures, and emergency response crews trained for incident response. These procedures designate a chain of command for notification, evacuation, response, and cleanup of spills resulting from the use and/or transport of hazardous materials.

The proposed project will most likely result in a disturbed soil area of less than 0.4-hectares (1-acre). As such, the project will be required to comply with the conditions of the Department's Standard Specification, and to address the potential temporary water quality impacts resulting from construction activities. Standard Special Provision (SSP) 07-340 will be included as part of the Plans, Specifications, and Estimates. SSP 07-340 will address water pollution control work and implementation of a Water Pollution Control Plan (WPCP) during construction. The WPCP will be reviewed and approved by the Resident Engineer prior to construction.

Air Quality

The provisions of Section 7-1.01F Air Pollution Control, and Section 10 Dust Control require the contractor to comply with all pertinent rules, regulations, ordinances, and statutes of the local air district.

If asbestos is found during construction, Rule 1000 of the North Coast Unified Air Quality Management District must be adhered to when handling this material.

Noise and Vibration

Noise generated during construction is regulated by the provisions of Caltrans' Standard Specifications, Section 7-1.01 I, "Sound Control Requirements". This section requires the contractor to comply with all local sound control and noise level rules, regulations and ordinances, which apply to any work performed pursuant to the contract. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler or a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without a muffler.

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Appendix D List of Technical Studies

To assist in the identification and assessment of potential environmental impacts of the proposed project, Caltrans staff prepared the following technical reports:

Air Quality Report

Floodplain Report

Geotechnical Report

Historic Property Survey Report

Hydrology Report

Initial Site Assessment (Hazardous Waste)

Noise Report

Natural Environment Study

Project Study Report

Visual Impact Assessment

Water Quality/Storm Water Report

Wetland Delineation Report

Copies of these reports are available for review at the Caltrans District 3-North Region Environmental Division, Office of Environmental Management at 703 B Street, Marysville, CA 95901.

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Appendix E Public Review Comments

Comments received during public/agency review of this document, and the associated responses, would be included in this Appendix for the final document.