

Chapter 4 Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and avoidance, minimization, and/or compensation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including: project development team meetings, interagency coordination meetings, and public open house meetings. This chapter summarizes the results of the Department's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

4.1 Public Participation and Outreach

A public meeting was held on April 17, 2008, from 5:30 to 7:30 p.m. at the Hampton Inn, 100 A Street, Crescent City, CA 95531, during the project development phase of this project, prior to circulation of this draft EIR/EA. The purpose of this meeting was to provide the public with an overview of the project as well as solicit comments and concerns. The meeting was announced via a news release on March, 27, 2008. A formal presentation explaining the proposed project was given. Informational exhibits and maps were on display, and project staff was available to answer questions. Approximately 109 people attended, resulting in the submittal of 66 written responses. Comments received included support for the project as well as concerns about truck safety, hazardous road conditions, tourism, aesthetics, old growth trees, benefits to the trucking industry, slope stability, hazardous materials, and noise. The primary issues were concerns regarding road safety with increased truck traffic, preserving the natural beauty of the project locations, and potential tourism impacts.

A Department web page with information regarding the project was created. It includes displays from the public scoping meeting, links with brief descriptions of each project location, as well as information regarding STAA trucks (http://www.dot.ca.gov/dist1/d1projects/197-199_staa/).

Representatives from the Department have met quarterly with the Citizens Advisory Team (CAT). The CAT was developed to maintain communication between various private citizen groups and organizations and the Del Norte Local Transportation Commission and to allow these groups to share their concerns with the Department's project development team for this project.

4.2 Scoping Process for the EIR/EA

A Notice of Preparation (NOP) for the proposed project was distributed on August 26, 2008. The NOP was also filed with the State Clearinghouse and sent to the appropriate elected officials, agencies, and interested parties. The State Clearinghouse recorded the comment period as September 2 to October 1, 2008.

A public scoping meeting for the EIR/EA was held on September 16, 2008, from 5:30 to 7:30 p.m. at the Del Norte County Cultural Center, 1001 Front Street, Crescent City, CA 95531. The meeting was announced in the NOP and via a news release on September 2, 2008. The purpose of the scoping meeting was to identify concerns of both the public and agencies in order to clearly define the environmental issues and alternatives to be examined in the draft EIR/EA. Maps and other project information displays were available, and Department staff were on hand to answer questions and receive comments regarding the scope and content of the EIR/EA. Thirty-two people attended this meeting, resulting in the submittal of 19 written responses. Written comments received during the scoping meeting and during the NOP comment period were compiled and summarized. The comments were broad and included most of the topics typically addressed in environmental documents. The primary topics raised at this meeting included requests for more detailed project information, information regarding how STAA trucks might benefit the local economy, concerns regarding increased truck traffic, concerns about potential impacts on tourism/recreation/aesthetics/biological resources, safety issues for motorists and pedestrians, concerns about the potential for an increase in accidents, and support for the project.

4.3 Consultation and Coordination with Public Agencies

During the preparation of the technical studies prepared for the proposed project, formal and informal coordination was conducted with the federal, state, and local agencies and entities listed below.

4.3.1 Agency Coordination

4.3.1.1 U.S. Army Corps of Engineers

A preliminary jurisdictional determination of wetlands and other waters of the United States has been prepared and will be submitted to the USACE. In addition, Carol Heidsiek of the Arcata Office of the USACE was present at a May 19, 2005, field meeting for advice on 404 permitting requirements. Section 404 authorization for fill of waters of the United States has not yet been initiated.

4.3.1.2 Forest Service

Mike McCain, Forest Service Fisheries Scientist, of the Smith River National Recreation Area and Gasquet Ranger District of the Six Rivers National Forest was consulted regarding fisheries along this stretch of the Smith River (February and March 2009). Brenda Devlin, Wildlife Biologist of the same district, was consulted regarding marbled murrelet, northern spotted owl, and other animals that may be in the project area (March 2009).

Lisa Hoover and John McRae, Botanists for the Six Rivers National Forest in Eureka, were first consulted about Forest Service sensitive botanical species that may be in the project area in March 2009. Mr. McRae emailed a list of these species in May and June 2009. Coordination regarding Forest Service special-status cryptogamic species (bryophytes, lichens, and fungi) was

initiated in fall 2009. Coordination with the Forest Service regarding sensitive plant and cryptogamic species is ongoing.

Draft letters to Mary Kay Vandiver, District Ranger of the Smith River National Recreation Area, Six Rivers National Forest, were prepared requesting concurrence with the conclusions of the Section 4(f) evaluation and potential effects on the Middle Fork Smith River as required by the Wild and Scenic Rivers Act. Written concurrence would be obtained from the Forest Service after the public has been afforded an opportunity to review and comment on the effects of the proposed project and is expected prior to release of the final EIR/EA. The draft concurrence letters are included at the end of this chapter, and this consultation is ongoing.

Julie Burcell, District Archaeologist of the Six Rivers National Forest, was contacted in December 2009 and from February to May 2010 to request further information regarding cultural resources sites and previous cultural resources studies. To date, no further information regarding cultural resources studies or sites has been presented.

An initial coordination meeting with George Frey of Six Rivers National Forest regarding various project aspects, including aesthetics, 4(f) evaluation, and Wild and Scenic River coordination for proposed work on US 199 was conducted by Department staff in fall 2009.

4.3.1.3 U.S. Fish and Wildlife Service

Ray Bosch of USFWS was consulted regarding northern spotted owl and marbled murrelet (March 2009). Dave Imper, USFWS Botanist, was contacted about sensitive plants in the project area (2008). The USFWS also was contacted to obtain an updated list of all federal candidates, proposed, and listed endangered or threatened species that could occur in the vicinity of the proposed project. Endangered Species Act (Section 7) consultation with the USFWS regarding threatened and endangered species potentially affected by the proposed project is ongoing, including periodic attendance by Department staff at multi-agency coordination meetings between USFWS, National Marine Fisheries Service, DFG, and the Department (group titled “Level 1/Level 2”) to update these agencies on project issues.

4.3.1.4 National Marine Fisheries Service

Bob Pagliuco of NMFS was contacted regarding impacts to coho salmon and marbled murrelet in March 2009. Ongoing consultation with the NMFS includes initial coordination regarding Section 7 consultation for threatened and endangered species by periodic attendance from Department staff at multi-agency coordination meetings between USFWS, National Marine Fisheries Service, DFG, and the Department (group titled “Level 1/Level 2”) to update these agencies on project issues.

4.3.1.5 California Department of Fish and Game

Gordon Leppig of the California Department of Fish and Game (DFG) was contacted regarding impacts to coho salmon and marbled murrelet in March 2009 and regarding sensitive plants starting in spring 2008. Ongoing consultation with the DFG includes three approvals/permits required by the DFG: Section 1602 streambed alteration agreement, Section 2080.1 agreement,

and a consistency determination with biological opinions prepared by USFWS and NMFS, including periodic attendance by Department staff at multi-agency coordination meetings between USFWS, National Marine Fisheries Service, DFG, and the Department (group titled “Level 1/Level 2”) to update these agencies on project issues. Coordination regarding sensitive plants is also ongoing.

4.3.1.6 Native American Heritage Commission and Coordination with Local Native American Tribes

The NAHC was contacted in October 2008 to request sacred lands database search and provide a list of Native American representatives that might have any information or concerns regarding the project. In November 2008, the NAHC provided both a sacred lands search and a list of six Native American representatives, who were contacted by letter in November 2008. The same individuals were contacted by phone and email in July and August 2009, and in January and February 2010. The letters are included at the end of this chapter.

4.3.1.7 North Coastal Information Center

The North Coastal Information Center was contacted in November 2008 to perform a records search of archaeological and historical resources for the project.

4.3.1.8 Del Norte County Parks Department

A draft letter to Ed Fulton, Building/Parks Maintenance Superintendent, at the Del Norte County Parks Department was prepared regarding the temporary construction easement at Ruby Van Deventer County Park. The draft letter also requests concurrence with the conclusions of the Section 4(f) evaluation. Written concurrence would be obtained from the Del Norte County Parks Department prior to release of the final EIR/EA. The letter is included at the end of this chapter and consultation is ongoing.

4.3.1.9 National Park Service

Coordination with the National Park Service as required by the Wild and Scenic Rivers Act has been initiated and completed with regard to the proposed improvements at the two project locations along SR 197. The National Park Service provided a letter of concurrence in February 2010. The letter is included at the end of this chapter.

4.3.2 Meetings

4.3.2.1 Agency Stakeholder Meeting

An agency stakeholder meeting was conducted on July 28, 2008, to discuss the project and potential environmental issues. Department planning, environmental, and design staff and consulting environmental staff attended this meeting. The following agency stakeholder representatives also attended this meeting: Craig Martz (DFG), Dan Free and Seth Naman

(NMFS), Jeremiah Puget (North Coast Regional Water Quality Control Board [NCRWQCB]), Ray Bosch (USFWS), and Tamera Leighton (Del Norte Local Transportation Commission).

4.3.2.2 Agency Coordination Meetings

In 2008, representatives from the Department, DFG, USFWS, NMFS, and NCRWQCB attended an agency coordination meeting. This group also attended a site visit on November 18, 2009, along with personnel from the Forest Service.

Proposed protection measures for sensitive plant species were initially discussed at a meeting with John McRae (Forest Service Botanist) and Gordon Leppig (DFG) on August 10, 2009. The measures were further developed and subsequently approved by John McRae and Gordon Leppig via email and phone coordination in January 2010.

[DATE], 2010

Mary Kay Vandiver
District Ranger, Smith River National Recreation Area
Six Rivers National Forest
P.O. Box 228
Gasquet, CA 95543-0228

Subject: Section 4(f) Concurrence Request for the 197/199 Safe Surface Transportation Assistance Act Access Project, Del Norte County

Dear Ms. Vandiver:

The California Department of Transportation (Department) is proposing to construct improvements on State Route (SR) 197 and U.S. Highway (US) 199 in Del Norte County to reclassify these routes as part of the Surface Transportation Assistance Act (STAA) truck route network.

Construction of the 197/199 Safe STAA Access Project (proposed project) would use federal funds administered by the Federal Highway Administration (FHWA). As a result, compliance with the National Environmental Policy Act (NEPA) is required. Through delegation of authority by the FHWA Delegation Pilot Program authorized under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the Department is the NEPA lead agency for preparation of the draft environmental document for the proposed project. In accordance with NEPA, the Department is preparing an environmental assessment (EA) to assess potential environmental effects resulting from the proposed project. The Department is also the California Environmental Quality Act (CEQA) lead agency for the proposed project and is preparing an environmental impact report (EIR).

As part of the NEPA process, the Department is required to prepare documentation required by Section 4(f) of the U.S. Department of Transportation Act, referred to herein as the Section 4(f) evaluation. Section 4(f), codified in federal law in the United States Code (USC), Title 14, Section 303, declares that "[i]t 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."

The purpose of this letter is to present the proposed approach and evaluation of resources relative to the requirements of Section 4(f). Public parks, recreation areas, cultural resources, and wildlife or waterfowl refuges within 0.5 mile of the proposed project were identified to determine whether they qualify for protection as Section 4(f) resources and whether the provisions of Section 4(f) would be triggered by construction of the proposed project. The Smith River

Mary Kay Vandiver, District Ranger
[DATE], 2010
Page 2

National Recreation Area (NRA) is located on publicly owned national forest system lands within the Six Rivers National Forest and designated a national recreation area, qualifying it as eligible for protection under Section 4(f). In addition, designated and developed recreation sites within the Smith River NRA within 0.5 mile of the proposed project were evaluated relative to the requirements of Section 4(f), including Sandy Beach, Patrick Creek Campground and Patrick Creek Trail, Middle Fork Smith River, and Middle Fork Smith River Access Trails.

Project Description

The Department is proposing to construct roadway improvements along SR 197 and US 199 in Del Norte County to reclassify these routes as part of the STAA truck route network. The roadway improvement project is composed of seven project locations referred to as Ruby 1, Ruby 2, Patrick Creek Narrows (Locations 1 to 3), the Narrows, and Washington Curve (Figure 1). The Ruby 1 and 2 sites are located along SR 197 in Del Norte County. Patrick Creek Narrows Locations 1 to 3, the Narrows, and Washington Curve sites are located along US 199 on national forest lands within the Smith River NRA (Figure 2). Proposed safety-enhancing improvements include lane- and shoulder-widening projects. In turn, curve radii would be increased, as would sight distances. The primary purpose of the proposed project is to improve spot locations on SR 197 and US 199 to allow reclassification of the SR 197-US 199 corridor as part of the STAA network of truck routes, while minimizing environmental impacts. The secondary purpose is to enhance safety on the routes for automobiles, trucks, and other large vehicles at the same spot locations.

Below is a summary of the proposed project alternatives at Patrick Creek Narrows Locations 1 to 3, the Narrows, and Washington Curve, the project sites located along US 199 within the Smith River NRA.

- **Patrick Creek Narrows Location 1:** This location is on US 199 from post mile (PM) 20.5 to PM 20.9, about 2 miles east of the Grassy Flat Campground. One alternative is being considered for this site. The existing roadway curve would be improved and the roadway would be widened to accommodate two 12-foot-wide lanes and 4-foot shoulders. To accommodate the widening and broader roadway curves, an approximately 350-foot-long, 6-foot-tall retaining wall is proposed along the river side of the road above a portion of the existing steep rock-armored riverbank. Additional roadway work would include an open graded asphalt concrete (OGAC) overlay to improve friction and traction, striping, a centerline rumble strip, shoulder backing, and new metal-beam guardrail construction. Existing gravel pullouts would be used as staging areas. An existing 36-inch culvert would be replaced with a longer culvert to match the new roadway width at the inlet and outlet. Also, two 18-inch culverts would be replaced with 24-inch culverts. No additional right-of-way would need to be acquired at this location. Construction at this location is anticipated to take approximately 90-100 days over one season starting in spring 2013. Right-of-way at this

Mary Kay Vandiver, District Ranger
[DATE], 2010
Page 3

location is held in permanent easement from the U.S. Department of Agriculture (USDA) Forest Service (Forest Service) including a 100-foot easement on the east side of US 199 and a 400-foot easement along the west side of the roadway where the retaining wall would be constructed.

- **Patrick Creek Narrows Location 2:** This location is farther east on US 199, with project limits from PM 23.92 to PM 24.08. Within the project limits at this location, US 199 crosses the Middle Fork Smith River Bridge. Three alternatives are being considered for Patrick Creek Narrows Location 2: the Upstream Bridge Replacement Alternative, Downstream Bridge Replacement Alternative, and Bridge Preservation with Upslope Retaining Wall Alternative. Common features of the three alternatives would be the realignment and widening of the existing 11- to 12-foot lanes to at least 12 feet and the increase in the shoulders to a width of 4 to 8 feet. To accommodate the widening on the westernmost extent of the project location, approximately 20,000 cubic yards of rock excavation from the rock cut slope would be required. Rock excavation would extend more than 100 feet above the highway and expose approximately 1/3 acre of newly excavated rock slope. A hoe ram, rock splitter, and/or controlled blasting would be required to construct the rock cut slope. A cut slope of 1:1 is anticipated. Because of the fractured nature of the bedrock, rock fall may be expected after construction. Therefore, a permanent rock-fall mitigation system may be needed. This could consist of a wire-mesh drape or incorporate a rock-fall catchment area at roadway level. One culvert within the limits within this project location would be replaced to match the new roadway width. Improvements at this location would also include an OGAC overlay to improve friction and traction, striping, a centerline rumble strip, metal-beam guardrail, and shoulder backing. Existing gravel and paved pullouts nearby would be used to stage equipment.

The existing right-of-way at this location is 100 feet left and right of the centerline and is held in permanent easement from the Forest Service. However, an expansion of the easement may be required in the vicinity of the Middle Fork Smith River Bridge for all three proposed alternatives at this location. The unique features of each build alternative are discussed below.

- *Upstream Bridge Replacement Alternative:* The Middle Fork Smith River Bridge would be replaced with a new bridge constructed at an alignment upstream of the existing bridge. Additionally, a 400-foot-long retaining wall would be constructed on the cut slope side of the roadway. Approximately 0.47 acre of additional permanent right-of-way would be required at this location (Figure 3). Two bridge design options would be evaluated for this alternative: a concrete arch bridge and a concrete box girder bridge. After construction of the new bridge was complete, the existing bridge would be removed. In-river work would be required at times and include diverting the Middle Fork Smith River during bridge replacement and demolition. The options for diverting Middle Fork Smith River flow during construction include water bladder or K-rail and gravel

Mary Kay Vandiver, District Ranger
[DATE], 2010
Page 4

diversion, corrugated steel pipe localized diversion, creek diversion with dam, and culvert and rock diversion. Proposed water diversion techniques would be constructed seasonally, during low river flow conditions to allow construction of temporary falsework supports in the channel. Bridge replacement would require a trestle (or pad created in the river bed), falsework, and a debris containment system. A trestle is a temporary elevated structure used as a work platform for workers and equipment. Falsework is the temporary structure that supports the main structure during construction. The trestle and falsework may be supported by columns that are placed on the river banks or may have supports in the live channel. The debris containment system would be required to prevent debris from falling into the river during demolition of the old bridge. The debris containment system would have to extend underneath the existing bridge and would likely require supports in the river channel that would involve water diversion. Construction of this alternative is anticipated to take approximately 300 days over three seasons beginning in late summer/fall 2013 and ending in late fall/winter 2015.

- *Downstream Bridge Replacement Alternative:* This alternative would replace the Middle Fork Smith River Bridge on a new alignment downstream of the existing bridge location. A retaining wall or viaduct would be constructed downstream from the new bridge. The retaining wall or viaduct would extend for approximately 250 feet and transition directly into the proposed new bridge approach. If a retaining wall were selected, it would extend downslope from the highway level approximately 30 feet and would be supported along the bank of the Middle Fork Smith River. If a viaduct were selected, it would be founded on drilled piles and would cantilever the northbound traffic lane over the bank of the Middle Fork Smith River. The viaduct would also require a curtain wall to be constructed. The curtain wall would extend below the viaduct and would be shorter in height and length than the retaining wall. This alternative would also require a retaining wall on the Oregon side of the bridge that would be approximately 10 feet high and 200 feet long (Figure 4). Approximately 0.33 acre of additional permanent right-of-way would be required at this location (Figure 4). Two bridge design options would be evaluated for this alternative: a concrete arch bridge and a concrete box girder bridge. The existing bridge would be removed once the new bridge was in place. Similar to that described for the Upstream Bridge Replacement Alternative, construction of this alternative would involve in-river work requiring diversion of the Middle Fork Smith River, a trestle, falsework, and a debris containment system. Construction of this alternative is anticipated to take approximately 300 days over three seasons beginning in late summer/fall 2013 and ending in late fall/winter 2015.
- *Bridge Preservation with Upslope Retaining Wall Alternative:* This alternative would retain the existing bridge but realign the roadway on either end of the bridge to allow large trucks to cross. An additional retaining wall/rock bolting or rock net drapery would be constructed on the cut slope side of the highway. The retaining wall/rock bolting area would be approximately 300 feet long and up to 100 feet high. The retaining wall or rock

Mary Kay Vandiver, District Ranger
[DATE], 2010
Page 5

bolting would provide additional width to align large vehicles before they cross the narrow bridge. This alternative would not preclude future bridge replacement. Approximately 0.23 acre of additional permanent right-of-way would be required at this location, as shown on Figure 5. Construction of this alternative is anticipated to take approximately 250 days over three seasons beginning in late summer/fall 2013 and ending in late fall/winter 2015.

- **Patrick Creek Narrows Location 3:** Approximately 1.5 miles east of Patrick Creek Narrows Location 2 on US 199, the project limits run from PM 25.5 to PM 25.65. Only one alternative is being considered at this location. The proposed project would increase the shoulder width to 4 feet on both sides of the roadway and straighten the S-curve that runs through the project limit. To support the wider roadway an approximately 135-foot-long wall up to an approximate height of 15 feet is proposed on the river side. A drilled-pile foundation may be required. Two culverts would be replaced to match the new roadway width and an existing overside drain would be replaced. Improvements would also include an OGAC overlay to improve friction and traction, striping, a rumble strip, metal-beam guardrail, and shoulder banking. Existing gravel pullouts would be used to stage equipment. The right-of-way easement at this location includes a 100-foot easement along both sides of US 199. However, additional right-of-way would need to be acquired from a private parcel. Construction at this location is anticipated to take approximately 50-70 days over one season beginning in spring 2013.
- **The Narrows:** The Narrows site is situated between Patrick Creek Narrows Locations 1 and 2, with project limits ranging from PM 22.7 to PM 23.0. One alternative, with two construction-method scenarios, is being considered for this site. Improvements would increase lane widths to 12 feet and provide 2-foot shoulders. Roadway widening would be accomplished by cutting into the existing cut slope. In slope locations composed of soft material, mechanical equipment such as an excavator would be used. Proposed cut heights range from 0 to 15 feet, with an average height of 10 feet and average depth of 4 feet. Where extremely irregular rock slopes are vertical or overhanging, sliver cuts would be required. Proposed cut heights vary from 0 to 60 feet, with an average height of 25 feet and average depth of 4 feet. The rock excavation/cut limits would be established by controlled blasting or presplitting, which would involve drilling closely spaced holes in the rock face and creating a shear plane by setting off simultaneous charges of explosives in the holes. The results after presplitting are a clean rock face and reduction in rock-fall potential. To excavate the cut slope in these areas, drilling would be done by crane only where there is enough room for all traffic to pass through a one-way reversible traffic control. Slopes that cannot be reached by crane without blocking traffic would be drilled by other means, such as using a track-mounted drill or drilling by hand. A 1-foot-wide paved drainage ditch would be added at the shoulder of the road for a total paved width of 29 feet. One new culvert and drain inlet would be constructed. Also, an existing culvert and drain inlet would be replaced to match the new edge of pavement. In addition to roadway widening, isolated outcrops of overhanging or

Mary Kay Vandiver, District Ranger
[DATE], 2010
Page 6

loose rock above the excavation limits would be stabilized with rock bolting. Other work includes an overlay of new OGAC pavement to improve friction and traction, a centerline rumble strip, and new striping. Existing gravel pullouts nearby would be used to stage equipment. Construction of the improvements at the Narrows site would occur within existing right-of-way easement. Construction at this location is anticipated to take approximately 100 days over two seasons in summer/fall 2013 and summer/fall 2014.

- **Washington Curve:** Located at PM 26.3 to PM 26.5, this is the easternmost US 199 site under the proposed project. These alternatives would straighten the compound curve at this project location. The improvements would increase the lane width to a minimum of 12 feet. One culvert on the Oregon side of the project limits would be replaced to match the new roadway. Work would include an OGAC overlay to improve friction and traction, replacement of the existing metal-beam guardrail, and installation of a centerline rumble strip. Construction of the improvements at this site would occur within existing right-of-way easement that extends 200 feet to the north and 150 feet to the south from the roadway centerline. Existing gravel pullouts would be used to stage equipment. The unique features of each build alternative are discussed below.
 - **Cut Slope Alternative:** Proposed improvements under this alternative would involve excavation of a new slope on the cut slope side of the roadway. The shoulders would be widened from 2 to 6 feet. Roadway excavation would be approximately 20,000 cubic yards, disturbing an area of approximately 1 acre. The proposed cut slope would be 1:1, depending on geologic conditions. Naturally occurring asbestos (NOA) has been identified at Washington Curve, and it is likely that excavated material would contain NOA at levels considered hazardous. Therefore, the Contractor would be required to hire an industrial hygienist to develop a health and safety plan and test excavation material for NOA during construction. In addition, the Contractor would be required to take appropriate measures to contain and dispose of any material that contains NOA. Construction of this alternative is anticipated to take approximately 150 days over two seasons during 2014 and 2015.
 - **Retaining Wall Alternative:** This alternative proposes to construct a retaining wall along the cut slope side of the roadway to provide additional roadway width. The wall would be approximately 800 feet long. Excavation for construction of the wall would be approximately 5,000 cubic yards. The total disturbed area would be approximately 0.6 acre. The wall height would be approximately 12 feet, but would extend to a maximum height of 30 feet midway through the length of the wall. The vertical surface area of the wall would be approximately 14,000 square feet. Construction of this alternative is anticipated to take approximately 250-300 days over three seasons during 2014, 2015 and 2016.

Mary Kay Vandiver, District Ranger
[DATE], 2010
Page 7

Section 4(f) Evaluation

The Section 4(f) evaluation for the proposed project addresses potential impacts that may occur as a result of implementing the proposed project on publicly owned recreation facilities within or adjacent to the project sites. During preparation of the Section 4(f) evaluation, the Department determined that the proposed improvements along the US 199 alignment on national forest lands would have an effect on the Smith River NRA and there would be temporary construction-related effects on the Middle Fork Smith River, as discussed below.

The Department also evaluated areas designated for recreation use by the Forest Service and located within a 0.5-mile radius of the five project sites, including Sandy Beach, Patrick Creek Campground, Patrick Creek Trail, and Middle Fork Smith River Access Trails. It was determined that the proposed improvements would not require a Section 4(f) use of any of these recreation sites on either a permanent or temporary basis.

Smith River National Recreation Area

Traffic delays could be inconvenient for visitors traveling to and from recreation facilities within the Smith River NRA on US 199. Anticipated traffic control includes one-way reversible traffic control, full roadway closure without a detour, and shoulder closure. Table 1 presents the preliminary construction schedule with the number of working days by project location.

Mary Kay Vandiver, District Ranger
 [DATE], 2010
 Page 8

Table 1. Preliminary Construction Schedule Timetable with Number of Work Days by Location

Project Locations on US 199 (All Alternatives)	Construction Season ^a				
	1 2012	2 2013	3 2014	4 2015	5 2016
Patrick Creek Narrows Location 1		90-100 working days ^b with 15-minute delays, and 1-hour delays for 80-100 working days in this season, and shoulder closure			
Patrick Creek Narrows Location 2		100 working days with 15-minute delays, and 1-hour delays for 75-100 working days in this season, and shoulder closure	100 working days with 15-minute delays, and 1-hour delays for 75-100 working days in this season, and shoulder closure	50-100 working days with 15-minute delays, and 1-hour delays for 75-100 working days in this season, and shoulder closure	
Patrick Creek Narrows Location 3		50-70 working days with 15-minute delays, and 1-hour delays for 25 working days in this season, and shoulder closure			
The Narrows	50 working days with 30-minute delays for 40 days	50 working days with 30-minute delays for 40 days			
Washington Curve			50-100 working days with 30-minute delays, night closures 50-100 days	50-100 working days with 30-minute delays, night closures 50-100 days	50-100 working days with 30-minute delays, night closures 50-100 days

^a A construction season typically extends from summer through fall. For the Patrick Creek Narrows locations, the season may extend into winter.

^b Number of working days is approximate

Under typical one-way reversible control, a maximum of 15–30 minute delays are anticipated; however, full road closures without detour could cause up to 1-hour delays during construction. As indicated in Table 1, these delays could be inconvenient for visitors and would delay access to the recreational facilities along US 199 during the construction season over a period of 5 years. In particular multiple delays could be encountered by visitors when construction is occurring at more than one location during the same construction season. These delays would affect visitor access to the Smith River NRA recreation sites along US 199 including day use areas, campgrounds, trailheads, and Middle Fork Smith River access points. The Department has

Mary Kay Vandiver, District Ranger
[DATE], 2010
Page 9

preliminarily determined that the delay in access to recreation areas within the Smith River NRA would be enough of an inconvenience to visitors that it would not meet the criteria for a temporary occupancy, instead it would constitute a Section 4(f) use and meet the requirements for a *de minimis* impact. The Department may make such a finding only if the project will have no adverse effect on the activities, features, and attributes of the Smith River NRA and only if the Forest Service concurs with the *de minimis* finding.

Further, as previously described, implementation of the proposed project may require expansion of the existing easement held by the Department on a permanent basis at the Patrick Creek Narrows Location 2. The three alternatives proposed at this location may require additional right-of-way, as shown on Figures 3 through 5. This area is an existing rock face, and no Forest Service recreation facilities are located therein. The area that would be required would range from approximately 0.23 acre up to 0.47 acre, as presented in the project description for this location. The Department would submit an application to amend the existing DOT and would manage the land within the right-of-way easement for transportation purposes. The addition of this land to the existing right-of-way would result in a Section 4(f) use of the Smith River NRA and the Department has preliminarily determined this would also meet the requirements for a *de minimis* impact. This conclusion is based on the fact that the incorporation of the land into the roadway right-of-way would not result in a permanent adverse effect on any of the recreation areas within the Smith River NRA. Similar to the discussion above, the Department may make such a finding only if the project will have no adverse effect on the activities, features, and attributes of the Smith River NRA and only if the Forest Service concurs with the *de minimis* finding. However, prior to making this finding, the Department is required to obtain written concurrence from the agency with jurisdiction over this resource. The Forest Service's concurrence with the Department's assessment is requested below. Additional requirements for a *de minimis* impact finding include providing the public an opportunity to review and comment on the effects of the proposed project on the Section 4(f) resource.

Implementation of the following measures would minimize access and circulation impacts during construction.

- Access to the designated and developed recreation sites within the Smith River NRA will be maintained at all times during construction of the proposed project.
- Construction will not occur on weekends (beginning after 3 p.m. on Fridays), designated legal holidays, or the day preceding designated legal holidays; and the full width of the traveled roadway will be open for use at these times by the traveling public as well as when construction operations are not actively in progress.
- Location specific traffic management plans will be prepared by the Department's District Traffic Operations staff and approved by the Department's District Transportation Management Plan Manager. Each plan will contain specific requirements for public noticing.

Mary Kay Vandiver, District Ranger
[DATE], 2010
Page 10

traffic control implementation, property and business access, and safety during project construction.

- The Department resident engineer will provide information to residents, businesses, and adjacent landowners (e.g., Forest Service) before and during project work that may represent a negative impact surrounding the zone of construction. Funding will be included in supplemental funds for the resident engineer to print flyers.
- The Oregon Department of Transportation (ODOT) public information officer will be contacted 2 weeks before any closure on US 199 longer than 30 minutes to allow ODOT to warn public traffic of the possible delays on the US 199 corridor.
- The Department will use regional media (e.g., newspapers and radio stations) to advise the public of closures or lengthy delays at Patrick Creek Narrows Locations 1, 2, and 3; The Narrows site, and the Washington Curve site. Media advisories on full highway closures will be provided at least 1 week in advance of closures.
- Information regarding delays and scheduled closures will be made readily available to the traveling public on the internet through the Department's California Highway Information Network, and other sources. The website dedicated to the five projects covered by this environmental document will be maintained to provide additional information to the public regarding the status of the projects, planned night time full roadway closures, etc. The address of this website will be included in all media advisories.
- Coordination with sponsors of projects near the project locations will be required to avoid conflicts with other projects. This coordination would extend to other Department projects and projects that may be undertaken by Del Norte County and other agencies.

Additional avoidance, minimization, and/or mitigation measures are included in the proposed project for potential effects on the human, physical, and biological environment within the Smith River NRA.

Middle Fork Smith River

The proposed improvement to the bridge that spans the Middle Fork Smith River at the Patrick Creek Narrows Location 2 is anticipated to involve temporary in-river work under two of the three proposed alternatives at this location. While construction is expected to occur mainly during the off season for the primary recreation activities such as rafting, kayaking, and fishing, recreationists would be subject to periodic exclusions from the construction zone within the project limits for safety reasons while bridge replacement and demolition work is occurring. The free-flowing condition of the river would not be affected upstream or downstream of the

Mary Kay Vandiver, District Ranger
[DATE], 2010
Page 11

construction limits necessary for bridge replacement and demolition. Within the construction limits, the temporary water diversion techniques would divert water away from the temporary supports in the river channel necessary to support the falsework and debris containment system. Recreation activities on the river would continue upstream and downstream of the construction limits because the river would be temporarily diverted within the construction limits only, allowing water to flow downstream of the bridge. Recreation use of the river would not be interrupted upstream or downstream of the limited construction zone. Construction may involve water diversion during low river flow conditions, generally between mid-June to October, after which the diversion would be removed from the river. The falsework would remain in place if construction of the bridge is not completed within one construction season. The construction season could coincide with part of the fishing, kayaking, and rafting season during the fall seasons and the winter of 2015. If boaters are present at the same time that in-water work, diversion techniques, and/or slope removal are in place, it is anticipated that boaters would need to wait for a safe opportunity to pass or portage around the construction area for safety reasons. Because the bridge replacement alternatives could interrupt recreation activities during construction, it is being considered a temporary occupancy of the river at this location. Implementation of the bridge preservation alternative is not expected to require in-water work or diversion techniques, although blasting may be required and could affect recreation activities to a lesser degree.

Under FHWA regulations (23 CFR 774.13[d]), temporary occupancy of a property does not constitute use of a Section 4(f) resource when the following conditions are satisfied.

- **The duration of the occupancy must be temporary (i.e., less than the time needed for construction of the project), and there should be no change in ownership of the land.** Construction at this site is anticipated to take approximately 250 to 300 working days over a period of three seasons, beginning in summer/fall 2013 and lasting through late fall/winter 2015. Once in-water construction has been completed at this site each season, full use of the river for recreation activities within the project construction limits (fishing, kayaking, and rafting) would resume. During construction recreation use of the river would not be interrupted upstream or downstream of the limited construction zone because the river would be temporarily diverted, allowing water to flow downstream of the bridge. Boaters would be allowed to portage around the construction area on a temporary basis for safety reasons, in the event weather conditions allow the construction and boating season to coincide. Construction activities would not require a change in ownership of the lands adjacent to the river.
- **The scope of work must be minor (i.e., both the nature and magnitude of the changes to the Section 4(f) property are minimal).** Any diversion techniques in the river channel would be constructed seasonally with the exception of the bridge falsework. The bridge falsework would remain in place if construction of the bridge is not completed within one construction season. The banks or channel of the river would not be permanently altered. All

Mary Kay Vandiver, District Ranger
[DATE], 2010
Page 12

construction debris would be removed and disturbed areas would be restored to a natural setting with re-grading, erosion control, and revegetation of disturbed areas.

- **There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis.** No permanent adverse physical impacts on the river are anticipated as a result of the construction activities at this location. Temporary and permanent best management practices would be implemented in addition to specific measures to minimize or mitigate potential adverse impacts on the river as included in the EIR/EA. If kayakers or rafters are running the river while construction is taking place, they would be required to portage around the area where bridge replacement, demolition, slope removal, or water diversion techniques are occurring. During construction, the river would be diverted, as described above, allowing water to flow freely downriver and for recreation activities on the river to continue, including fishing, kayaking, and rafting outside the limited construction zone.
- **The land being used must be fully restored (i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project).** Any diversion techniques in the river channel would be removed once the construction season has ended. Bridge falsework would remain in place if construction of the bridge is not completed within one construction season. The banks or channel of the river would not be permanently altered. All construction debris would be removed and disturbed areas would be restored to a natural setting with re-grading, erosion control, and revegetation of disturbed areas.
- **There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.** This letter has been prepared for your signature of agreement regarding the temporary occupancy of the Middle Fork Smith River during construction.

As described above, the temporary occupancy of the Middle Fork Smith River would meet all of the criteria outlined in 23 CFR 774.13(d).

Findings

This letter has been prepared for your signature of agreement regarding the following findings for the Smith River NRA and Middle Fork Smith River.

- The Section 4(f) use of the Smith River NRA as a result of the delay in access to the recreation areas over a 5-year construction period at multiple sites on US 199 and incorporation of 0.23–0.47 acre into the roadway right-of-way at Patrick Creek Narrows Location 2 would not result in a permanent adverse effect on any of the recreation areas

Mary Kay Vandiver, District Ranger
[DATE], 2010
Page 13

within the Smith River NRA or the protected activities, features, or attributes for which the Smith River NRA is eligible for protection under Section 4(f); and

- The temporary construction-related effects on the Middle Fork Smith River at the Patrick Creek Narrows Location 2 would not have a direct or adverse effect on the values for which the Middle Fork Smith River was designated a Wild and Scenic River.

We have greatly appreciated the cooperation of the Six Rivers National Forest in the planning and environmental evaluation of this project and look forward to continued consultation and coordination. Your agreement with the above conclusions about the provisions of Section 4(f) does not in any way remove the Department's responsibilities to assess potential effects on cultural or natural resources, such as water quality, wildlife habitat, and redwood trees, on national forest lands pursuant to NEPA, the Endangered Species Act, the Clean Water Act, the Wild and Scenic Rivers Act, and other applicable laws and executive orders.

Please indicate your concurrence with the findings described above by signing below and returning this letter to: Kevin Church, Project Manager, California Department of Transportation District 1, P.O. Box 3700, Eureka, CA 95502-3700.

Date: _____
Mary Kay Vandiver
District Ranger
Smith River National Recreation Area

If you have any questions or would like to discuss this further, please call me at 707/445-6600.

Sincerely,

Kevin Church
Project Manager
California Department of Transportation District 1

Enclosures: Figures 1 through 5

cc: Kim Hayler, Environmental Coordinator, California Department of Transportation District 1

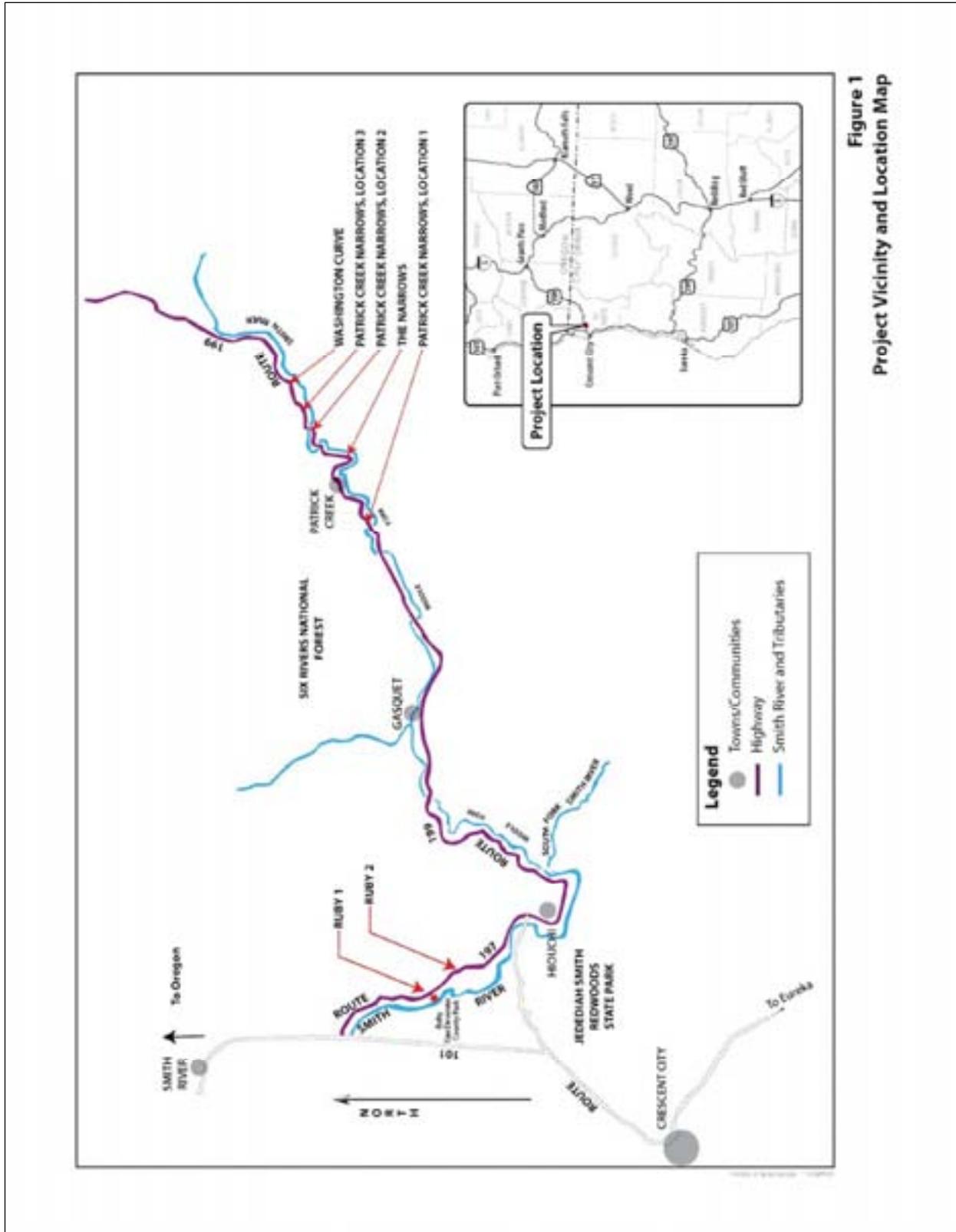
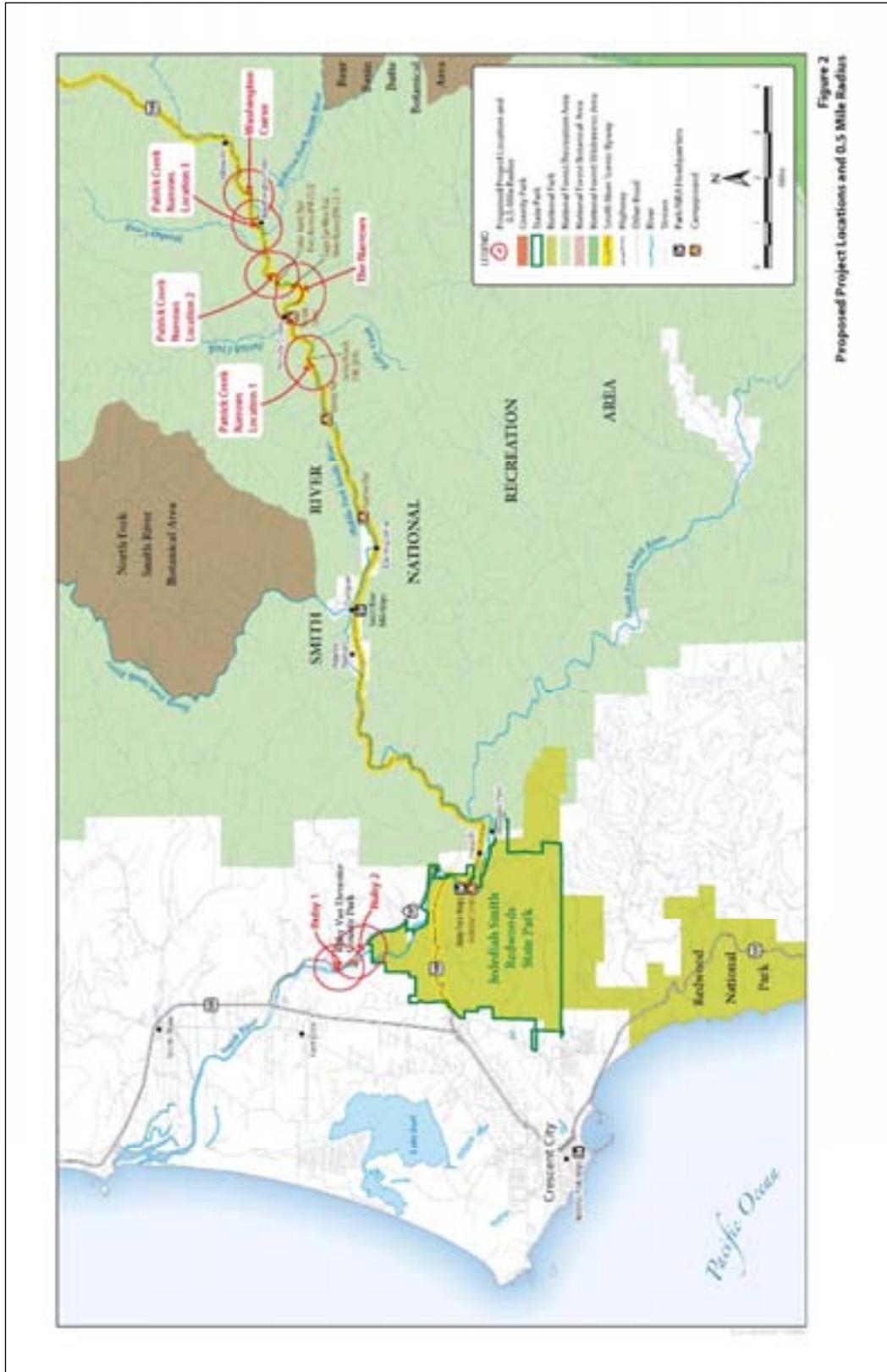
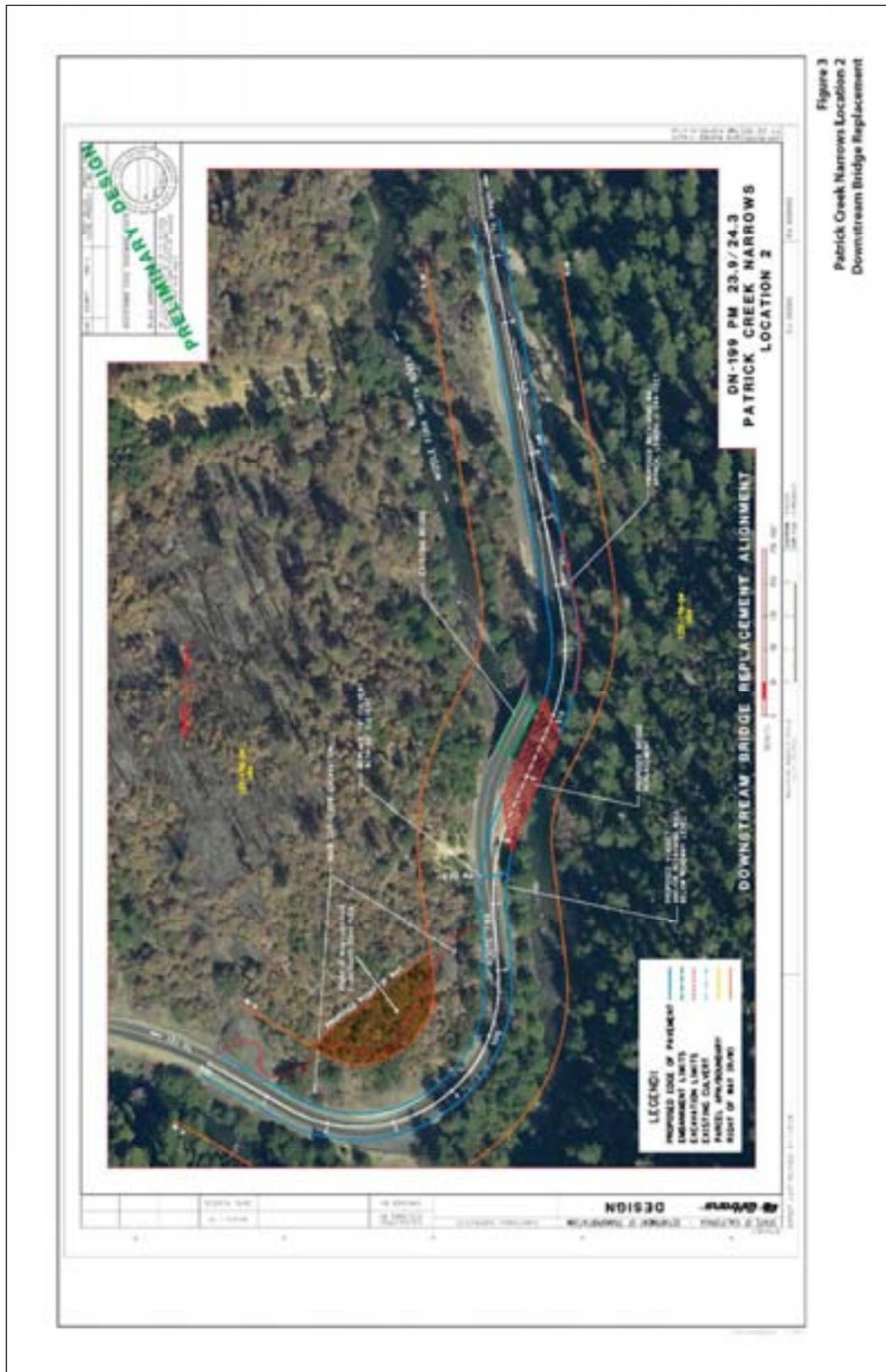


Figure 1
Project Vicinity and Location Map





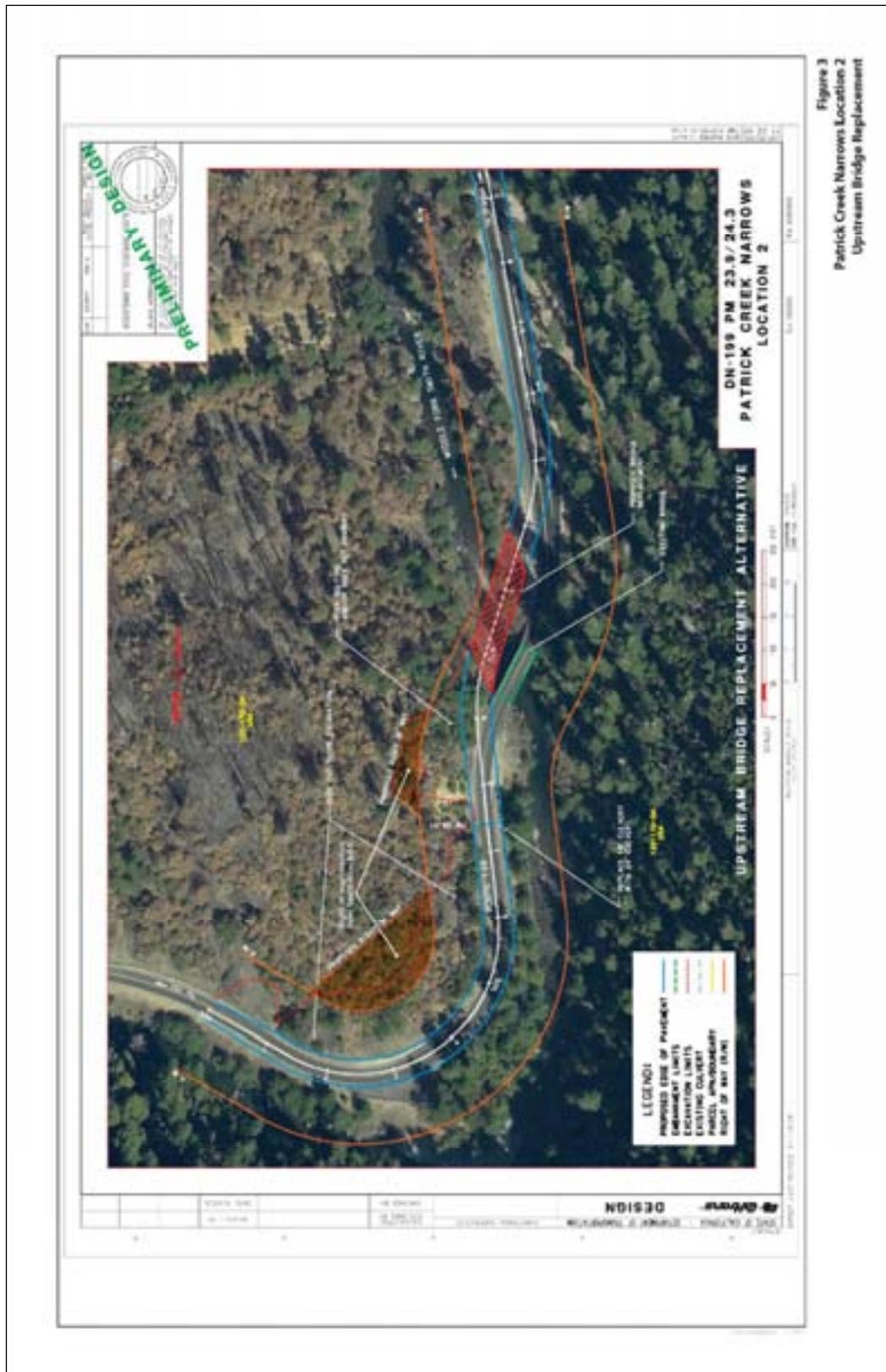


Figure 3
Patrick Creek Narrows Location 2
Upstream Bridge Replacement

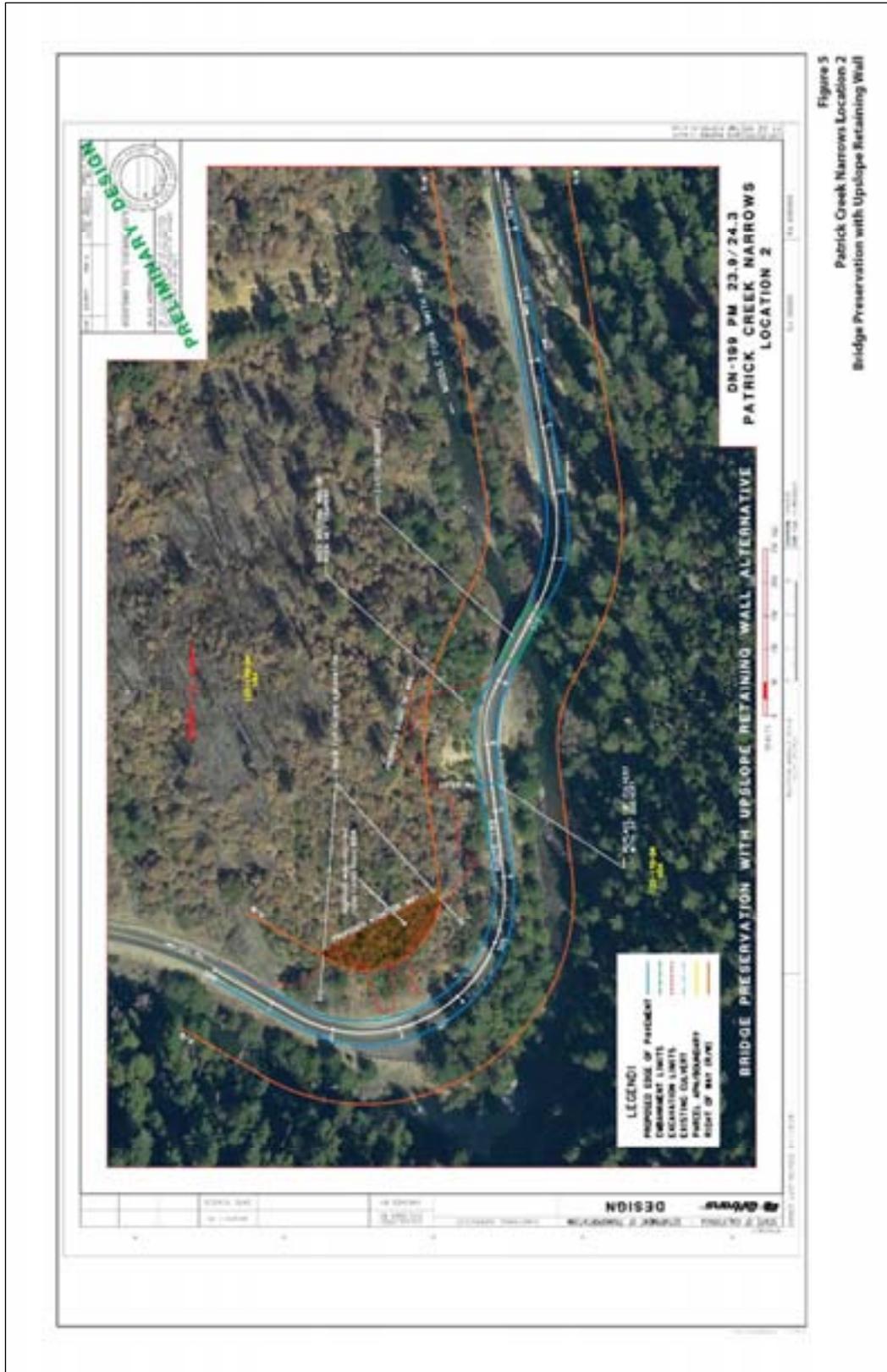


Figure 5
Patrick Creek Narrows Location 2
Bridge Preservation with Upslope Retaining Wall

[DATE], 2010

Mary Kay Vandiver
District Ranger, Smith River National Recreation Area
Six Rivers National Forest
P.O. Box 228
Gasquet, CA 95543-0228

Subject: Wild and Scenic River Consultation for the 197/199 Safe STAA Access Project, Del Norte County

Dear Ms. Vandiver:

The California Department of Transportation (Department) is proposing to construct improvements on State Route (SR) 197 and U.S. Highway (US) 199 in Del Norte County to reclassify these routes as part of the Surface Transportation Assistance Act (STAA) truck route network. As you know, the Smith River is a component of the National Wild and Scenic Rivers System as well as the California Wild and Scenic Rivers System. The segment that borders the project area, the Middle Fork Smith River, is designated as "Recreational." Section 5(d)(1) of the Wild and Scenic Rivers Act directs all federal agencies to consider the potential for national wild, scenic, and recreational river areas in all planning for the use and development of water and related land resources. The purpose of this consultation is to establish whether or not the proposed project would have an adverse effect on the free-flowing characteristics of the Smith River and/or the potential to alter the river segment's ability to meet the Recreational designation it now holds.

Construction of the 197/199 Safe STAA Access Project (proposed project) would use federal funds administered by the Federal Highway Administration (FHWA). As a result, compliance with the National Environmental Policy Act (NEPA) is required. Through delegation of authority by the FHWA Delegation Pilot Program authorized under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the Department is the NEPA lead agency for preparation of the draft environmental document for the proposed project. In accordance with NEPA, the Department is preparing an environmental assessment (EA) to assess potential environmental effects resulting from the proposed project. The Department is also the California Environmental Quality Act (CEQA) lead agency for the proposed project and is preparing an environmental impact report (EIR) in accordance with this act.

As part of the NEPA process, the Department is required to consult with the designated river managing agencies. Five project locations are located along US 199 on national forest lands within the Smith River National Recreation Area (NRA) near the Middle Fork Smith River

Ms. Mary Kay Vandiver
[DATE], 2010
Page 2

(Figure 1). In addition, two project locations are located along SR 197 near the main stem of the Smith River. Following is a description of project activities for each project location.

Project Description

The Department is proposing to construct roadway improvements along SR 197 and US 199 in Del Norte County to reclassify these routes as part of the STAA truck route network. The roadway improvement project is composed of seven project locations referred to as Ruby 1, Ruby 2, Patrick Creek Narrows (Locations 1 to 3), the Narrows, and Washington Curve (Figure 1). The Ruby 1 and 2 sites are located along SR 197 in Del Norte County. Patrick Creek Narrows Locations 1 to 3, the Narrows, and Washington Curve sites are located along US 199 on national forest lands within the Smith River NRA as shown in Figure 2. Proposed safety-enhancing improvements include lane- and shoulder-widening projects. Curve radii would also be increased, as would sight distances. The primary purpose of the proposed project is to improve spot locations on SR 197 and US 199 to allow reclassification of the SR 197-US 199 corridor as part of the STAA network of truck routes, while minimizing environmental impacts. The secondary purpose is to enhance safety on the routes for automobiles, trucks, and other large vehicles at the same spot locations.

Project Alternatives

Below is a summary of the proposed project alternatives at Patrick Creek Narrows Locations 1 through 3, the Narrows site, and the Washington Curve site—the five project sites located along US 199 within the Smith River NRA.

- **Patrick Creek Narrows Location 1:** This location is on US 199 from post mile (PM) 20.5 to 20.9, about 2 miles east of the Grassy Flat Campground. One alternative is being considered for this site. The existing roadway curve would be improved and the roadway would be widened to accommodate two 12-foot-wide lanes and 4-foot shoulders. To accommodate the widening and broader roadway curves, an approximately 350-foot-long, 6-foot-tall retaining wall is proposed along the river side of the road above a portion of the existing steep rock-armored riverbank. Additional roadway work would include an open graded asphalt concrete (OGAC) overlay to improve friction and traction, striping, a centerline rumble strip, shoulder backing, and new metal-beam guardrail construction. Existing gravel pullouts would be used as staging areas. An existing 36-inch culvert would be replaced with a longer culvert to match the new roadway width at the inlet and outlet. Also, two 18-inch culverts would be replaced with 24-inch culverts. Construction at this location is anticipated to take approximately 70 days over one season starting in spring 2013. Right-of-way at this location is held in permanent easement from U.S. Forest Service (Forest Service), including a 100-foot easement on the east side of US 199 and a 400-foot easement along the west side of the roadway where the retaining wall would be constructed. No

Ms. Mary Kay Vandiver
[DATE], 2010
Page 3

additional right-of-way would need to be acquired at this location. Construction of this alternative is anticipated to take approximately 90–100 days over one season beginning in spring 2013.

- **Patrick Creek Narrows Location 2:** This location is farther east on US 199, with project limits from PM 23.92 to 24.08. Within the project limits at this location, US 199 spans the river via the Middle Fork Smith River Bridge. Three alternatives are being considered for Patrick Creek Narrows Location 2: the Upstream Bridge Replacement Alternative, Downstream Bridge Replacement Alternative, and Bridge Preservation with Upslope Retaining Wall Alternative. Common features of the three alternatives would realign and widen the existing 11- to 12-foot lanes to at least 12 feet and increase the shoulders to a width of 4 to 8 feet. To accommodate the widening on the westernmost extent of the project location, approximately 20,000 cubic yards of rock excavation from the rock cut slope would be required. Rock excavation would extend more than 100 feet above the highway and expose approximately 1 acre of newly excavated rock slope. A hoe ram, rock splitter, and/or controlled blasting would be required to construct the rock cut slope. A cut slope of 1:1 is anticipated. Because of the fractured nature of the bedrock, rock fall may be expected after construction. Therefore, a permanent rock-fall mitigation system may be needed. This could consist of a wire-mesh drape or incorporate a rock-fall catchment area at roadway level. One culvert within the limits within this project location would be replaced to match the new roadway width. Improvements at this location would also include an OGAC overlay to improve friction and traction, striping, a centerline rumble strip, metal-beam guardrail, and shoulder backing. Existing gravel and paved pullouts nearby would be used to stage equipment.

The existing right-of-way at this location is 100 feet left and right of the centerline and is held in permanent easement from the Forest Service. However, an expansion of the easement may be necessary in the vicinity of the Middle Fork Smith River Bridge for all three proposed alternatives at this location. The unique features of each build alternative are discussed below.

- *Upstream Bridge Replacement Alternative:* The Middle Fork Smith River Bridge would be replaced with a new bridge constructed at an alignment upstream of the existing bridge. Additionally, a 400-foot-long retaining wall would be constructed on the cut slope side of the roadway. Approximately 0.47 acre of additional permanent right-of-way would be required at this location, as shown on Figure 3. Two bridge design options would be evaluated for this alternative: a concrete arch bridge and a concrete box girder bridge. After construction of the new bridge, the existing bridge would be removed. In-river work would be required at times and include diverting the Middle Fork Smith River during bridge replacement and demolition. The options for diverting Middle Fork Smith River flow during construction include water bladder or K-rail and gravel diversion; corrugated steel pipe localized diversion; creek diversion with dam; and culvert and rock

Ms. Mary Kay Vandiver
[DATE], 2010
Page 4

diversion. Bridge replacement would require a trestle (or pad created in the riverbed), falsework, and a debris containment system.¹ The trestle and falsework may be supported by columns placed on the riverbanks, or they may have supports in the live channel. The debris containment system would be required to prevent debris from falling into the river during demolition of the old bridge. The debris containment system would have to extend underneath the existing bridge and would likely require supports in the river channel that would involve water diversion. After the new bridge is complete, the existing bridge would be removed. The existing spread footing foundation would be cut off flush at the ground surface. Also, portions of the old roadway southwest of the old bridge and directly adjacent to the old bridge would be removed and revegetated. The northwest portion of the old roadway would be retained for drainage features. Construction of this alternative is anticipated to take approximately 300 days over three seasons, beginning in late summer/fall 2013 and ending in late fall/winter 2015.

- *Downstream Bridge Replacement Alternative:* This alternative would replace the Middle Fork Smith River Bridge on a new alignment downstream of the existing bridge location. A retaining wall or viaduct would be constructed downstream from the new bridge. The retaining wall or viaduct would extend for approximately 250 feet and transition directly into the proposed new bridge approach. If a retaining wall were selected, it would extend downslope from the highway level approximately 30 feet and be supported along the bank of the Middle Fork Smith River. If a viaduct were selected, it would be founded on drilled piles and would cantilever the northbound traffic lane over the bank of the Middle Fork Smith River. The viaduct would also require a curtain wall to be constructed. The curtain wall would extend below the viaduct and would be shorter in height and length than the retaining wall. This alternative would also require a retaining wall on the Oregon side of the bridge that would be approximately 10 feet high and 200 feet long (Figure 4). Approximately 0.25 acre of additional permanent right-of-way would be required at this location. Two bridge design options would be evaluated for this alternative: a concrete arch bridge and a concrete box girder bridge. The existing bridge would be removed once the new bridge is in place. Similar to the description for the Upstream Bridge Replacement Alternative above, construction of this alternative would involve in-river work requiring diversion of the Middle Fork Smith River, a trestle, falsework, and a debris containment system for removal of the existing bridge. Construction of this alternative is anticipated to take approximately 300 days over three seasons, beginning in late summer/fall 2013 and ending in late fall/winter 2015.
- *Bridge Preservation with Upslope Retaining Wall Alternative:* This alternative would retain the existing bridge but realign the roadway on either end of the bridge to allow large trucks to cross. An additional retaining wall/rock bolting or rock net drapery would

¹ A *trestle* is a temporary elevated structure used as a work platform for workers and equipment. *Falsework* is the temporary structure that supports the main structure during construction.

Ms. Mary Kay Vandiver
[DATE], 2010
Page 5

be constructed on the cut slope side of the highway. The retaining wall/rock bolting area would be approximately 300 feet long and up to 100 feet high. The retaining wall or rock bolting would provide additional width to align large vehicles before they cross the narrow bridge. This alternative would not preclude future bridge replacement. Approximately 0.23 acre of additional permanent right-of-way would be required at this location, as shown on Figure 5. Construction of this alternative is anticipated to take approximately 250 days over three seasons, beginning in late summer/fall 2013 and ending in late fall/winter 2015.

- **Patrick Creek Narrows Location 3:** Approximately 1.5 miles east of Patrick Creek Narrows Location 2 on US 199, the project limits at this location run from PM 25.5 to 25.65. Only one alternative is being considered at this location. The proposed project would increase the shoulder width to 4 feet on both sides of the roadway and straighten the S-curve that runs through the project limit. To support the wider roadway, an approximately 135-foot-long wall up to an approximate height of 15 feet is proposed on the river side. A drilled-pile foundation may be required. Two culverts would be replaced to match the new roadway width and an existing overside drain would be replaced. Improvements would also include an OGAC overlay to improve friction and traction, striping, a rumble strip, metal-beam guardrail, and shoulder backing. Existing gravel pullouts would be used to stage equipment. The right-of-way easement at this location includes a 100-foot easement along both sides of US 199. However, additional right-of-way would need to be acquired from a private parcel. Beginning in spring 2013, construction at this location is anticipated to take approximately 50–70 days over one season.
- **The Narrows:** The Narrows site is situated between Patrick Creek Narrows Locations 1 and 2, with project limits ranging from PM 22.7 to 23.0. One alternative, with two construction-method scenarios, is being considered for this site. Improvements would increase lane widths to 12 feet and provide 2-foot shoulders. Roadway widening would be accomplished by cutting into the existing cut slope. In slope locations composed of soft material, mechanical equipment such as an excavator would be used. Proposed cut heights range from 0 to 15 feet, with an average height of 10 feet and average depth of 4 feet. Where extremely irregular rock slopes are vertical or overhanging, sliver cuts would be required. Proposed cut heights vary from 0 to 60 feet, with an average height of 25 feet and average depth of 4 feet. The rock excavation/cut limits would be established by controlled blasting or presplitting, which would involve drilling closely spaced holes in the rock face and creating a shear plane by setting off simultaneous charges of explosives in the holes. The results after presplitting are a clean rock face and reduction in rock-fall potential. To excavate the cut slope in these areas, drilling would be done by crane only where there is enough room for all traffic to pass through a one-way reversible traffic control. Slopes that cannot be reached by crane without blocking traffic would be drilled by other means, such as using a track-mounted drill or drilling by hand. A 1-foot-wide paved drainage ditch would be added at the shoulder of the road for a total paved width of 29 feet. One new culvert and drain inlet would be constructed.

Ms. Mary Kay Vandiver
[DATE], 2010
Page 6

Also, an existing culvert and drain inlet would be replaced to match the new edge of pavement. In addition to roadway widening, isolated outcrops of overhanging or loose rock above the excavation limits would be stabilized with rock bolting. Other work includes an overlay of new OGAC pavement to improve friction and traction, a centerline rumble strip, and new striping. Existing gravel pullouts nearby would be used to stage equipment. Construction of the improvements at the Narrows site would occur within existing right-of-way easement. Construction at this location is anticipated to take approximately 100 days over two seasons, beginning in summer/fall 2012 and ending in summer/fall 2013.

- **Washington Curve:** Located at PM 26.3 to 26.5, this is the easternmost US 199 site under the proposed project. The alternatives below would straighten the compound curve at this project location. The improvements would increase the lane width to a minimum of 12 feet. One culvert on the Oregon side of the project limits would be replaced to match the new roadway. Work would include an OGAC overlay to improve friction and traction, replace the existing metal-beam guardrail, and install a centerline rumble strip. Construction of the improvements at this site would occur within existing right-of-way easement that extends 200 feet to the north and 150 feet to the south from the roadway centerline. Existing gravel pullouts would be used to stage equipment. The unique features of each build alternative are described below.
 - **Cut Slope Alternative:** Proposed improvements under this alternative would involve excavation of a new slope on the cut slope side of the roadway. The shoulders would be widened from 2 to 6 feet. Roadway excavation would be approximately 20,000 cubic yards, disturbing an area of approximately 1 acre. The proposed cut slope would be 1:1, depending on geologic conditions. Naturally occurring asbestos (NOA) has been identified at Washington Curve, and it is likely that excavated material would contain NOA at levels considered hazardous. Therefore, the Contractor would be required to hire an Industrial Hygienist to develop a health and safety plan and test excavation material for NOA during construction. In addition, the Contractor would be required to take appropriate measures to contain and dispose of any material that contains NOA. Construction of this alternative is anticipated to take approximately 150 days over two seasons during 2014 and 2015.
 - **Retaining Wall Alternative:** This alternative proposes to construct a retaining wall along the cut slope side of the roadway to provide additional roadway width. The wall would be approximately 800 feet long. Excavation for construction of the wall would be approximately 5,000 cubic yards. The total disturbed area would be approximately 0.6 acre. The wall height would be approximately 12 feet but extend to a maximum height of 30 feet midway through the length of the wall. The vertical surface area of the wall would be approximately 14,000 square feet. Construction of this alternative is anticipated to take approximately 250–300 days over three seasons during 2014, 2015, and 2016.

Ms. Mary Kay Vandiver
[DATE], 2010
Page 7

Results

The proposed project would not involve construction in the bed or on the banks of the river (below the ordinary high water mark [OHWM]) at Patrick Creek Narrows Locations 1 and 3, or the Narrows and Washington Curve sites on US 199. As such, it does not appear that implementation of the proposed improvements at these four project locations would have an adverse effect on the free-flowing characteristics of the river and/or the potential to alter the river segment's ability to meet the recreational criteria it now holds.

However, as noted, implementation of the proposed improvements to the Middle Fork Smith River Bridge at Patrick Creek Narrows Location 2 would involve temporary in-water work below the OHWM, under two of the build alternatives being considered. Following is a description of the anticipated effects on the free-flowing nature and recreational designation of the Middle Fork Smith River.

- *Free-flowing nature of the Middle Fork Smith River:* Beginning in late summer/fall 2013 and ending in late fall/winter 2015, the in-water work (below the OHWM of the Middle Fork Smith River) requiring diversion of the Middle Fork Smith River is anticipated to take approximately 300 days over three seasons. Under the bridge replacement alternatives, a new bridge would be constructed on an alignment upstream or downstream of the existing bridge. The new bridge would be constructed first, before removal of the existing bridge. The new abutments would be located along the edge of the riverbank and outside the OHWM. The existing spread footing would be cut off flush at the ground surface. Therefore, no permanent structures would be placed within the river channel that would alter the free-flowing nature of the river.

Bridge replacement would require a trestle (or pad created in the riverbed), falsework, and a debris containment system. The trestle and falsework may be supported by columns placed on the riverbanks or may have supports in the live channel that would require water diversion. The proposed water diversion techniques would be constructed seasonally, during low river flow conditions. The bridge falsework would remain in place if construction of the bridge is not completed within one construction season.

The debris containment system would be required to prevent debris from falling into the river during demolition of the old bridge. The debris containment system would have to extend underneath the existing bridge and would likely require supports in the river channel that would involve water diversion. The free-flowing condition of the river would not be affected upstream or downstream of the construction limits necessary for bridge replacement and demolition. Within the construction limits, the temporary water diversion techniques would divert water away from the temporary supports in the river channel necessary to support the falsework and debris containment system. The temporary supports and diversion techniques would be removed once the bridge demolition has been accomplished. The banks or channel

Ms. Mary Kay Vandiver
[DATE], 2010
Page 8

of the river would not be altered. All construction debris would be removed and the site would be restored to a natural setting with regrading, erosion control, and revegetation of disturbed areas. Construction at this location is anticipated to take up to three seasons, as noted previously. While temporary diversion of the river would be required to replace the existing bridge, the free-flowing nature of the river would not be altered once construction has been completed.

The Bridge Preservation with Upslope Retaining Wall Alternative would not require in-water work. This alternative would retain the existing bridge but would realign the roadway on either end of the bridge to allow large trucks to cross. In addition, this alternative would require construction of a retaining wall or rock bolting on the southwest (hill) side of the existing bridge. This alternative would not preclude future bridge replacement and would not alter the free-flowing nature of the river.

- *Alteration of the setting of the Middle Fork Smith River:* Improvements proposed at this location may include replacing the existing bridge, an element of the existing conditions for travelers on US 199 and on the river. In addition, excavation of cut slopes and construction of retaining walls and rock fall barriers would occur. These elements also exist throughout the roadway corridor along the river. Temporary views of construction activities can be expected from the roadway and from the river. Aesthetic treatments would be incorporated into the retaining wall's design to minimize the wall's effects. Trees and vegetation would also be removed and disturbed areas would be revegetated. Measures included in the EIR/EA would reduce and minimize potential impacts on the setting of the river.
- *Anadromous fish:* Impacts on anadromous fish (e.g., coho and Chinook salmon, coastal cutthroat trout, green sturgeon) are anticipated during bridge replacement and described in the EIR/EA. Implementation of measures included in the EIR/EA would avoid and minimize potential impacts on the salmonids and their Critical Habitat and Essential Fish Habitat to the greatest extent practicable during project construction. These temporary impacts are not expected to alter the river segment's ability to maintain the "outstanding remarkable" value for the anadromous fishery it now holds.
- *Recreational designation of the Middle Fork Smith River:* During construction at Patrick Creek Narrows Location 2, recreationists would be excluded from the construction zone within the project limits for safety reasons while bridge replacement and demolition work is occurring. Access to the river for recreational activities outside the limited construction zone would be maintained at all times throughout the construction period of the proposed project. Recreation activities on the river would continue upstream and downstream of the construction limits because the river would be temporarily diverted within the construction limits only, allowing water to flow downstream of the bridge. Recreation use of the river would not be interrupted upstream or downstream of the limited construction zone. The construction season could coincide with part of the fishing, kayaking, and rafting season

Ms. Mary Kay Vandiver
[DATE], 2010
Page 9

during the fall and the winter seasons. If boaters are present at the same time that in-water work, diversion techniques and/or slope removal are in place, it is anticipated that boaters would need to portage around the construction area for safety reasons. Recreational activities on the river within the construction limits would resume after each construction season has ended and diversion techniques in the channel are removed. Implementation of the bridge preservation alternative is not expected to require in-water work or diversion techniques, although blasting may be required and could affect recreational activities to a lesser degree. Traffic delays on US 199 are anticipated during construction seasons at various locations over a period of 5 years. In particular multiple delays could be encountered when construction is occurring at more than one location during the same construction season. These delays would interfere with public access to the Smith River NRA recreation sites on or accessed from US 199, including Middle Fork Smith River access points. As noted above, construction activities at this location are anticipated to take up to three seasons. Recreation opportunities along the river would resume once construction at the Patrick Creek Narrows Location 2 has been completed and would not alter the river segment's ability to meet the recreational designation it now holds.

Therefore, implementation of the proposed improvements at Patrick Creek Narrows Location 2 would not have a permanent adverse effect on the free-flowing characteristics of the Middle Fork Smith River and does not have the potential to alter the river's ability to meet its current Recreational designation.

As the responsible and designated federal management agency for the Middle Fork Smith River within the Smith River NRA, we are requesting your written determination that the proposed project will not adversely affect the Wild and Scenic River designation of the Smith River. Please send your written determination to:

Kevin Church, Project Manager
California Department of Transportation District 1
P.O. Box 3700
Eureka, CA 95502-3700

We have greatly appreciated the cooperation of the Six Rivers National Forest in the planning and environmental evaluation of this proposed project and look forward to continued consultation and coordination. If you have any questions or would like to discuss this further, please call me at 707/445-6600.

Sincerely,

Ms. Mary Kay Vandiver
[DATE], 2010
Page 10

Kevin Church
Project Manager
California Department of Transportation District 1

Enclosures: Figures 1 through 5

cc: Kim Hayler, Environmental Coordinator, California Department of Transportation District 1

Draft

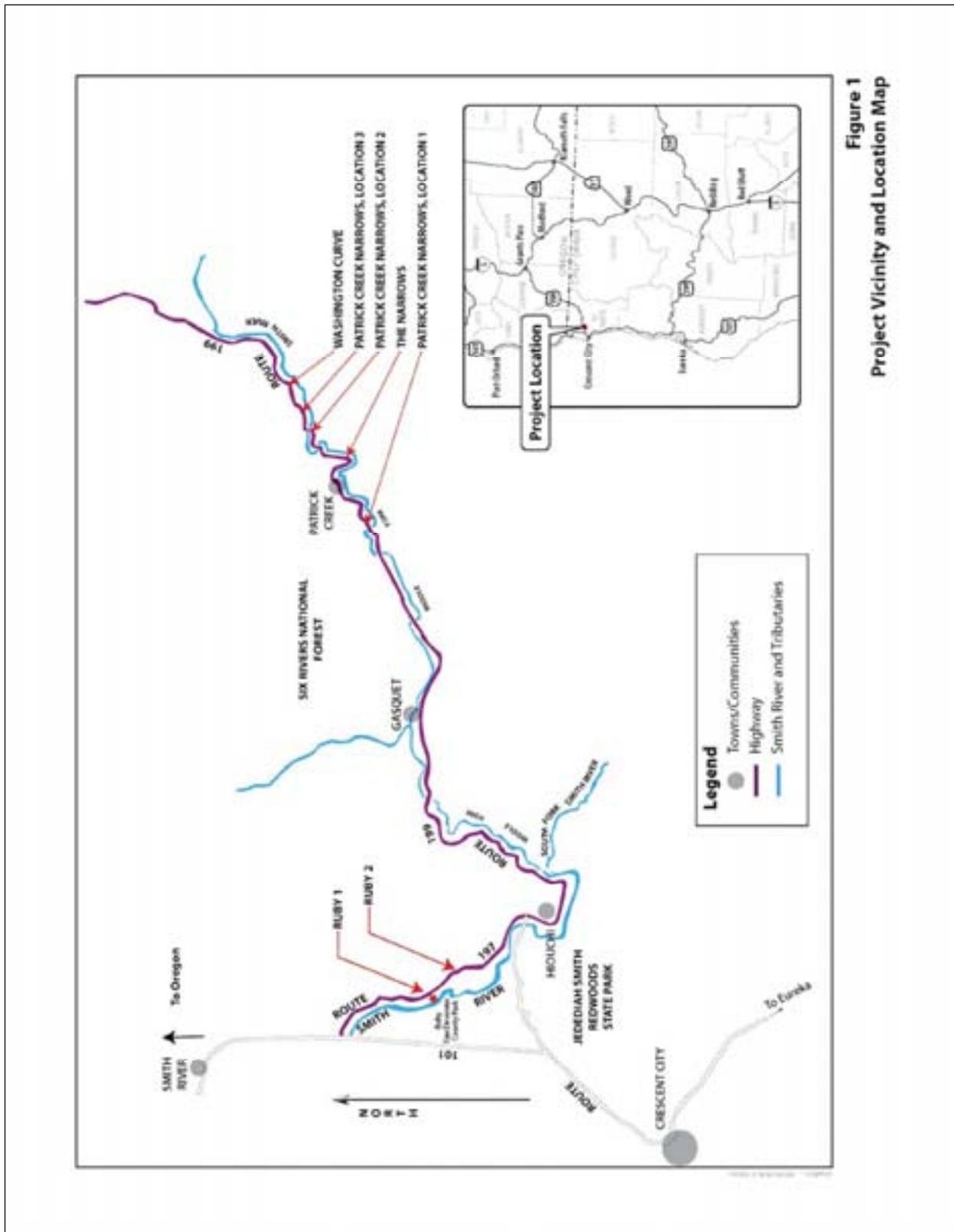
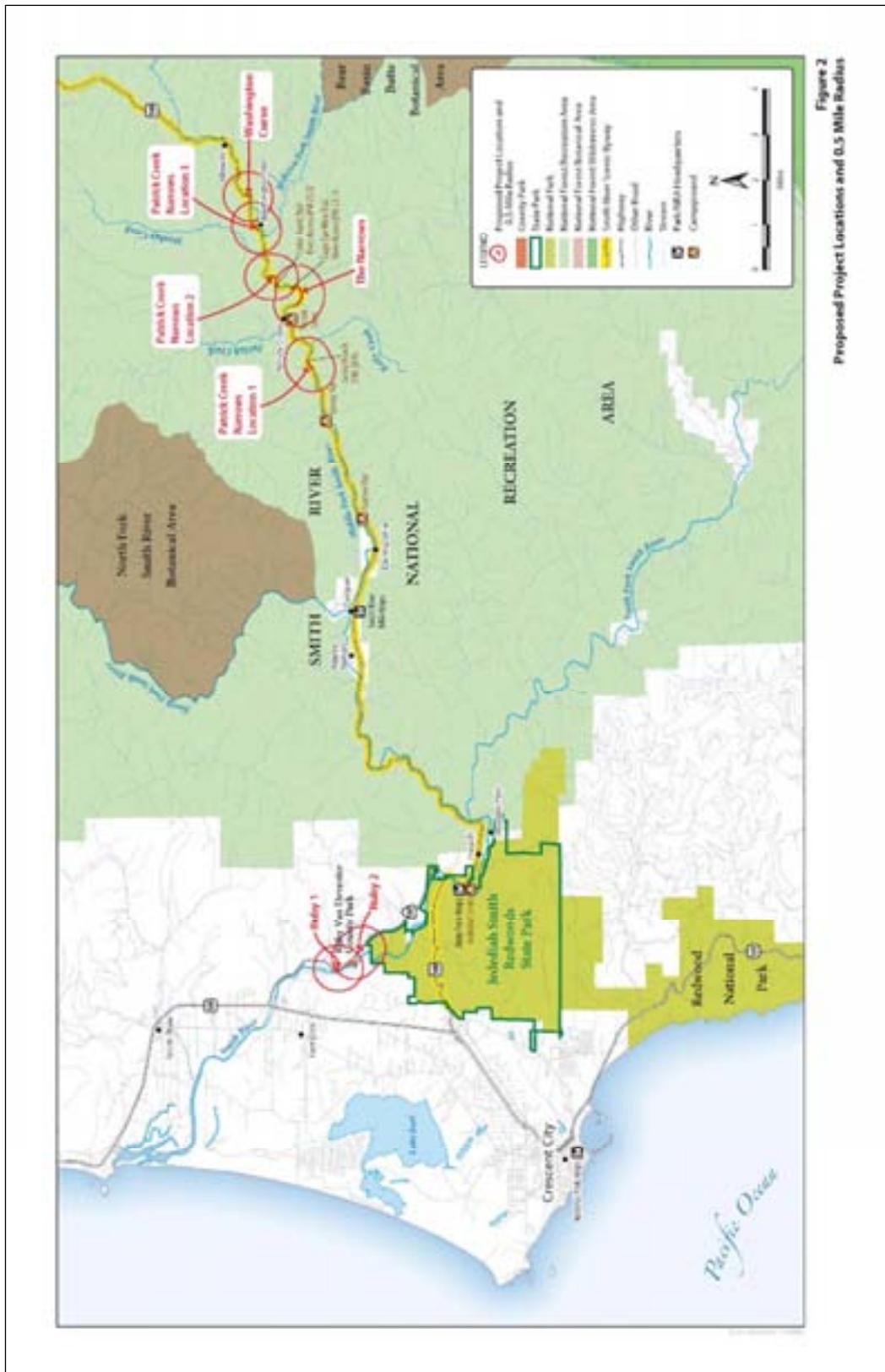
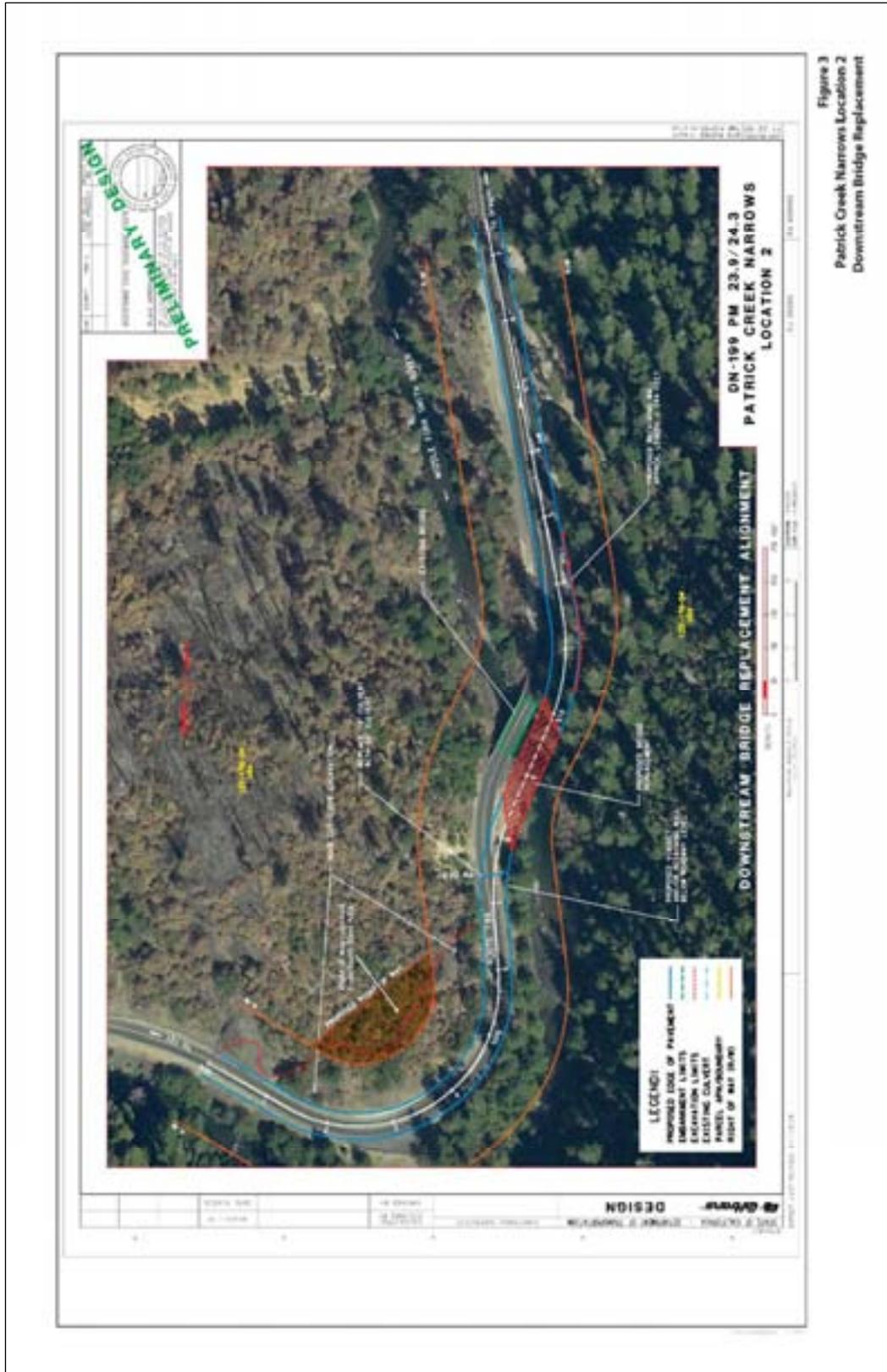


Figure 1
Project Vicinity and Location Map





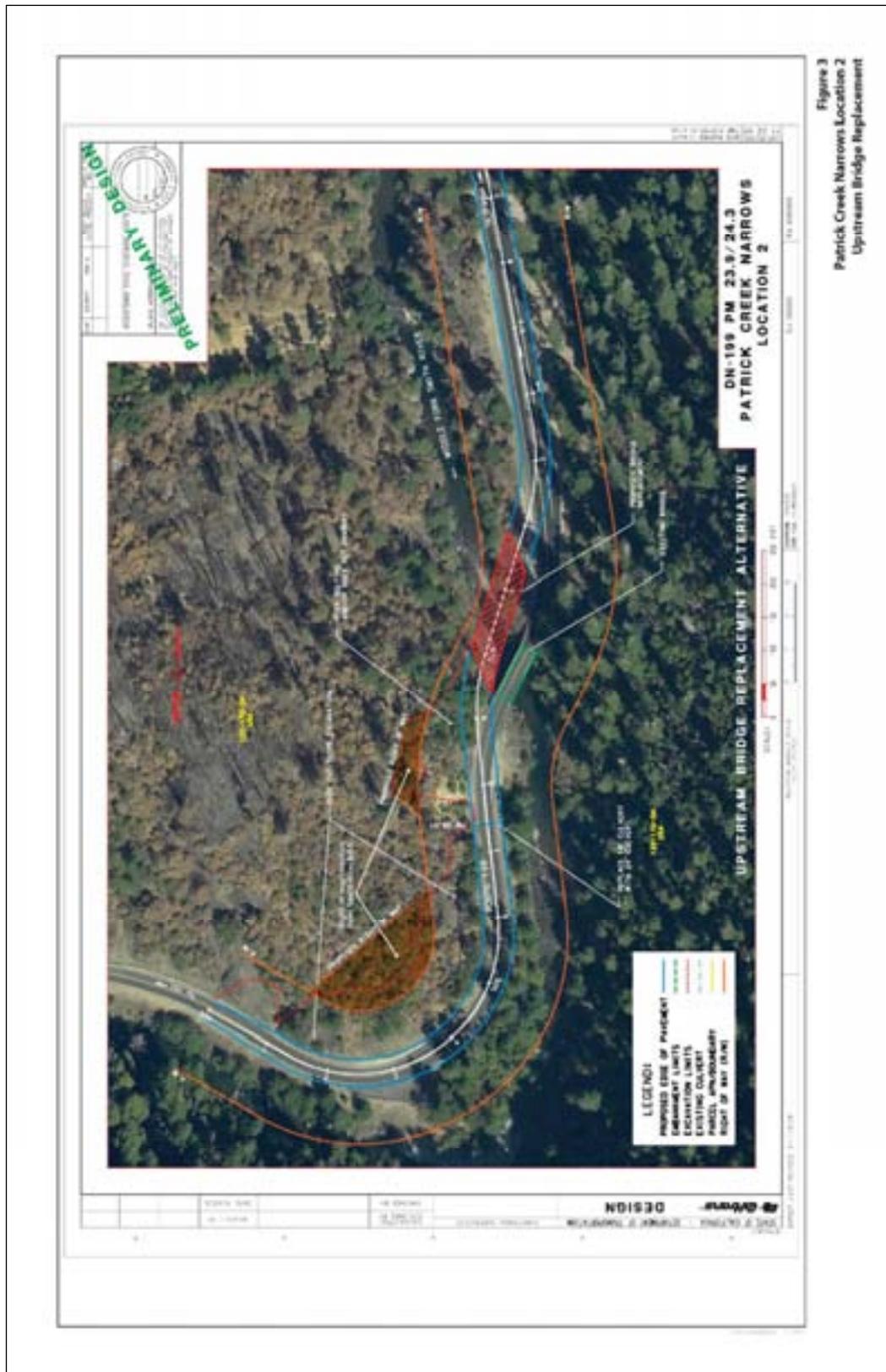


Figure 3
Patrick Creek Narrows Location 2
Upstream Bridge Replacement

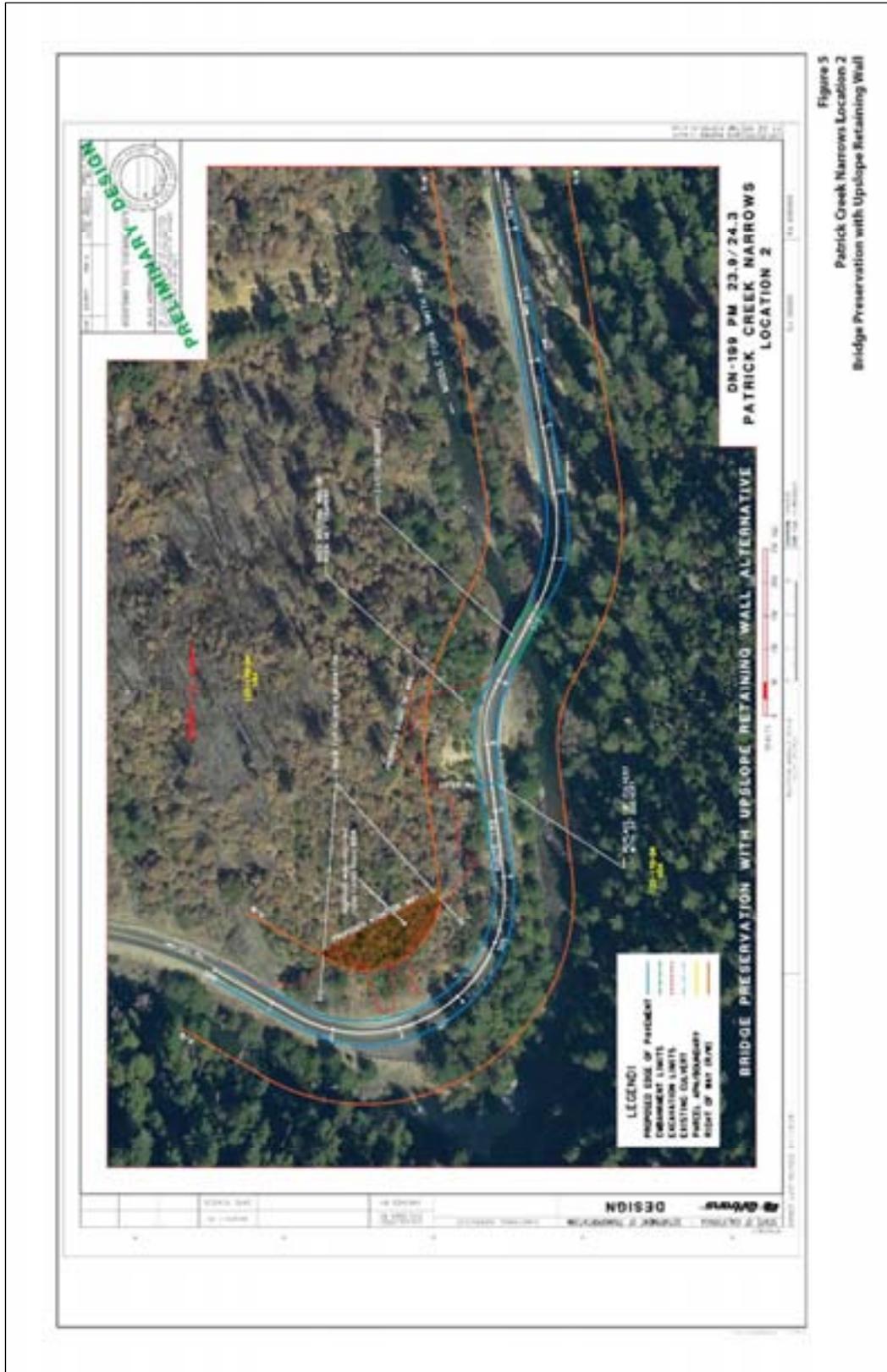


Figure 5
Patrick Creek Narrows Location 2
Bridge Preservation with Upslope Retaining Wall

11/10/2008 12:50 FAX 916 657 5390

NANC

001

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax



November 4, 2008

Tina Pitsenberger
ICF Jones & Stokes
630 K Street, Suite 400
Sacramento, CA 95814

RE: Proposed Caltrans 199/197 STAA Highway Projects; Del Norte County.

Sent By Fax: (916) 737-3030
Pages Sent: 2

Dear Ms. Pitsenberger:

A record search of the Sacred Lands File indicates the presence of Native American cultural resources in the vicinity of your project that may be impacted (Mun-sro-me, Houchi USGS Quadrangle, a known archaeological site, CA-DNO-36 in Del Norte County and Walker Flat, also Houchi USGS Quadrangle). Please contact Loren Brommelyn 180 China Creek Ct., Crescent City, Ca 95531, telephone number (707) 464-1665 to determine if your project will impact these sites. Also attached is the Native American Contact list for Del Norte County.

The presence or absence of specific site information in the Sacred Lands File does not indicate the absence of other cultural resources in any project area. Other sources of information regarding cultural resources in your project area should also be contacted for information regarding known and recorded sites. I suggest you consult with all of those on the accompanying Native American Contacts list, if they cannot supply information, they might recommend others with specific knowledge about cultural resources in your project area. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4040.

Sincerely,

A handwritten signature in black ink that reads "Katy Sanchez".

Katy Sanchez
Program Analyst

Native American Contacts
Del Norte County
November 3, 2008

<p>Elk Valley Rancheria of Smith River Tolowa Dale Miller, Chairperson 2332 Howland Hill Road Tolowa Crescent City , CA 95531 dmiller@elk-valley.com (707) 464-4680 (707) 464-4519</p>	<p>✓ Elk Valley Rancheria of Smith River Tolowa Glen Gary, Tribal Administrator 2332 Howland Hill Road Tolowa Crescent City , CA 95531 tgoodman@elk-valley.com (707) 464-4680 (707) 464-4519 Fax</p>
<p>Smith River Rancheria of California Kara Brundin-Miller, Chairperson 140 Rowdy Creek Road Tolowa Smith River , CA 95567 kara.miller@tolowa-nsn.gov (707) 487-9255 (707) 487-0930 Fax</p>	<p>✓ Elk Valley Rancheria of Smith River Tolowa John Green, Cultural & Natural Resources Committee 2332 Howland Hill Road Tolowa Crescent City , CA 95531 (707) 464-4680 (707) 464-4519 Fax</p>
<p>✓ Melochundum Band of Tolowa Indians P.O. Box 388 Tolowa Fort Dick , CA 95538</p>	<p>Elk Valley Rancheria of Smith River Tolowa ✓ Shannon Tushingam, THPO 2332 Howland Hill Road Tolowa Crescent City , CA 95531 (707) 464-4680 (707) 464-4519 Fax</p>
<p>Smith River Rancheria of California ✓ Russ Crabtree, Tribal Administrator 140 Rowdy Creek Road Tolowa Smith River , CA 95567 srindian@gte.net (707) 487-9255 (707) 487-0930 FAX</p>	<p>Smith River Rancheria of California THPO ✓ Suntayea Steinruck 140 Rowdy Creek Road Tolowa Smith River , CA 95567 (707) 487-9255 (707) 487-0930 Fax</p>
<p>✓ Loren Brommelyn 180 China Creek Ct. Crescent City, CA 95531 (707) 464-1665</p>	

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Caltrans 199/197 STAA highway Projects; Del Norte County.



November 10, 2008

Loren Brommelyn
180 China Creek Court
Crescent City, CA 95531

Subject: SR 197/US 199 STAA Project

Dear Ms. Brommelyn:

I obtained your name from the Native American Heritage Commission in order to inform you of the Caltrans State Route 197/U.S. Highway 199 STAA Improvements Project. The NAHC suggested you as a contact person regarding whether or not the project will impact site CA-DNO-36.

The project includes improvements on Routes 197 and 199 in Del Norte County to allow classification of the routes as part of the California STAA truck route network. These projects are located in five locations along Routes 197 and 199: Ruby 1, Ruby 2, Patrick Creek, The Narrows and Washington Curve. The enclosed map indicates the project locations.

Thank you for your cooperation in this matter. Please do not hesitate to call me if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tina Pitsenberger'.

Tina Pitsenberger
Project Coordinator

Project Area Map enclosed



November 10, 2008

Smith River Rancheria of California
Russ Crabtree, Tribal Administrator
140 Rowdy Creek Road
Smith River, CA 95567

Subject: SR 197/US 199 STAA Project

Dear Mr. Crabtree:

I obtained your name from the Native American Heritage Commission in order to inform you of the Caltrans State Route 197/U.S. Highway 199 STAA Improvements Project. The project includes improvements on Routes 197 and 199 in Del Norte County to allow classification of the routes as part of the California STAA truck route network. These projects are located in five locations along Routes 197 and 199: Ruby 1, Ruby 2, Patrick Creek, The Narrows and Washington Curve. The enclosed map indicates the project locations.

We are seeking information from Native American representatives in the area regarding the existence of sites within the project area. Thank you for your cooperation in this matter. Please do not hesitate to call me if you have any questions or concerns.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Tina Pitsenberger'.

Tina Pitsenberger
Project Coordinator

Project Area Map enclosed



November 10, 2008

Melochundum Band of Tolowa
P.O. Box 388
Fort Dick, CA 95538

Subject: SR 197/US 199 STAA Project

Dear Sir or Madam:

I obtained your name from the Native American Heritage Commission in order to inform you of the Caltrans State Route 197/U.S. Highway 199 STAA Improvements Project. The project includes improvements on Routes 197 and 199 in Del Norte County to allow classification of the routes as part of the California STAA truck route network. These projects are located in five locations along Routes 197 and 199: Ruby 1, Ruby 2, Patrick Creek, The Narrows and Washington Curve. The enclosed map indicates the project locations.

We are seeking information from Native American representatives in the area regarding the existence of sites within the project area. Thank you for your cooperation in this matter. Please do not hesitate to call me if you have any questions or concerns.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Tina Pitsenberger'.

Tina Pitsenberger
Project Coordinator

Project Area Map enclosed



November 10, 2008

Shannon Tushingam, THPO
Elk Valley Rancheria of Smith River Tolowa
2332 Howland Hill Road
Crescent City, CA 95531

Subject: SR 197/US 199 STAA Project

Dear Shannon Tushingam:

I obtained your name from the Native American Heritage Commission in order to inform you of the Caltrans State Route 197/U.S. Highway 199 STAA Improvements Project. The project includes improvements on Routes 197 and 199 in Del Norte County to allow classification of the routes as part of the California STAA truck route network. These projects are located in five locations along Routes 197 and 199: Ruby 1, Ruby 2, Patrick Creek, The Narrows and Washington Curve. The enclosed map indicates the project locations.

We are seeking information from Native American representatives in the area regarding the existence of sites within the project area. Thank you for your cooperation in this matter. Please do not hesitate to call me if you have any questions or concerns.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Tina Pitsenberger'.

Tina Pitsenberger
Project Coordinator

Project Area Map enclosed



November 10, 2008

Smith River Rancheria of California
Kara Brundin-Miller, Chairperson
140 Rowdy Creek Road
Smith River, CA 95567

Subject: SR 197/US 199 STAA Project

Dear Ms. Brundin-Miller:

I obtained your name from the Native American Heritage Commission in order to inform you of the Caltrans State Route 197/U.S. Highway 199 STAA Improvements Project. The project includes improvements on Routes 197 and 199 in Del Norte County to allow classification of the routes as part of the California STAA truck route network. These projects are located in five locations along Routes 197 and 199: Ruby 1, Ruby 2, Patrick Creek, The Narrows and Washington Curve. The enclosed map indicates the project locations.

We are seeking information from Native American representatives in the area regarding the existence of sites within the project area. Thank you for your cooperation in this matter. Please do not hesitate to call me if you have any questions or concerns.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Tina Pitsenberger'.

Tina Pitsenberger
Project Coordinator

Project Area Map enclosed



November 10, 2008

Smith River Rancheria of California THPO
Suntayea Steinruck
140 Rowdy Creek Road
Smith River, CA 95567

Subject: SR 197/US 199 STAA Project

Dear Ms. Steinruck:

I obtained your name from the Native American Heritage Commission in order to inform you of the Caltrans State Route 197/U.S. Highway 199 STAA Improvements Project. The project includes improvements on Routes 197 and 199 in Del Norte County to allow classification of the routes as part of the California STAA truck route network. These projects are located in five locations along Routes 197 and 199: Ruby 1, Ruby 2, Patrick Creek, The Narrows and Washington Curve. The enclosed map indicates the project locations.

We are seeking information from Native American representatives in the area regarding the existence of sites within the project area. Thank you for your cooperation in this matter. Please do not hesitate to call me if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tina Pitsenberger'.

Tina Pitsenberger
Project Coordinator

Project Area Map enclosed



November 10, 2008

Dale Miller, Chairperson
Elk Valley Rancheria of Smith River Tolowa
2332 Howland Hill Road
Crescent City, CA 95531

Subject: SR 197/US 199 STAA Project

Dear Mr. Miller:

I obtained your name from the Native American Heritage Commission in order to inform you of the Caltrans State Route 197/U.S. Highway 199 STAA Improvements Project. The project includes improvements on Routes 197 and 199 in Del Norte County to allow classification of the routes as part of the California STAA truck route network. These projects are located in five locations along Routes 197 and 199: Ruby 1, Ruby 2, Patrick Creek, The Narrows and Washington Curve. The enclosed map indicates the project locations.

We are seeking information from Native American representatives in the area regarding the existence of sites within the project area. Thank you for your cooperation in this matter. Please do not hesitate to call me if you have any questions or concerns.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Tina Pitsenberger'.

Tina Pitsenberger
Project Coordinator

Project Area Map enclosed



November 10, 2008

Glen Gary, Tribal Administrator
Elk Valley Rancheria of Smith River Tolowa
2332 Howland Hill Road
Crescent City, CA 95531

Subject: SR 197/US 199 STAA Project

Dear Mr. Gary:

I obtained your name from the Native American Heritage Commission in order to inform you of the Caltrans State Route 197/U.S. Highway 199 STAA Improvements Project. The project includes improvements on Routes 197 and 199 in Del Norte County to allow classification of the routes as part of the California STAA truck route network. These projects are located in five locations along Routes 197 and 199: Ruby 1, Ruby 2, Patrick Creek, The Narrows and Washington Curve. The enclosed map indicates the project locations.

We are seeking information from Native American representatives in the area regarding the existence of sites within the project area. Thank you for your cooperation in this matter. Please do not hesitate to call me if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tina Pitsenberger'.

Tina Pitsenberger
Project Coordinator

Project Area Map enclosed



November 10, 2008

John Green, Cultural & Natural Resources Committee
Elk Valley Rancheria of Smith River Tolowa
2332 Howland Hill Road
Crescent City, CA 95531

Subject: SR 197/US 199 STAA Project

Dear Mr. Green:

I obtained your name from the Native American Heritage Commission in order to inform you of the Caltrans State Route 197/U.S. Highway 199 STAA Improvements Project. The project includes improvements on Routes 197 and 199 in Del Norte County to allow classification of the routes as part of the California STAA truck route network. These projects are located in five locations along Routes 197 and 199: Ruby 1, Ruby 2, Patrick Creek, The Narrows and Washington Curve. The enclosed map indicates the project locations.

We are seeking information from Native American representatives in the area regarding the existence of sites within the project area. Thank you for your cooperation in this matter. Please do not hesitate to call me if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tina Pitsenberger'.

Tina Pitsenberger
Project Coordinator

Project Area Map enclosed

[DATE], 2010

Ed Fulton
Building/Parks Maintenance Superintendent
Del Norte County Parks Department
840 9th Street, Suite 11
Crescent City, CA 95531

Subject: Section 4(f) Concurrence Request for the 197/199 Safe Surface Transportation Assistance Act Access Project, Del Norte County

Dear Mr. Fulton:

The California Department of Transportation (Department) is proposing to construct improvements on State Route (SR) 197 and U.S. Highway (US) 199 in Del Norte County to reclassify these routes as part of the Surface Transportation Assistance Act (STAA) truck route network.

Construction of the 197/199 Safe STAA Access Project (proposed project) would use federal funds administered by the Federal Highway Administration (FHWA). As a result, compliance with the National Environmental Policy Act (NEPA) is required. Through delegation of authority by the FHWA Delegation Pilot Program authorized under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the Department is the NEPA lead agency for preparation of the draft environmental document for the proposed project. In accordance with NEPA, the Department is preparing an environmental assessment (EA) to assess potential environmental effects resulting from the proposed project. The Department is also the California Environmental Quality Act (CEQA) lead agency for the proposed project and is preparing an environmental impact report (EIR).

As part of the NEPA process, the Department is required to prepare documentation required by Section 4(f) of the U.S. Department of Transportation Act, referred to herein as the Section 4(f) evaluation. Section 4(f), codified in federal law in the United States Code (USC), Title 14, Section 303, declares that "[i]t 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."

Public parks, recreation areas, and facilities within 0.5 mile of the proposed project were identified to determine whether they qualify for protection as Section 4(f) resources and whether the provisions of Section 4(f) would be triggered by construction of the proposed project. The public parks and recreation areas considered in this evaluation include all neighborhood, city, regional, state, and federal recreation resources in the project area.

Ed Fulton, Building/Parks Maintenance Superintendent
[DATE], 2010
Page 2

Project Description

The Department is proposing to construct roadway improvements along SR 197 and US 199 in Del Norte County to reclassify these routes as part of the STAA truck route network. The roadway improvement project is composed of five distinct project sites referred to as Ruby 1, Ruby 2, Patrick Creek Narrows (Locations 1 to 3), the Narrows, and Washington Curve (Figure 1). The Ruby 1 and 2 sites are located along SR 197 and are the closest to Ruby Van Deventer County Park. Patrick Creek Narrows Locations 1 to 3, the Narrows site, and the Washington Curve site are located along US 199. Proposed safety-enhancing improvements include lane- and shoulder-widening projects. In turn, curve radii would be increased, as would sight distances. The primary purpose of the proposed project is to improve spot locations on SR 197 and US 199 to allow reclassification of the SR 197-US 199 corridor as part of the STAA network of truck routes, while minimizing environmental impacts. The secondary purpose is to enhance safety on the routes for automobiles, trucks, and other large vehicles at the same spot locations.

Below is a summary of the proposed project alternatives at the Ruby 1 and 2 sites, the two project sites located nearest to Ruby Van Deventer County Park along SR 197 (Figure 2):

- **Ruby 1:** The Ruby 1 site is located on SR 197 at post mile (PM) 4.5, near the entrance to Ruby Van Deventer County Park. To improve the roadway, the curve of the road would be lengthened, and shoulders would be increased from their existing 0- to 1-foot widths to new varying widths. On the southbound side, the new shoulders would vary from 0 to 7 feet, transitioning from each end of the project limits. Four-foot shoulders are proposed on the northbound side. Asphalt concrete would be applied to the curve of the roadbed to improve the existing super elevation.¹ In addition, the asphalt surface would be an open graded asphalt concrete (OGAC) overlay. Two existing culverts would be extended and new drainage inlets installed. The old drainage inlets would be removed and new ones inserted in their place. No trees would be removed along the right-of-way adjacent to Ruby Van Deventer County Park.
- **Ruby 2:** The Ruby 2 site is located on SR 197 and extends from PM 3.2 to PM 4.0. This site is situated just under 0.5 mile south of the Ruby 1 site. Three build alternatives are being considered for the Ruby 2 site. The Two-Foot Shoulders Alternative would increase the shoulder widths to a minimum of 2 feet on both sides of the roadway. The shoulder widths currently vary from 0 to 4 feet. The Four-Foot Shoulders Alternative would increase the shoulder widths to 4 feet on both sides of the roadway. The Two-Foot Widening in Spot Locations Alternative would increase the shoulder widths to 2 feet at spot locations.

¹ The *super elevation* is the rise in the roadway surface elevation as one moves from the inside edge of the road to the outside edge along a curve.

Ed Fulton, Building/Parks Maintenance Superintendent
[DATE], 2010
Page 3

Ruby Van Deventer County Park

The Section 4(f) evaluation for the proposed project addresses the potential impacts on recreation facilities within or adjacent to the project sites that may occur as a result of implementing the proposed project. During preparation of the Section 4(f) evaluation, the Department determined that there may be temporary construction-related effects on Ruby Van Deventer County Park as a result of the proposed improvements at the Ruby 1 site. The Department has determined that construction of the proposed project at the Ruby 2 site would not result in any permanent or temporary construction-related effects on Ruby Van Deventer County Park, because of the distance of the proposed project improvements from the park boundaries. Consequently, only potential temporary effects due to construction at the Ruby 1 site are discussed below.

The SR 197 right-of-way adjacent to Ruby Van Deventer County Park at the proposed Ruby 1 location is on a prescriptive easement with De Norte County. Improvements at this site would widen the southbound side shoulder for a distance of approximately 0.12 mile within the existing road right-of-way prescriptive easement. Implementation of this alternative would not require the acquisition of any additional permanent right-of-way along SR 197. The temporary construction easement would be located on park property at the entrance to the park (Figure 3). The temporary construction easement is necessary to allow for modification of the park entrance to match the improved roadway surface elevation. To accomplish this work, parking on three to four parking spaces would not be available during the time it takes to modify the entrance to the park. The temporary construction easement would include a total area of approximately 2,150 square feet (0.05 acre) (Figure 3). Construction at the entrance is anticipated to occur over a period of 3 days. Access to the park, including the campground and picnic area, would be maintained at all times during construction at the park entrance and during the construction season at this location. Establishment of the construction zone would be done in a manner that would minimize the amount of area unavailable for parking and that would not temporarily or permanently displace any campsites or picnic sites.

The duration of construction at the Ruby 1 site is anticipated to be 50 days (approximately 10 weeks). Construction would not occur on weekends (beginning after 3 p.m. on Fridays), designated legal holidays, or the day preceding designated legal holidays. No night work is anticipated at this site, and the maximum traffic delays on SR 197 are anticipated to be limited to 15 minutes or less. The construction period at the Ruby 1 project site is anticipated to be summer through fall 2012.

Access to the river at the undeveloped boat launch by boaters with trailers could be reduced or limited during the period required for the temporary construction easement because there would be less room to maneuver boat trailers in the parking lot. However, this access would not be blocked and would be maintained at all times, and access to the river by other recreationists at this location would not be affected. Additionally, construction activities at the entrance could intermittently delay access to the campsites and day-use area at times when equipment or

Ed Fulton, Building/Parks Maintenance Superintendent
[DATE], 2010
Page 4

material is moving in or out of the entrance. However, access to the campsites and day-use area of the park would be maintained at all times during construction activities.

The Department has determined that the potential effects of the temporary construction easement at the park entrance meet the criteria for a temporary occupancy that is not adverse, as defined in FHWA regulations (Code of Federal Regulations [CFR], title 23, section 774.13[d]). Specifically, the Department proposes the following measures be taken to ensure the criteria are met and is requesting Del Norte County written concurrence with the following assertions.

- **The duration of the occupancy must be temporary (i.e., less than the time needed for construction of the project), and there should be no change in ownership of the land.** The temporary construction easement proposed at Ruby Van Deventer County Park would be temporary for an anticipated period of 3 days of the 50-day construction period for this location. Once construction has been completed at this site, full use of the entrance and parking lot for visitors would resume. The construction easement would be temporary, compared with the overall construction period of the proposed improvements at this location, and construction activities would not require a change in ownership of the park lands.
- **The scope of work must be minor (i.e., both the nature and magnitude of the changes to the Section 4(f) property are minimal).** Construction activities in the area would allow for modification of the park entrance to meet the elevation of the improved roadway. The entrance would be paved to transition from SR 197 to the parking area. A temporary construction zone would be established around the area in the parking lot with limited access for equipment and workers to pave the area. No other physical changes to the parking lot or other park property are anticipated. Removal of trees or vegetation would not be required in this area.
- **There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features or attributes of the property, on either a temporary or permanent basis.** No permanent adverse physical impacts on the park property are anticipated as a result of the modifications to the park entrance. The Department will coordinate with the Del Norte County Parks Department to ensure that, to the extent feasible, construction would avoid impacts on as many park visitors as possible. This coordination also would ensure that access to the park, river access, and visitor use of the campsites and day-use areas continue uninterrupted during the construction period at the Ruby 1 site. Potential intermittent delays on SR 197 near the park are not expected to interfere with the protected activities, features, or attributes of the park. Once construction has been completed, use of the entrance and parking lot would resume.

Access to the river at the undeveloped boat launch by boaters with trailers could be less convenient during the estimated 3 days it would take to modify the entrance because there would be less room to maneuver boat trailers in the parking lot. However, this access would

Ed Fulton, Building/Parks Maintenance Superintendent
[DATE], 2010
Page 5

not be blocked and would be maintained at all times, and access to the river by other recreationists at this location would not be affected. Launching boats from the informal, undeveloped boat launch is difficult because of the large gravel sandbar; therefore, use of the undeveloped boat launch is infrequent or occasional. Because of the short-term nature of this temporary impact, the difficulty of launching boats from this location, and the availability of other boat launch facilities nearby, the temporarily reduced or limited area that boaters with trailers would have to maneuver in the parking area, is not expected to interfere with the protected activities, features, or attributes of the park. The construction at the park entrance would not result in a permanent interference with the use of the river access for boaters with trailers.

- **The land being used must be fully restored (i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project).** Construction activities would take place at the entrance to the park, and there would not be any physical changes to other park property. Removal of trees or vegetation would not be required for the construction activities. The entrance would be paved and fully restored to a condition as good as that which existed before the proposed project. The entrance would be restriped. However, should any modifications or inadvertent damage occur to the parking lot or other park property, the property would be restored, at a minimum, to the condition that existed before the construction staging activities.
- **There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.** This letter of concurrence has been prepared for your signature of agreement regarding the temporary occupancy of Ruby Van Deventer County Park during construction.

The temporary construction-related impacts on Ruby Van Deventer County Park would not substantially or permanently impair recreation activities at the park or any physical features of the park. As described above, the temporary occupancy of the entrance to Ruby Van Deventer County Park would meet all of the criteria outlined in 23 CFR 774.13(d).

Please indicate your concurrence with the findings described above regarding the temporary occupancy of Ruby Van Deventer County Park by signing below and returning this letter to: Kevin Church, Project Manager, California Department of Transportation District 1, P.O. Box 3700, Eureka, CA 95502-3700.

Date: _____

Ed Fulton
Building/Parks Maintenance Superintendent
Del Norte County Parks Department

Ed Fulton, Building/Parks Maintenance Superintendent
[DATE], 2010
Page 6

If you have any questions or would like to discuss this further, please call me at 707/445-6600.

Sincerely,

Kevin Church
Project Manager
California Department of Transportation District 1

Enclosures: Figures 1 to 3

cc: Kim Hayler, Environmental Coordinator, California Department of Transportation District 1

Draft

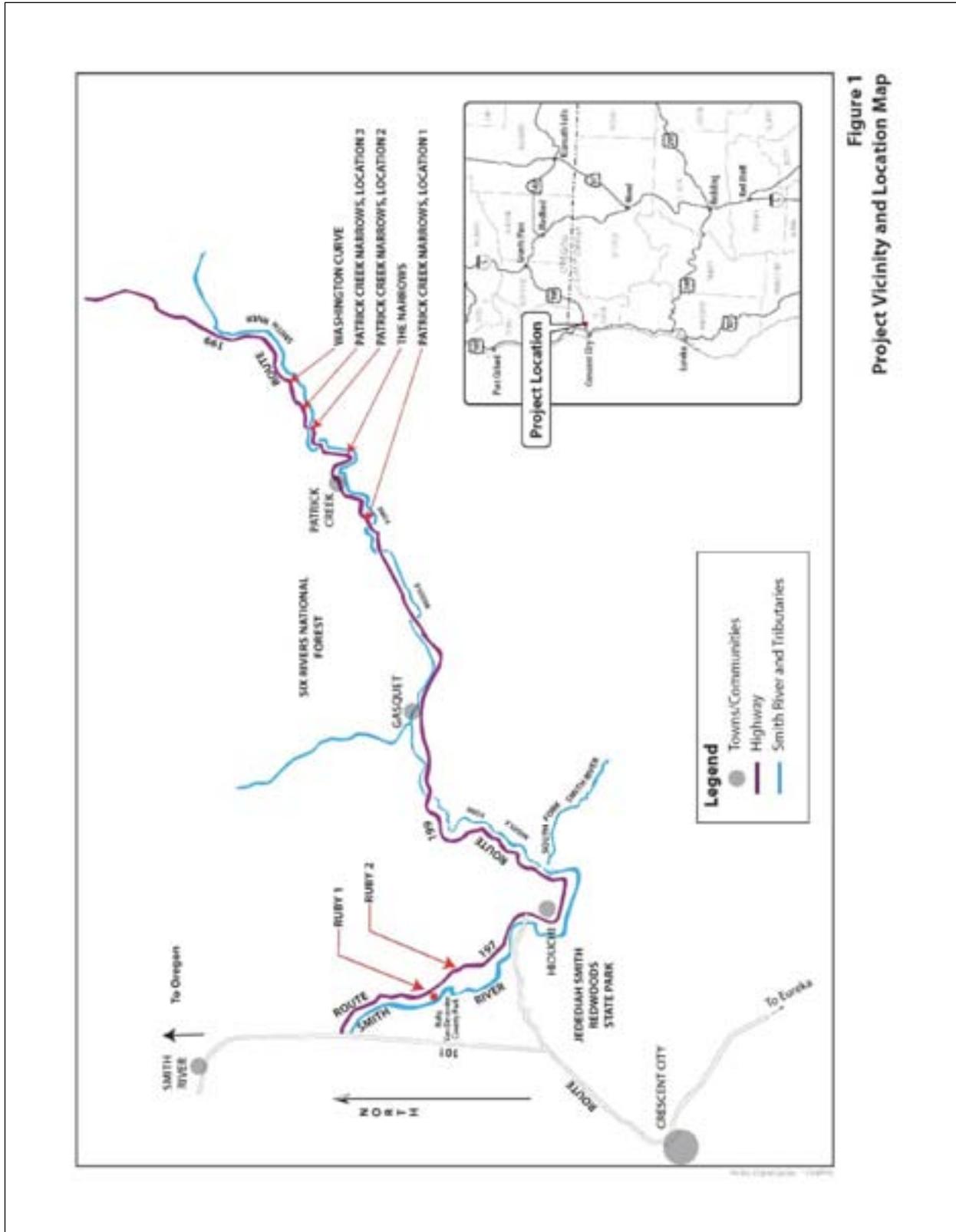


Figure 1
Project Vicinity and Location Map

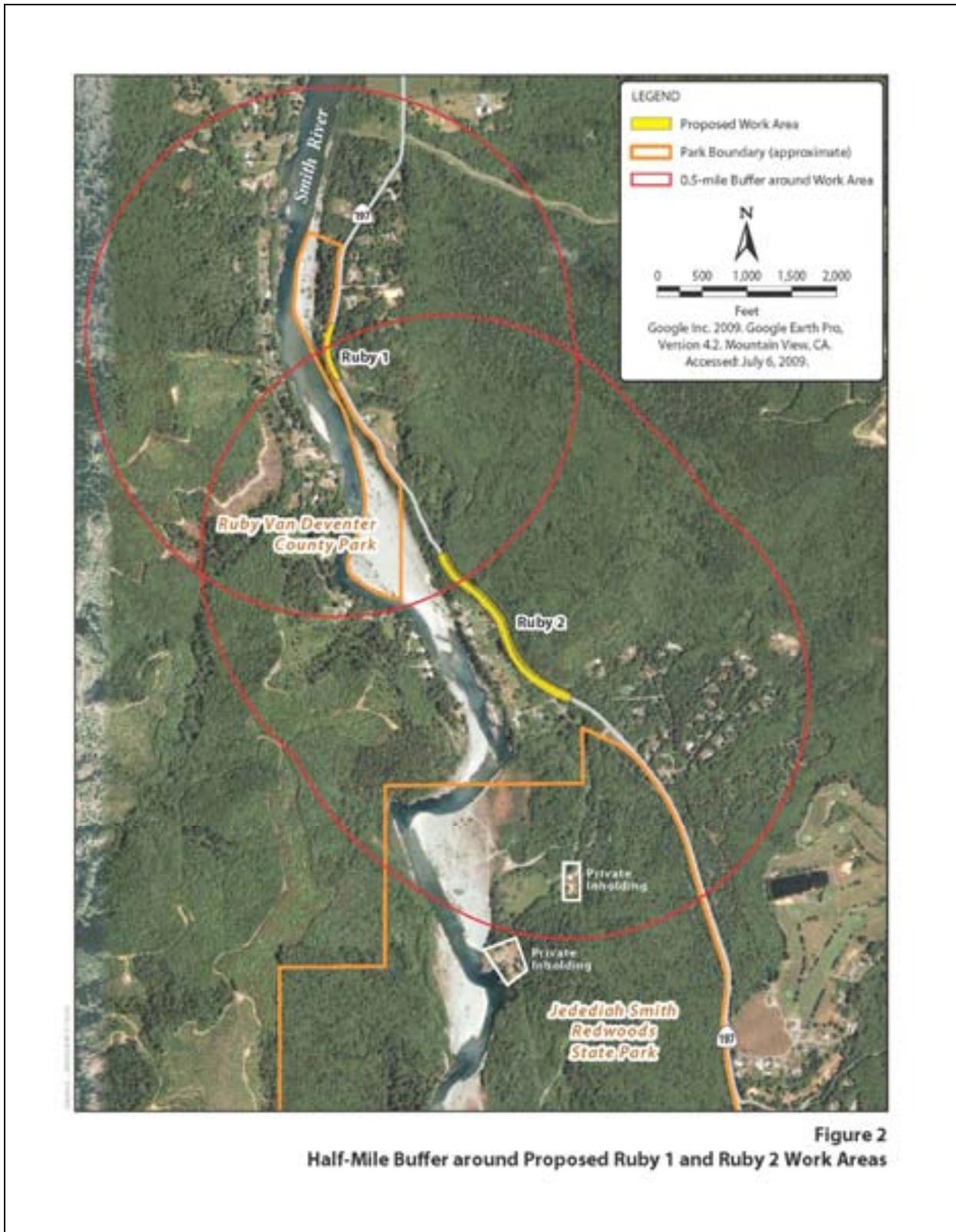


Figure 2
Half-Mile Buffer around Proposed Ruby 1 and Ruby 2 Work Areas



Figure 3
Ruby 1 Project Location and Temporary Construction Easement



United States Department of the Interior

NATIONAL PARK SERVICE
Pacific West Region
1111 Jackson Street
Oakland, CA 94607

February 16, 2010

Kim Hayler
California Department of Transportation
North Region Environmental, Unit E1
P.O. Box 3700
Eureka, CA 95502

Subject: State Route 197 improvements for STAA trucks

Dear Ms Hayler:

This letter is in response to your request of impacts to Wild & Scenic Rivers that may be caused by the improvements for STAA trucks along State Route 197 know as Ruby 1 and Ruby 2.

Section 7 of the Wild and Scenic Rivers Act prohibits federal agencies from "assist[ing] by loan grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established."

Based on the information provided I feel that the proposed project will not have a direct and adverse effect on the values for which the river was designated. However if the project scope should change, further consultation with the National Park Service would be required.

If you have any further questions, please contact me at (510) 817-1451.

Sincerely,

A handwritten signature in blue ink that reads "Stephen Bowes".

Stephen Bowes
CA Wild and Scenic Rivers Coordinator
National Park Service
1111 Jackson Street, suite 700
Oakland, CA 94607

Chapter 5 List of Preparers

5.1 California Department of Transportation

Gary Berrigan, Senior Environmental Planner, Chief, North Region Office of Environmental Services (North), California Department of Transportation District 1, Eureka.

Kevin Church, Project Manager and Registered Engineer, California Department of Transportation District 1, Eureka.

Kim Hayler, Environmental Coordinator, North Region Office of Environmental Services (North), California Department of Transportation District 1, Eureka.

Gail Popham, Biologist, North Region Office of Environmental Services (North), California Department of Transportation District 1, Eureka.

Miguel Villicana, NPDES Stormwater Coordinator and Registered Engineer, North Region Office of Environmental Services (North), California Department of Transportation District 2, Redding.

Jim Hibbert, Landscape Architect, North Region Project Development, Landscape Architecture, California Department of Transportation District 1, Eureka.

Barry Douglas, Archaeologist, North Region Office of Environmental Services (North), California Department of Transportation District 1, Eureka.

Coady Reynolds, Biologist, North Region Office of Environmental Services (North), California Department of Transportation District 1, Eureka.

Steven Croteau, Environmental Coordinator, North Region Office of Environmental Services (North), California Department of Transportation District 1, Eureka.

Steve Werner, Hazardous Waste Coordinator and Registered Geologist, North Region Office of Environmental Services (North), California Department of Transportation District 1, Eureka.

Dawn Friend, Registered Engineer, North Region Hydraulics/Design, California Department of Transportation District 1, Eureka.

Ted Schultz, NPDES Stormwater Coordinator and Registered Engineer, North Region Office of Environmental Services (North), California Department of Transportation District 2, Redding.

Brenda Harwell, Registered Engineer North Region Design, California Department of Transportation District 1, Eureka.

Lena Ashley, Senior Transportation Engineer, North Region Design, California Department of Transportation District 1, Eureka.

Ed Speer, Registered Engineer, North Region Design, California Department of Transportation District 2, Redding.

Juan Salas, Transportation Engineer, North Region Design, California Department of Transportation District 1, Eureka.

Tom Phillips, Registered Engineer, North Region Design, California Department of Transportation District 1, Eureka.

Dan Vail, Senior Delineator, North Region Design, California Department of Transportation District 1, Eureka.

Jeff Larson, Senior Delineator, North Region Design, California Department of Transportation District 1, Eureka.

Charlie Narwold, Senior Engineering Geologist for Office of Geotechnical Design North and Registered Geologist, California Department of Transportation District 1, Eureka.

Dawn McGuire, Engineering Geologist, Office of Geotechnical Design North, California Department of Transportation District 1, Eureka.

Dan Vann, Associate Engineering Geologist, Office of Geotechnical Design North, California Department of Transportation District 1, Eureka.

Sharon Tang, Air Quality Coordinator, North Region Office of Environmental Services (South), California Department of Transportation District 3, Sacramento.

Saeid Zandian, Noise Coordinator, North Region Office of Environmental Services (South), California Department of Transportation District 3, Sacramento.

Steven Manz, Lead Transportation Engineer, Office of Traffic Safety, California Department of Transportation District 1, Eureka.

Nicole Braafladt, Transportation Engineer, Office of Traffic Safety, California Department of Transportation District 1, Eureka.

Troy Arseneau, Chief of Office of Traffic Operations and Traffic Engineer, California Department of Transportation District 1, Eureka.

Mitchell Higa, Environmental Coordinator, North Region Office of Environmental Services (North), California Department of Transportation District 1, Eureka.

Kelly Dunlap, Supervising Environmental Planner, Division of Environmental Analysis, California Department of Transportation, Sacramento.

Rick Mayberry, Transportation Engineer, System Planning, California Department of Transportation District 1, Eureka.

Kemset Moore, Registered Engineer, North Region Hydraulics/Design, California Department of Transportation District 1, Eureka.

Glenn Hurlburt, Registered Engineer, North Region Hydraulics/Design, California Department of Transportation District 1, Eureka.

David Workman, Transportation Engineer (Civil), Office of Traffic Safety, California Department of Transportation District 1, Eureka.

5.2 ICF International

Christy Corzine, Project Director.

Claire Bromund, Senior Project Manager.

Tina Sorvari, Project Coordinator.

Shannon Hatcher, Senior Air Quality and Noise Specialist.

Shannon Hill, Air Quality Specialist.

Dave Buehler, Senior Acoustical Engineer.

Margaret Widdowson, Senior Botanist.

Kim Stevens, 4(f) Specialist.

Christiaan Havelaar, Archaeologist.

Jennifer Stock, Landscape Architect.

Shahira Ashkar, Technical Writer.

Christine Fukasawa, Technical Writer.

Chris Small, Technical Editor.

Ken Cherry, Senior Technical Editor.

Shawn Vreeland, Technical Editor.

John Mathias, Technical Editor.

Ryan Patterson, Publications Specialist.

Kristin Teddy, CAD Specialist.

Alex Angier, CAD Specialist.

Dan Schiff, GIS Specialist.

Senh Saelee, Graphic Artist.

Tim Messick, Graphic Artist.

John Durnan, Graphic Artist.

5.3 Fehr & Peers

Jon Nepstad, Principal-in-Charge.

David B. Robinson, Registered Professional Engineer, No. TR2201.

5.4 Roger Trott

Roger Trott, Consulting Economist.

5.5 Jeanne McFarland

Jeanne McFarland, Mycologist.

Chapter 6 Distribution List

Assemblymember Wesley Chesbro
710 E Street, Suite 150
Eureka, CA 95501

CA Air Resources Board
1001 I Street
Sacramento, CA 95814-2814

CA Department of Corrections
PO Box 942883
Sacramento, CA 94283-0001

CA Dept. of Conservation
801 K Street, 24th Floor
Sacramento, CA 95814

CA Dept. of Parks & Recreation
1111 2nd Street
Crescent City, CA 95531

CA Dept. of Parks and Recreation
North Coast Redwoods District
3431 Fort Ave.
Eureka, CA 95501

CA Dept. of Toxic Substances Control
1001 I Street
Sacramento, CA 95814-2828

CA Native American Heritage Commission
9915 Capitol Mall, Room 364
Sacramento, CA 95814

CA Office of Historic Preservation
PO Box 942846
Sacramento, CA 94296-0001

CA Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

CA Water Resources Control Board
PO Box 100
Sacramento, CA 95812-0100

California Highway Patrol
Crescent City Office
1444 Parkway Drive
Crescent City, CA 95531

California Transportation Commission
1120 N Street
Room 221 (MS-52)
Sacramento, CA 95814

Carol Heidseik
US Army Corp of Engineers
Eureka Field Office
601 Startare Drive
Eureka, CA 95501

City Council
City of Crescent City
377 J Street
Crescent City, CA 95531

Dale Miller, Tribal Chair
Elk Valley Rancheria
2332 Howland Hill Road
Crescent City, CA 95531

Del Norte County Park and Beaches
840 9th Street, Suite #11
Crescent City, CA 95531

Del Norte County
Board of Supervisors
981 H Street, Suite 200
Crescent City, CA 95531

Del Norte County
Community Development Department
981 H Street, Suite 110
Crescent City, CA 95531

Del Norte County
Local Transportation Commission
1225 Marshall Street, Suite 8
Crescent City, CA 95531

Don Pass
Six Rivers National Forest
P.O. Box 228
Gasquet, CA 95543

George Frey
Six Rivers National Forest
1330 Bayshore Way
Eureka, CA 95501

Gordon Leppig
CA Department of Fish and Game
619 2nd Street
Eureka, CA 95501

Jeremiah Puget
NCRWQCB
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

Kara Brundin Miller, Tribal Chair
Smith River Rancheria
140 Rowdy Creek Road
Smith River, CA 95567

Kasey Sirkin
NOAA Fisheries
1655 Heindon Road
Arcata, CA 95521

North Coast Unified Air Quality
Management District
2300 Myrtle Avenue
Eureka, CA 95501

Ray Bosch
USFWS
1655 Heindon Road
Arcata, CA 95521

Redwood National and State Parks
1440 US Highway 199
Crescent City, CA 95531

Rep. Mike Thompson
Humboldt District Office
317 3rd Street, Suite #1
Eureka, CA 95501

Scott McFarland
State Lands Commission
100 Howe Ave., Suite 100 South
Sacramento, CA 95825

Senator Sam Aanestad
State Capitol
Sacramento, CA 94248-0001

Smith River NRA
P.O. Box 228
Gasquet, CA 95543

State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Stephen Bowes
National Park Service
Hydropower Assistance Program
1111 Jackson St., Suite 700
Oakland, CA 94607

U.S. Army Corps of Engineers
1455 Market St., 16th Floor
San Francisco, CA 94103-1398

U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105-3901

Warden
Pelican Bay State Prison
P.O. Box 7000
Crescent City, CA 95531

Chapter 7 References Cited

Chapter 1

- California Department of Transportation. 1999a. *Route Concept Report, Route 197 Corridor 01-DN-197-KP 0.0/11.4 (PM 0.0/7.1)*. July.
- California Department of Transportation. 1999b. *Route Concept Report, Route 199 Corridor 01-DN-199-KP TO.8/58.6 (PM TO.8/36.4)*. July.
- California Department of Transportation. 2006. *DN-197/199 Corridor Extra-Legal Load and STAA Vehicle Accessibility Study: A Report to Improve Mobility and Accommodate Large Vehicles on Routes 197 and 199 in Del Norte County*. March. Produced by California Department of Transportation District 1, Office of Permits.
- Del Norte County. 2006. *Comprehensive Economic Development Strategy: Del Norte County, California 2006–2008*. Adopted by the Del Norte County Board of Supervisors in May 2006.
- Fehr & Peers. 2010. *197/199 Safe STAA Access Project: Revised Traffic Analysis*. Final. January.

Section 2.1.1 Land Use

- Baselt, D. 2009. *Jedediah Smith Redwoods State Park*. Available: <<http://www.redwoodhikes.com/Jed%20Smith/Jed%20Smith.html>>. Accessed: March 13, 2009.
- California Department of Finance. 2007. *California Statistical Abstract*. Available: <http://www.dof.ca.gov/HTML/FS_DATA/STAT-ABS/Statistical_Abstract.php>. Accessed: December 16, 2008.
- California Department of Parks and Recreation. 2009. *Jedediah Smith Redwoods State Park*. Available: <<http://www.parks.ca.gov/pages/413/files/JedediahSmith2007REPRINT.pdf>>. Accessed: March 13, 2009.
- California Department of Transportation. 2006. *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 Negative Declaration. Eureka, CA.
- California Department of Transportation. 2010. *Draft Construction Scenario DN 199—PM 20.5/25.7—EA: 01-479400 Realignment and Widening at Patrick Creek Narrows, Patrick Creek Narrows Location 2*. Originally submitted December 2008; revised January 2010. Eureka, CA. City of Crescent City. 2001. *Crescent City General Plan*. Section 1, Land Use and Community Development. May 21. Crescent City, CA.

- Del Norte County. 2003. *Del Norte County General Plan*. Section 8, Transportation and Circulation Element. January 28. Crescent City, CA.
- Del Norte County. 2006. *Comprehensive Economic Development Strategy: Del Norte County, California 2006–2008*. Adopted by the Del Norte County Board of Supervisors in May 2006.
- Del Norte Local Transportation Commission. 2008. *2008 Regional Transportation Improvement Program for Del Norte County*. January. Crescent City, CA.
- Fehr & Peers. 2010. *197/199 Safe STAA Access Project. Revised Traffic Analysis*. Final. January. Prepared for the California Department of Transportation, District 1, Eureka, CA. Salt Lake City, UT.
- Mintier & Associates; Jones & Stokes Associates; Stephen Lowens, P.E.; and Crescent City Planning Department. 2001. *City of Crescent City General Plan Policy Document*. Crescent City, CA.
- Mintier & Associates; Jones & Stokes Associates; Stephen Lowens, P.E.; Del Norte County Community Development Department. 2003. *Del Norte County General Plan*. Crescent City, CA.
- National Wild and Scenic Rivers. 2004. Wild and Scenic Rivers Act: Section 7, Technical Report of the Interagency Wild and Scenic Rivers Coordinating Council. U.S. Forest Service. Portland OR. October. Available:<<http://www.rivers.gov/publications/section-7.pdf>>. Accessed: January 29, 2010.
- National Wild and Scenic Rivers. 2009. Smith River. Available:<<http://www.rivers.gov/wsr-smith.htm>>. Accessed: August 15, 2009.
- Sierra Institute for Community and Environment. 2006. *Del Norte County Forest Service Resource Advisory Committee and Title III Projects Case Study*. Taylorsville, CA.
- Trott, R. 2010. *Community Impact Assessment, 197/199 Safe STAA Access Project*. February. Prepared for the California Department of Transportation, North Region Environmental, Unit E-1, Eureka, CA.
- UNESCO (United Nations Educational, Scientific and Cultural Organization) World Heritage Centre. 2009. *Redwood National and State Parks*. Available: <<http://whc.unesco.org/en/list/134>>. Accessed: March 13, 2009.
- U.S. Department of Transportation, Bureau of Transportation Statistics, and U.S. Department of Commerce, Bureau of the Census. 2000. *1997 Economic Census; Transportation; 1997 Commodity Flow Survey; Hazardous Materials; EC97TCF-US(HM)RV*. Available: http://www.bts.gov/publications/commodity_flow_survey/1997/hazardous_materials/. Accessed June 2009.

U.S. Forest Service. 1992. *Smith River National Recreation Area, Smith River Management Plan Addendum*. Eureka, CA.

U.S. Forest Service. 1995. *Six Rivers National Forest Land and Resource Management Plan*. Six Rivers National Forest. Available: <<http://www.fs.fed.us/r5/sixrivers/publications/forest-plan/>>.

U.S. Forest Service. 2005. Letter to California Department of Transportation. Gasquet, CA. November 28.

U.S. Forest Service. 2009. Patrick Creek Campground. Available: <<http://www.fs.fed.us/r5/sixrivers/recreation/smith-river/campgrounds/patrick-creek/>>. Accessed: June 9, 2009. Last revised: August 7, 2008.

Personal Communications

Fulton, Ed. Building maintenance and parks superintendent. Del Norte County Parks Department, Crescent City, CA. March 13, 2009—telephone conversation.

Hayler, Kimberly. Environmental coordinator. California Department of Transportation, District 1, Eureka, CA. March 16, 2009—email transmitting right-of-way ownership and agreements for DN-STAA CIA report; September 29, 2009, and October 20, 2009—email responses to project consultant requests for additional information on the proposed project alternatives and potential construction effects.

Hooper, Randy. Planner II. Del Norte County Planning Division, Crescent City, CA. January 12, 2009—telephone conversation.

Pass, Don. Forest Recreation Planner. U.S. Forest Service. August 5, 2009—telephone conversation.

Section 2.1.2 Growth

California Department of Corrections and Rehabilitation. 2008. *Pelican Bay State Prison*. Available: <<http://www.cdcr.ca.gov/Visitors/Facilities/PBSP.html>>. Accessed: December 22, 2008.

California Department of Finance. 2007. *Population Projections by Race/Ethnicity for California and Its Counties 2000–2050*. Report 06 P-1. Sacramento, CA.

California Department of Finance. 2008. *Table 2: E-5 City/County Population and Housing Estimates, 1/1/2008*. Report E-5. Sacramento, CA.

California Department of Finance. 2009. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2001–2009, with 2000 Benchmark*. May. Sacramento, CA.

- California Department of Transportation. 2006. *DN-197/199 Corridor Extra-Legal Load and STAA Vehicle Accessibility Study: A Report to Improve Mobility and Accommodate Large Vehicles on Routes 197 and 199 in Del Norte County*. March. Produced by California Department of Transportation District 1, Office of Permits.
- Cambridge Systematics. 2003. *Transportation for Economic Development*. Prepared for the California Department of Transportation. June. Oakland, CA.
- Del Norte County Board of Supervisors. 2006. *Comprehensive Economic Development Strategy: Del Norte County, California 2006–2008*. Adopted by the Del Norte County Board of Supervisors in May 2006.
- Del Norte Local Transportation Commission. 2007. *Achieving STAA Route Status for the State Route 197/US Highway 199 Corridor—A Goods Movement Action Plan*. April. Updated October 2007. Crescent City, CA.
- Del Norte Local Transportation Commission. 2008. *2008 Regional Transportation Improvement Program for Del Norte County*. January. Crescent City, CA.
- Fehr & Peers. 2010. *197/199 Safe STAA Access Project. Revised Traffic Analysis*. Final. January. Prepared for the California Department of Transportation, District 1, Eureka, CA. Salt Lake City, UT.
- Mintier & Associates; Jones & Stokes Associates; Stephen Lowens, P.E.; Del Norte County Community Development Department. 2003. *Del Norte County General Plan*. Crescent City, CA.
- Sierra Institute for Community and Environment. 2006. *Del Norte County Forest Service Resource Advisory Committee and Title III Projects Case Study*. Taylorsville.
- Trott, R. 2010. *Community Impact Assessment, 197/199 Safe STAA Access Project*. February. Prepared for the California Department of Transportation, North Region Environmental, Unit E-1, Eureka, CA.

Section 2.1.3 Community Impacts

- California Air Resources Board. 2006. *Emission Reduction Plan for Ports and Goods Movement in California*. Sacramento, CA.
- California Business, Transportation and Housing Agency and California Environmental Protection Agency. 2007. *Goods Movement Action Plan*. Sacramento, CA.
- California Department of Corrections and Rehabilitation. 2008. *Pelican Bay State Prison*. Available: <<http://www.cdcr.ca.gov/Visitors/Facilities/PBSP.html>>. Accessed: December 22, 2008.

- California Department of Finance. 2007. *Population Projections by Race/Ethnicity for California and Its Counties 2000–2050*. (Report 06 P-1.) Sacramento, CA.
- California Department of Finance. 2008. *Table 2: E-5 City/County Population and Housing Estimates, 1/1/2008*. (Report E-5.) Sacramento, CA.
- California Department of Transportation. 1997. *Environmental Handbook Volume 4: Community Impact Assessment*. June. Sacramento, CA.
- California Employment Development Department. 2009a. *Labor Force Data for Sub-County Areas—2007 Benchmark: Crescent City and Crescent City North CDP*. Sacramento, CA.
- California Employment Development Department. 2009b. *Major Employers in Del Norte County*. Available: <<http://www.calmis.ca.gov/file/majorer/countymajorer.cfm?CountyCode=000015>>. Accessed: January 26, 2009.
- City-Data.com. 2008. *Del Norte County, California*. Available: <http://www.city-data.com/county/Del_Norte_County-CA.html>. Accessed: December 29, 2008.
- Fehr & Peers. 2010. *197/199 Safe STAA Access Project. Revised Traffic Analysis*. Final. January. Prepared for the California Department of Transportation, District 1, Eureka, CA. Salt Lake City, UT.
- Fizber.com. 2008. *Gasquet City Profile*. Available: <<http://www.fizber.com/sale-by-owner-home-services/california-city-gasquet-profile.html?more=neigh>>. Accessed: August 26, 2008.
- LSC Transportation Consultants, Inc. 2008. *Del Norte County Intercity and Regional Bus Service Development Plan*. Prepared for the Del Norte Local Transportation Commission, Crescent City, CA. Tahoe City, CA. Available: <http://www.dnltc.org/planningdocs/BusServiceDevPlan_062008.pdf>. Accessed: December 18, 2008.
- Mintier & Associates; Jones & Stokes Associates; Stephen Lowens, P.E.; Del Norte County Community Development Department. 2003. *Del Norte County General Plan*. Crescent City, CA.
- National Park Service. n.d. Excerpt from Section II.1, Introduction of the Nomination Form: World Heritage Property, Redwood National Park. Available: <<http://www.nps.gov/oia/topics/REDW.pdf>>. Accessed: August 26, 2008.]
- Sierra Institute for Community and Environment. 2006. *Del Norte County Forest Service Resource Advisory Committee and Title III Projects Case Study*. Taylorsville, CA.
- U.S. Bureau of Economic Analysis. 2008. *Table CA1-3—California per Capita Personal Income*. Available: <<http://www.bea.gov/regional/reis/drill.cfm>>. Accessed: December 24, 2008.

U.S. Census Bureau. 2002. *Census 2000 Summary File 1 and Summary File 3 for Del Norte County, Crescent City, Hiouchi (Census Tract 2.02, Block Group 4), and Gasquet (Census Tract 2.02, Block Group 3)*. Available: <http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=DEC&_submenuId=datasets_1&_lang=en>. Accessed: July 16 and 17, 2008; August 25 and 26, 2008; September 2 and 8, 2008; and December 17, 18, and 22, 2008.

U.S. Census Bureau. 2008. *American Community Survey*. Available: <http://factfinder.census.gov/servlet/DatasetMainPageServlet?_lang=en&_ts=248203672828&_ds_name=ACS_2007_3YR_G00_&_program=>>. Accessed: December 24, 2008.

Section 2.1.4 Utilities/Emergency Services

Trott, R. 2010. *Community Impact Assessment, 197/199 Safe STAA Access Project*. February. Prepared for the California Department of Transportation, North Region Environmental, Unit E-1, Eureka, CA.

Personal Communications

Athey, Tim. Operations commander, Del Norte County Sheriff's Department, Crescent City, CA. February 3, 2009—telephone conversation.

Chase, Eloise. Customer relations. Del Norte Ambulance, Crescent City, CA. February 3, 2009—telephone conversation.

Gibbons, Mike. Dispatcher chief. U.S. Forest Service, Six Rivers National Forest, Gasquet, CA. February 3, 2009—telephone conversation.

Hablitzel, Steve. Sergeant. Del Norte County Sheriff's Department, Crescent City, CA. February 2, 2009—telephone conversation.

Morrison, William. Volunteer firefighter. Crescent City Fire Protection District, Crescent City, CA. February 2, 2009—telephone conversation.

Tweed, Charles. Operations manager. Del Norte Ambulance, Crescent City, CA. February 13, 2009—telephone conversation.

Section 2.1.5 Traffic and Transportation/Pedestrian and Bicycle Facilities

California Department of Transportation. 1999a. *Route Concept Report, Route 197 Corridor 01-DN-197-KP 0.0/11.4 (PM 0.0/7.1)*. July.

California Department of Transportation. 1999b. *Route Concept Report, Route 199 Corridor 01-DN-199-KP TO.8/58.6 (PM TO.8/36.4)*. July.

California Department of Transportation. 2002. *Guide for the Preparation of Traffic Impact Studies*. December.

Federal Highway Administration. 2004

Fehr & Peers. 2010. *197/199 Safe STAA Access Project. Revised Traffic Analysis*. Final. January. Prepared for the California Department of Transportation, District 1, Eureka, CA. Salt Lake City, UT.

Personal Communications

Wall pers. comm.

Section 2.1.6 Visual/Aesthetics

California Department of Transportation. 2009. *California Scenic Highway Program. Eligible (E) and Officially Designated (OD) Routes*. Available: <<http://www.dot.ca.gov/hq/LandArch/scenic/cahisys4.htm>>. Accessed: June 15, 2009. Last revised: July 1, 2008.

California Department of Transportation. 2010. *Natural Environment Study, 197/199 Safe STAA Access Project*. February.

Del Norte County. 2003. *Del Norte County General Plan*. January 28. Crescent City, CA.

Federal Highway Administration. 1995. *FHWA Docket No. 95-15: National Scenic Byways, Notice of FHWA Interim Policy*. USDOT. May 18, 1995.

ICF International 2010. *Visual Impact Assessment, 197/199 Safe STAA Access Project, Del Norte County*. January. Prepared for California Department of Transportation, District 1, Eureka, CA. San Francisco, CA.

National Scenic Byways Program. 2009. *Smith River Scenic Byway*. Available: <<http://www.byways.org/explore/byways/2197/>>. Accessed: June 14, 2009.

U.S. Forest Service. 1992. *Smith River National Recreation Area Management Plan*. On file: Six Rivers National Forest and Caltrans District 1. Eureka, CA.

———. 1995. *Landscape Aesthetics: A Handbook for Scenery Management*. (Agriculture Handbook Number 701).

———. 2009. Patrick Creek Campground. Available: <<http://www.fs.fed.us/r5/sixrivers/recreation/smith-river/campgrounds/patrick-creek/>>. Accessed: June 9, 2009. Last revised: August 7, 2008.

Personal Communications

ICF Jones & Stokes. 2008. Summary of comments from STAA Notice of Preparation and scoping meeting. September 16, 2008.

Pass, Don. U.S. Forest Service. July 6, 2009—Telephone conversation.

Steele, Joanne. Volcanic Legacy Information Center. November 3, 2003—Email.

Section 2.1.7 Cultural Resources

California Department of Parks and Recreation. 1976. *California Inventory of Historical Resources*. On file at the North Coastal Information Center.

California Department of Parks and Recreation. 1992. *California Points of Historical Interest* (1992 and updates). On file at the North Coastal Information Center.

California Department of Parks and Recreation. 1996. *California Historical Landmarks* (1996 and updates). On file at the North Coastal Information Center.

California Office of Historic Preservation . 2002. California Register of Historical Resources.

California Office of Historic Preservation. 2003. California Historic Property Inventory.

California Department of Transportation. 2006. *Historic Bridge Inventory*. Available: <<http://www.dot.ca.gov/hq/structur/strmaint/historic.htm>>.

Drucker, P. 1937. The Tolowa and their Southwest Oregon Kin. *American Archaeology and Ethnology* 36(4):221–300.

General Land Office. 1856, 1884. *General Land Office plat maps*. On file at the North Coastal Information Center.

Gudde, E.G. 1969. *California Place Names*. Berkeley: University of California Press.

Hoover, M. B., H. E. Rensch, and E. G. Rensch. 1966. *Historic Spots in California*. Palo Alto: Stanford University Press.

Hoover M. B., H. E. Rensch, E. G. Rensch, W. H. Abloe, and D. E. Kyle. 1990. *Historic Spots in California*. 5th edition. Palo Alto: Stanford University Press.

ICF International. 2010. Historic Property Survey Report and Archaeological Survey Report.

King, T. F. 1972. *An Assessment of the Potential Impact of Proposed Improvements to U.S. Highway 199 on Historic and Prehistoric Resources*. On file at the North Coastal Information Center.

McDaniel, J. W., Jr. 2002. *Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California for the 400 THP*. On file at North Coastal Information Center.

Office of Historic Preservation. 2003. *California Historic Property Inventory*. On file at North Coastal Information Center.

Strudwick, I. 1997. *Negative Archaeological Survey Report for Cal Tran's proposed storm damage repair project Route 199*. On file at North Coastal Information Center.

Waterman, T. T. 1925. The Village Sites in Tolowa and Neighboring Areas in Northwestern California. *American Anthropologist* (N.S., 27).

Section 2.2.2 Water Quality and Storm Water Runoff

California Department of Transportation. 2009. *Water Quality Report, 197/199 Safe STAA Access Project*. December.

Section 2.2.3 Geology/Soils/Seismic/Topography

Del Norte County. 2003. *Del Norte County General Plan*. Safety and Noise Element. January 28. Crescent City, CA.

Section 2.2.4 Hazardous Waste/Materials

Fehr & Peers. 2010. *197/199 Safe STAA Access Project. Revised Traffic Analysis*. Final. January. Prepared for the California Department of Transportation, District 1, Eureka, CA. Salt Lake City, UT.

Geocon Consultants. 2008a. *Aerially Deposited Lead Site Investigation Report: State Route 197 Post Mile 4.42/4.54, Del Norte County, CA*. April. Rancho Cordova, CA. Prepared for California Department of Transportation, District 1, Eureka, CA.

Geocon Consultants. 2008b. *Aerially Deposited Lead Site Investigation Report: State Route 197 Post Mile 3.23/4.0, Del Norte County, CA*. April. Rancho Cordova, CA. Prepared for California Department of Transportation, District 1, Eureka, CA.

Geocon Consultants. 2008c. *Naturally Occurring Asbestos Site Investigation Report: State Route 199 Post Mile 20.5/25.5, Del Norte County, CA*. April. Rancho Cordova, CA. Prepared for California Department of Transportation, District 1, Eureka, CA.

Geocon Consultants. 2009a. *Asbestos and Lead-Containing Paint Survey Report: Smith River Middle Fork Bridge, Del Norte County, CA*. July. Rancho Cordova, CA. Prepared for California Department of Transportation, District 1, Eureka, CA.

Geocon Consultants. 2009b. *Aerially Deposited Lead and Naturally Occurring Asbestos Site Investigation Report: State Route 199 (DN-199) Post Mile 26.5 Curve Correction, Del Norte County, California*. July.

Werner, S. 2005. Initial Site Assessment (the Narrows). June 14.

Werner, S. 2007a. Initial Site Assessment (Ruby 1). October 10.

Werner, S. 2007b. Initial Site Assessment (Patrick Creek Narrows Locations 1 through 3). February 28.

Werner, S. 2008a. Transmittal memorandum of an ADL site investigation report (Ruby 1). May 28.

Werner, S. 2008b. Transmittal memorandum of an ADL site investigation report and Initial Site Assessment (Ruby 2).

Werner, S. 2008c. Transmittal memorandum of NOA site investigation report (Patrick Creek Narrows Location 1). May 28.

Werner, S. 2008d. Initial Site Assessment (Washington Curve). December 12.

Werner, S. 2009a. Revised NOA Disposal Requirements for PM 20.5. February 5.

Werner, S. 2009b. ISA follow-up memorandum. September 22.

Werner, S. 2009c. Revised Initial Site Assessment (Washington Curve). February 2.

Section 2.2.5 Air Quality

California Air Resources Board. 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. Page 1. Sacramento, CA: Stationary Source Division, Mobile Source Control Division. October. Available: <http://www.arb.ca.gov/diesel/documents/rrpfinal.pdf>. Accessed: July 1, 2009.

California Air Resources Board. 2002. *Quality Assurance Air Monitoring Site Information*. Last revised: November 11, 2002. Available:

- <http://www.arb.ca.gov/qaweb/countysselect.php?c_arb_code=08>. Accessed: January 7, 2010.
- California Air Resources Board. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. Table 1-1. April. Sacramento, CA.
- California Air Resources Board. 2008a. *Ambient Air Quality Standards*. Revised: November 17, 2008. Available: <<http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>>. Accessed: June 5, 2009.
- California Air Resources Board. 2008b. *Final Regulation Order: Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*. Last revised: July 29, 2008. Available: <<http://www.arb.ca.gov/toxics/atcm/asb2atcm.htm>>. Accessed: June 11, 2009.
- California Air Resources Board. 2008c. *Quality Assurance Site Information for Crescent City—Northcrest*. Revised: May 15, 2008. Available: <http://www.arb.ca.gov/qaweb/site.php?s_arb_code=08657>. Accessed: June 9, 2009.
- California Air Resources Board. 2009a. *Air Designation Maps/State and National*. Revised: February 9, 2009. Available: <<http://www.arb.ca.gov/desig/adm/adm.htm>>. Accessed: June 5, 2009.
- California Air Resources Board. 2009b. *Aerometric Data Analysis and Management System (ADAM): Top 4 Summary*. Available: <<http://www.arb.ca.gov/adam/welcome.html>>. Accessed: June 9, 2009.
- Federal Highway Administration. 2006. *A Methodology for Evaluating Mobile Source Air Toxic Emissions among Transportation Project Alternatives*. Available: <<http://www.fhwa.dot.gov/environment/airtoxic/msatcompare/msatemissions.htm>>. Accessed: January 8, 2010.
- Federal Highway Administration. 2009. *Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents*. September 30.
- Fehr & Peers. 2010. *197/199 Safe STAA Access Project: Revised Traffic Analysis*. Final. January.
- Intergovernmental Panel on Climate Change. 2007. Introduction. In: *Climate Change 2007: Mitigation (Working Group III Fourth Assessment Report)*. Available: <<http://www.ipcc.ch/ipccreports/ar4-wg3.htm>>. Accessed: July 1, 2009.
- North Coast Unified Air Quality Management District. 1995. *North Coast Unified Air Quality Management District Particulate Matter (PM10) Attainment Plan*. May 11.
- Solomon, S., D. Qin, M. Manning, R. B. Alley, T. Berntsen, N. L. Bindoff, Z. Chen, A. Chidthaisong, J. M. Gregory, G. C. Hegerl, M. Heimann, B. Hewitson, B. J. Hoskins, F. Joos, J. Jouzel, V. Kattsov, U. Lohmann, T. Matsuno, M. Molina, N. Nicholls, J.

Overpeck, G. Raga, V. Ramaswamy, J. Ren, M. Rusticucci, R. Somerville, T. F. Stocker, P. Whetton, R. A. Wood and D. Wratt. 2007. *Technical Summary*. In: S. D. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor, and H. L. Miller (eds.), *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom, and New York, NY.

The Weather Channel. 2009. Monthly averages for Crescent City, California. Available: <<http://www.weather.com>>. Accessed: June 9, 2009.

U.S. Environmental Protection Agency. 2009. *Green Book*. Revised: March 13, 2009. Available: <<http://www.epa.gov/oar/oaqps/greenbk>>. Accessed: June 5, 2009.

U.S. Environmental Protection Agency. 2008a. *Region 9: Naturally Occurring Asbestos in California*. Revised: April 30, 2008. Available: <<http://www.epa.gov/region09/toxic/noa>>. Accessed: June 11, 2009.

U.S. Environmental Protection Agency. 2008b. *Asbestos: Basic Information*. Revised: September 23, 2008. Available: <<http://www.epa.gov/asbestos/pubs/help.html>>. Accessed: June 11, 2009.

U.S. Environmental Protection Agency. 2008c. *Naturally Occurring Asbestos: Approaches for Reducing Exposure*. Revised: March 2008. Available: <http://www.epa.gov/superfund/health/contaminants/asbestos/noa_factsheet.pdf>. Accessed: June 11, 2009.

Personal Communications

Brady, Mike. Air Quality/Conformity Coordinator, California Department of Transportation, DOTP-ORIP, Sacramento, CA. January 6, 2010—email to Shannon Hill of ICF International about California-specific information applicable to the *Update on Mobile Source Air Toxic Analysis in NEPA Documents*.

Stinger, Preston. Transportation Engineer, Fehr & Peers, Salt Lake City, UT. June 23, 2009—email message.

Section 2.2.6 Noise and Vibration

Federal Highway Administration 2006. *Roadway Construction Noise Model*. February, 15, 2006. Available: <<http://www.rcnm.us/>>.

Fehr & Peers. 2010. *197/199 Safe STAA Access Project. Revised Traffic Analysis*. Final. January.

ICF International 2010. *197/199 Safe STAA Access Project: Noise Study Report*. January. Prepared for the California Department of Transportation, District 1, Eureka, CA. San Francisco, CA.

Section 2.3.1 Natural Communities

California Department of Fish and Game. 2003. List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database

California Department of Fish and Game. 2007a. Update to List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database

California Department of Fish and Game. 2007b.

California Department of Fish and Game. 2009. California Natural Diversity Database .

California Department of Transportation. 2010. *Natural Environment Study, 197/199 Safe STAA Access Project*. February.

Hickman, J. C. (ed.). 1993. *The Jepson Manual: Higher Plants of California*. Berkeley, CA: University of California Press.

Sawyer, J.O., and T. Keeler-Wolf. 1995. *Manual of California Vegetation*. Sacramento, CA: California Native Plant Society.

Section 2.3.2 Wetlands and Other Waters of the United States

Adamus, P. R., E. J. Clairain, Jr., R. D. Smith, and R. E. Young, R.E. 1987. *Wetland Evaluation Technique (WET)*. Volume II. (Technical Report Y-87.) Vicksburg, MS: U.S. Army Corps of Engineers, Waterways Experiment Station.

California Department of Transportation 2010a. *Natural Environment Study, 197/199 Safe STAA Access Project*. February.

California Department of Transportation. 2010b. *Wetlands and Other Waters of the U.S. Delineation Report Del Norte STAA Project, Route 199 Locations*.

Cowardin, L. M. 1979. Classification of Wetlands and Deepwater Habitats in the United States. U. S. Fish and Wildlife Service.

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. (Technical Report Y-87-1.) Vicksburg, MS: U.S. Army Waterways Experiment Station.

ICF International. 2010. *Ruby 1 and Ruby 2 (DN-197) and The Narrows (DN-199) Delineation of Wetlands and Other Waters*.

U.S. Army Corps of Engineers. 2005. *Regulatory Guidance Letter: Ordinary High Water Mark Identification*. December 7. (Letter 05-05.) Available: <<http://www.saw.usace.army.mil/wetlands/Library/RGL/rgl05-05.pdf>>.

U.S. Army Corps of Engineers. 2008. *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coastal Region*. Final report. Vicksburg, MS: U.S. Army Engineer Research and Development Center. J. S. Wakeley, R. W. Lichvar, and C. V. Noble, eds. Available: <http://www.usace.army.mil/cw/cecwo/reg/west_mt_intersupp.pdf>.

Section 2.3.3 Plant Species

Calflora. 2009. The Calflora Database: Information on wild California plants for conservation, education, and appreciation. Available: <<http://www.calflora.org/>>. Accessed: August 2008–July 2009).

California Department of Fish and Game. 2008. California Natural Diversity Database.

California Department of Fish and Game. 2009. California Natural Diversity Database.

California Department of Transportation. 2010. *Natural Environment Study, 197/199 Safe STAA Access Project*. February. Eureka, CA: California Department of Transportation, North Region Office of Environmental Services, District 1.

California Native Plant Society. 1998. Statement Opposing Transplantation as Mitigation for Impacts to Rare Plants. Adopted July 9, 1998. Available: <<http://www.cnps.org/cnps/archive/transplanting2.php>>.

California Native Plant Society. 2008. Inventory of Rare and Endangered Plants (online edition, v7-08b 4-02-08). Available: <<http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>>. Accessed: August 2008.

California Native Plant Society. 2009. Inventory of Rare and Endangered Plants (online edition, v7-09b 4-10-09 and v7-09c 7-14-09). Available: <<http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>>. Accessed: May–July 2009. California Native Plant Society. Sacramento, CA.

Fiedler, P. 1991. Mitigation related transplantation, translocation and reintroduction projects involving endangered and threatened and rare plant species in California. Sacramento, CA: California Department of Fish and Game. 82 pp. Quoted in California Native Plant Society 1998.

ICF International. 2010. *Special-Status Plants Survey Report*.

Regents of the University of California. 2009. Consortium of California Herbaria: information from California vascular plant specimens that are housed in herbaria throughout the state.

Data provided by the participants of the Consortium of California Herbaria. Available: <ucjeps.berkeley.edu/consortium/>. Accessed: August 2008–June 2009.

U.S. Department of Agriculture, Natural Resources Conservation Service. 2009. PLANTS database. Available: <<http://plants.usda.gov/index.html>>. Accessed July–October 2009.

U.S. Forest Service. 2006. *Six Rivers National Forest Sensitive Plant and Fungi Species List*.

Personal Communications

McRae, John. U.S. Forest Service Six Rivers National Forest Botanist. Personal communication–2009.

2.3.4 Animal Species

California Department of Transportation 2009

California Department of Transportation. 2010. *Natural Environment Study, 197/199 Safe STAA Access Project*. February. Eureka, CA: California Department of Transportation, North Region Office of Environmental Services, District 1.

California Department of Fish and Game. 2003. California Natural Diversity Database.

California Department of Fish and Game. 2005. California Natural Diversity Database.

California Department of Fish and Game. 2010. California Natural Diversity Database.

Krohn, W.B., S.M. Arthur, T.F. Paragi. 1994. Mortality and vulnerability of a heavily trapped fisher population. Pages 137–145 in S. W. Buskirk, A. S. Harestad, M. G. Raphael, R. A. Powell (eds.), *Martens, Sables and Fishers: Biology and Conservation*. Ithaca, NY: Comstock Publishing Associates.

Nussbaum, R. A., E. D. Brodie, Jr., and R. M. Storm. 1983. *Amphibians and Reptiles of the Pacific Northwest*. Moscow: University of Idaho Press.

Polite, C., and J. Pratt. 1990. Species reports in *Birds*. Volume II of *California's Wildlife*. Sacramento, CA: State of California Department of Fish and Game.

2.3.5 Threatened and Endangered Species

California Department of Fish and Game. 2000. California Department of Fish and Game green sturgeon files. Produced by Dave Kohlhorst in response to a California Public Records Act request. Available from the California Department of Fish and Game, Sacramento, California.

- California Department of Fish and Game. 2004. *Recovery Strategy for California Coho Salmon: A Report to the California Fish and Game Commission*. (Species Recovery Strategy 2004-1.) February. Sacramento: California Department of Fish and Game.
- California Department of Fish and Game. 2010. California Natural Diversity Database.
- Miller et al 1996
- Moyle, P. B., P. J. Foley, and R. M. Yoshiyama. 1992. *Status of Green Sturgeon, Acipenser medirostris, in California*. Final report submitted to National Marine Fisheries Service. Davis: University of California, Davis, CA.
- Polite, C., and J. Pratt. 1990. Species reports in *Birds*. Volume II of *California's Wildlife*. Sacramento, CA: State of California Department of Fish and Game.
- Solis, D. M., Jr., and R. J. Gutierrez. 1990. Summer habitat ecology of northern spotted owls in northwestern California. *Condor* 92:739–748.
- Thome, D. M., C. J. Zabel, and L. V. Diller. 1999. Forest characteristics and reproduction of spotted owls in managed north-coastal California forests. *Journal of Wildlife Management* 63:44–59.
- Thomas, J. W., E. D. Forsman, J. B. Lint, E. C. Meslow, B. R. Noon, and J. Verner. 1990. *A Conservation Strategy for the Northern Spotted Owl*. Report of the interagency committee to address the conservation strategy of the northern spotted owl. Washington, DC: U.S. Government Printing Office.

Personal Communications

- Bosch, Ray. U.S. Fish and Wildlife Service. Personal communication—March 2009.
- Devlin, Brenda. Wildlife Biologist. Smith River National Recreation Area and Gasquet Ranger District of the Six Rivers National Forest. Personal communication—March 2009.
- Leppig, Gordon. California Department of Fish and Game. Personal communication— March 2009.
- McCain, Mike. U.S. Forest Service Fisheries Scientist. Smith River National Recreation Area and Gasquet Ranger District of the Six Rivers National Forest. Personal communications —February 2005 and March 2009.
- McRae, John. Botanist for the Six Rivers National Forest, Eureka, CA. Emails—May and June 2009.
- Pagliuco, Bob. National Marine Fisheries Service. Personal communication— March 2009.

2.3.6 Invasive Species

California Invasive Plant Council. 2006. *California Invasive Plant Inventory*. (Publication 2006-02.) Berkeley, CA. Available: <<http://www.cal-ipc.org/ip/inventory/index.php>>. Accessed: February 2010.

———. 2007. New Weeds Added to Cal-IPC Inventory. Available: <<http://www.cal-ipc.org/ip/inventory/pdf/WebUpdate2007.pdf>>. February. Accessed: February 2010.

California Native Plant Society. 2000. *Invasive Weeds of Humboldt County*. August. Arcata, CA: Bug Press. Available: <<http://northcoastcnps.org/iwhc>>.

Section 2.4 Construction Impacts

California Air Resources Board. 2008. *Final Regulation Order: Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*. Last revised: July 29, 2008. Available: <<http://www.arb.ca.gov/toxics/atcm/asb2atcm.htm>>. Accessed: June 11, 2009.

California Department of Parks and Recreation. 2009. *Jedediah Smith Redwoods State Park*. Available: <<http://www.parks.ca.gov/pages/413/files/JedediahSmith2007REPRINT.pdf>>. Accessed: March 13, 2009.

California Department of Transportation. 2004. *Transportation- and Construction-Induced Vibration Guidance Manual*. Sacramento, CA.

California Department of Transportation. 2006. *Standard Specifications*. May. Sacramento, CA.

California Department of Transportation. 2007. *Transportation Management Plan, Patrick Creek*. March 1. Eureka, CA.

California Department of Transportation. 2009a. *Realignment and Widening at Patrick Creek Narrows: Project Description and Construction Scenario for Location 1 DN-199-20.5, Location 2 DN-199-23.9/24.3, and Location 3 ND-199-25.6*. March. Eureka, CA.

California Department of Transportation. 2009b. *Construction Scenarios DN 199—PM 22.7/23.0—EA: 01-450000 Roadway Widening at the Narrows*. February 4. Eureka, CA.

California Department of Transportation. 2009c. *Amendments to Standard Specifications*. July 31.

Federal Highway Administration 2006. *Roadway Construction Noise Model*. February 15. Available: <<http://www.rcnm.us/>>.

Federal Transit Administration. 2006. *Transit Noise and Vibration Impact Assessment*. May. (DOT-T-95-16.) Washington, DC: Office of Planning. Prepared by Harris Miller Miller & Hanson, Inc. Burlington, MA.

Geocon Consultants. 2008. *Naturally Occurring Asbestos Site Investigation Report: State Route 199 Post Mile 20.5/25.5, Del Norte County, CA*. April. Rancho Cordova, CA. Prepared for California Department of Transportation, District 1, Eureka, CA.

Geocon Consultants. 2009. *Aerially Deposited Lead and Naturally Occurring Asbestos Site Investigation Report: State Route 199 (DN-199) Post Mile 26.5 Curve Correction, Del Norte County, California*. July.

ICF International. 2010. *Draft 197/199 Safe STAA Access Project Noise Study Report*. July. Prepared for the California Department of Transportation, District 1, Eureka, CA. San Francisco, CA.

Siskind, D. E., V. J. Stachura, M. S. Stagg, and J. W. Kopp. 1980a. *Structure Response and Damage Produced by Airblast from Surface Mining*. (Report of Investigations 8485.) Prepared for U.S. Department of the Interior, Bureau of Mines.

Siskind, D. E., M. S. Stagg, J. W. Kopp, and C. H. Dowding. 1980b. *Structure Response and Damage Produced by Airblast from Surface Mining*. (Report of Investigations 8507.) Prepared for U.S. Department of the Interior, Bureau of Mines.

Personal Communications

Athey, Tim. Operations commander, Del Norte County Sheriff's Department, Crescent City, CA. February 3, 2009—telephone conversation.

Chase, Eloise. Customer relations. Del Norte Ambulance, Crescent City, CA. February 3, 2009—telephone conversation.

Gibbons, Mike. Dispatcher chief. U.S. Forest Service, Six Rivers National Forest, Gasquet, CA. February 3, 2009—telephone conversation.

Hablitzel, Steve. Sergeant. Del Norte County Sheriff's Department, Crescent City, CA. February 2, 2009—telephone conversation.

Hayler, Kimberly. Environmental coordinator. California Department of Transportation, District 1, Eureka, CA. March 16, 2009—email transmitting right-of-way ownership and agreements for DN-STAA CIA report; September 29, 2009, and October 20, 2009—email responses to project consultant requests for additional information on the proposed project alternatives and potential construction effects.

McRae, John. U.S. Forest Service Six Rivers National Forest Botanist. Personal communication—2009.

Morrison, William. Volunteer firefighter. Crescent City Fire Protection District, Crescent City, CA. February 2, 2009—telephone conversation.

Narwold pers. comm.

Tweed, Charles. Operations manager. Del Norte Ambulance, Crescent City, CA. February 13, 2009—telephone conversation.

Section 2.5 Cumulative Impacts

California Department of Finance. 2007. *Population Projections by Race/Ethnicity for California and Its Counties 2000–2050*. Report 06 P-1. Sacramento, CA.

California Department of Finance. 2009. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2001–2009, with 2000 Benchmark*. May. Sacramento, CA.

California Department of Transportation. 1999a. *Route Concept Report, Route 197 Corridor 01-DN-197-KP 0.0/11.4 (PM 0.0/7.1)*. July.

California Department of Transportation. 1999b. *Route Concept Report, Route 199 Corridor 01-DN-199-KP TO.8/58.6 (PM TO.8/36.4)*. July.

California Department of Transportation. 2002. *Guide for the Preparation of Traffic Impact Studies*. December.

California Department of Transportation. 2008a. *Community Impacts: Growth Analysis for Route 101 Richardson Grove*. Memorandum from Alicia Boomer, California Department of Transportation, North Region Office of Environmental Management, to Deborah Harmon, Senior Environmental Planner, January 30. Eureka, CA.

California Department of Transportation. 2008b. *Richardson Grove Operational Improvement Project Draft Environmental Impact Report/EA and Programmatic Section 4(f) Evaluation*. Eureka, CA.

Fehr & Peers. 2010. *197/199 Safe STAA Access Project. Revised Traffic Analysis*. Final. January. Prepared for the California Department of Transportation, District 1, Eureka, CA. Salt Lake City, UT.

Gallo, D. 2008. *Realigning Highway 101 at Richardson Grove: The Economic Impact on Humboldt and Del Norte Counties*. March. Prepared for the California Department of Transportation. Center for Economic Development, California State University, Chico. Chico, CA.

Humboldt County Workforce Investment Board. 2008. Online survey. Available: <<http://www.humboldtwib.com/>>.

U.S. Bureau of Economic Analysis. 2009. *Table CA04—Personal Income and Employment Summary, Del Norte County and Humboldt County*. Available: <<http://www.bea.gov/regional/reis>>. Accessed: July 20, 2009.

Chapter 3 California Environmental Quality Act (CEQA) Evaluation

California Department of Transportation. 2006. *Climate Action Program at Caltrans*. December. Available: <<http://www.dot.ca.gov/docs/ClimateReport.pdf>>. Accessed June 8, 2009.

Hendrix, M., and C. Wilson. 2007. *Recommendations by the Association of Environmental Professionals (AEP) on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents*. March 5. Association of Environmental Professionals.

State of California. [no date]. *Strategic Growth Plan*. Available: <<http://gov.ca.gov/issue/strategic-growth/>>.

U.S. Environmental Protection Agency. 2009. *Climate Change: Regulatory Initiatives—Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act*. Revised: December 18, 2009. Available: <<http://www.epa.gov/climatechange/endangerment.html>>. Accessed: December 18, 2009.