Chapter 1. Introduction

1.1 Overview

This Draft Program Environmental Impact Report (EIR) was prepared for the Wildwood Road Realignment and Widening Project (proposed project) by the Trinity County Department of Transportation (County). The County has the primary responsibility for approving the project and is the lead agency in accordance with the requirements of the California Environmental Quality Act (CEQA). The purpose of this document is to provide information to County and state officials, agency personnel, and the general public regarding the potentially significant environmental impacts of the proposed project, to identify possible means to minimize those impacts, and to describe reasonable alternatives to the proposed project pursuant to CEQA Guidelines Section 15121. In addition, this document discloses impacts found not to be significant, growth-inducing impacts, significant cumulative impacts, and significant environmental impacts that cannot be avoided, if any.

The EIR does not recommend approval or denial of the proposed project, but it will be used by the County to determine whether to approve the proposed project. The County must review and consider the information contained in the Final EIR prior to taking action on the proposed project. The EIR may also be used by other agencies, such as the California Transportation Commission (CTC) and the California Department of Fish and Wildlife (CDFW), during their approval and permitting processes as they make decisions on whether to issue funding or permits for the project.

1.2 Type of EIR and Intended Use

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR is a Program EIR and analyzes the overall project plans and proposed phases of the Wildwood Road Realignment and Widening Project in as much detail as possible. As defined in CEQA Guidelines Section 15168, a Program EIR examines the environmental impacts of a series of related actions at a programmatic level and provides program-wide mitigation measures. Ultimately, the EIR will be used by the County to evaluate the individual phases of the proposed project and may be used to streamline subsequent environmental reviews. As each project phase is designed, it will be evaluated to determine if it is within the scope of this EIR. Activities within the scope of the project description and analysis provided in this EIR would not require further environmental documentation. If an activity is not within the scope, a Subsequent EIR or Negative Declaration may be prepared.

The Trinity County Board of Supervisors will use this Draft EIR, public and agency comments, testimony at public hearings, responses to comments by County staff, and recommendations of County staff and the County Planning Commission in their decisions regarding certification of the Final EIR and approving or denying the proposed project. When certified as a Final EIR, the final document will provide required CEQA compliance for the County actions required to implement the proposed project, such as designing the individual phases.

1.3 Agency Approvals

This EIR will be used to varying degrees by other agencies involved with approving or issuing permits for the proposed project. The U.S. Forest Service (Forest Service), U.S. Army Corps of Engineers (Corps), Federal Highway Administration (FHWA), California Department of Transportation (Caltrans), CDFW, CTC, North Coast Regional Water Quality Control Board (Regional Water Board), and State Water Resources Control Board (State Water Board) are responsible agencies and will issue approvals or permits required for the proposed project. A comprehensive list of anticipated approvals and permits is provided at the end of Chapter 2.

A special use permit from the Forest Service for the easement associated with the road through the Shasta-Trinity National Forest will be required. As part of its permit process, the Forest Service must comply with the National Environmental Policy Act (NEPA) and may use portions of this EIR and associated technical reports to develop its NEPA document. Separate approvals are also required from the FHWA and CTC because the proposed project will receive funding through federal and state sources. FHWA has designated Caltrans to act as the NEPA Lead Agency on its behalf. The FHWA/Caltrans NEPA approval process is anticipated to be in the form of a Categorical Exclusion supported by technical studies. The Corps and other federal agencies may also use the analysis in this EIR to support their discretionary permit actions. In support of the federal agency reviews, supporting technical reports have incorporated NEPA requirements (e.g., the cultural report discusses compliance with the National Historic Preservation Act).

The certified Final EIR will also provide CEQA compliance for other actions by state agencies connected with the proposed project, including:

- allocation of future funding for design, right-of-way, and construction by CTC.
- issuance of a Streambed Alteration Agreement (Section 1602 of the Fish and Game Code) for the construction of facilities in a stream or streambed (e.g., culverts in tributaries of Hayfork Creek) by CDFW.
- water quality certification or waiver for discharge of fill into waters of the United States (Section 401 of the Clean Water Act) by the Regional Water Board.
- coverage under General Permit for Storm Water Discharges Associated with Construction Activity (Section 402 of the Clean Water Act) by the State Water Board.

1.4 Environmental Review Process

1.4.1 Scoping

Trinity County initiated the environmental review process for the EIR with the circulation of a Notice of Preparation (NOP) on September 28, 2009, pursuant to Section 15082 of the CEQA Guidelines. The NOP was available for public and agency review and comment for a 30-day period. The NOP provided an overview of the proposed project and included a summary of probable impacts. The Environmental Checklist from Appendix G of the CEQA Guidelines was not included with the NOP, but it was later used to assess resource topics that should be analyzed in detail in Chapter 3 (see

Section 3.1, Introduction to Chapter 3). Copies of the NOP and comments received are included in Appendix A. Table 1-1 summarizes the comments received on the proposed project. Concerns and issues raised regarding the proposed project during the NOP comment period are addressed in this EIR.

Table 1-1. Summary of Scoping Comment Letters

COMMENTER	DATE OF LETTER	KEY ISSUE AREAS	SUMMARY OF COMMENTS
Denise Boggs, *on behalf of the Conservation Congress, Citizens for Better Forestry, and Klamath Forest Alliance*	10-19-2009	Project Schedule Project Need Permitting Biology Cultural Resources Water Quality	▪ Concern with schedule for completion of CEQA document and actual project implementation ▪ Recommend consultation with other agencies (U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, State Historic Preservation Officer, and Corps) ▪ Consider permit needs ▪ Impact concerns: water quality, soils, mass wasting, sensitive species, and cultural resources ▪ Critical habitat for northern spotted owl, Pacific fisher, and Chinook salmon ▪ Hayfork Creek is an impaired water body under Section 303(d) of the Clean Water Act; project could exacerbate water quality issues ▪ Need for realignment and widening is not fully justified ▪ Recommend economic cost/benefit analysis
Richard L. Martin Jr., North Coast Unified Air Quality Management District	10-12-2009	Air Quality Hazardous Materials	▪ Concern with naturally occurring asbestos in the project area ▪ Requires compliance with CCR Title 17, Section 93105, Air Toxic Control Measure for Construction, Grading, Quarrying and Surface Mining Operations ▪ Need to identify methods of implementing controls mandated by Section 93105
Marcelino Gonzalez, California Department of Transportation	10-21-2009	Traffic	▪ Consult with Caltrans on road closures, detours, and traffic control plans
Katy Sanchez, Native American Heritage Commission	10-8-2009	Cultural Resources	▪ Contact appropriate information center ▪ If necessary, perform archaeological inventory survey ▪ Sacred lands are not expected in the project area ▪ Include mitigation in the EIR for the potential discovery of buried resources ▪ Contact Native American tribes

Table 1-1. Summary of Scoping Comment Letters

COMMENTER	DATE OF LETTER	KEY ISSUE AREAS	SUMMARY OF COMMENTS
Suren Holbek, Property Owner	5-17-2010; 7-9-2010	Funding Project Need Easement Access Vegetation Removal Hazardous Materials Noise Visual Resources	▪ Disagrees with the need to widen or realign Wildwood Road ▪ Concerns with County accessing private land without prior consent ▪ Alleges unnecessary tree cutting along easement and discharge of hazardous materials (oils and equipment cleaning) in Hayfork Creek by County in past ▪ Concerns with noise along improved road ▪ Concerns with changes in views of the road from property ▪ Money should be spent on other county improvements or staffing
Bimla Rhinehart, California Transportation Commission	11-09-2009	Funding	▪ Commission recommends that the County identify and secure the necessary funding to complete the project

1.4.2 Draft Environmental Impact Report

This document constitutes the Draft EIR and contains a description of the proposed project and alternatives, a description of the environmental setting, a discussion of impacts associated with the proposed project and alternatives, and identification of mitigation measures for impacts found to be significant.

This Draft EIR will be circulated for a 45-day public and agency review period. Copies of the document have been made available to local, state, and federal agencies and to interested organizations and individuals wishing to review and comment on the report. The publication of this document marks the beginning of the 45-day comment period, during which written comments will be received by the Trinity County Department of Transportation at the following address:

Attn: Jan Smith, Environmental Compliance Specialist
Subject: Wildwood Road Comments
Trinity County Department of Transportation
P.O. Box 2490
Weaverville, CA 96093
Fax: (530) 623-5312
E-mail: jsmith@trinitycounty.org

Copies of the Draft EIR and non-confidential supporting technical studies prepared by North State Resources, Inc. for this project will be available for public review at the following locations:

- Trinity County Department of Transportation
  31301 State Highway 3
  Weaverville, CA 96093
  Hours: 8 a.m. to 5 p.m.

- Hayfork Branch Library
  6641 A, State Highway 3
  Hayfork, CA 96041
  Hours: M/W 12:00 to 4:00 p.m.; Tu/Th 10:00 a.m. to 2:00 p.m.

- Weaverville, Main Library
  351 Main Street
  Weaverville, CA 96093
  Hours: M-Th 1:30 to 5:30 p.m.

Trinity County's web page, http://www.trinitycounty.org. Navigate to the Transportation Department webpage and see "Wildwood Road DEIR" under the General Information heading.

One or more public hearings will be held before the Trinity County Planning Commission during the review period, at which the public may make oral comments on the Draft EIR. Public notices announcing the hearing date(s), time(s), and location(s) will be published in the *Trinity Journal* at least 10 days prior to the hearing and posted at public locations in Wildwood and Hayfork and on the County's webpage, http://www.trinitycounty.org.

1.4.3 Final Environmental Impact Report and Certification

Written and oral comments received in response to the Draft EIR will be addressed in the Final EIR. The Draft EIR, responses to comments, any revisions to the Draft EIR, and a final Mitigation Monitoring and Reporting Program (MMRP) will constitute the Final EIR (refer to Section 5.5, Mitigation Monitoring Program for CEQA-Mandated Mitigation, for more information on the MMRP). After reviewing the project and the Final EIR, the Trinity County Planning Commission, in a public hearing, will recommend to the Trinity County Board of Supervisors whether to certify the EIR and approve or deny the proposed project. The County Board of Supervisors will then review the proposed project, the EIR, the Planning Commission's recommendations, and public testimony and will decide whether to certify the EIR and whether to approve or deny the project. If the County certifies the EIR and approves the proposed project, it will file a Notice of Determination with the Trinity County Clerk and the Governor's Office of Planning and Research.

1.5 EIR Organization

This EIR is organized into the following chapters:

- Executive Summary – Presents an overview of the EIR, a brief description of the proposed project and alternatives, and a summary of the results of the impact analysis.

- Chapter 1, Introduction – Presents an overview of the EIR and environmental review process.

- Chapter 2, Project Description – Describes the proposed project.

- Chapter 3, Environmental Setting and Impact Analysis – Describes the environmental and regulatory setting and analyzes environmental impacts for the following resource topics: land use, agriculture and forestry resources, transportation and traffic, air quality, noise, biological

resources, cultural resources, aesthetics, hydrology and water quality, geology and soils, and hazards and hazardous materials. Topics dismissed from further evaluation are identified in the introduction to the chapter.

- Chapter 4, Alternatives Analysis – Discusses alternatives to the proposed project, compares the impacts of these alternatives with the proposed project impacts, and discusses the environmentally superior alternative.
- Chapter 5, Other CEQA-Required Sections – Discusses cumulative impacts, growth-inducing impacts, significant unavoidable impacts and irreversible changes, and the MMRP requirements.
- Chapter 6, References – Lists the references cited throughout the EIR.
- Chapter 7, List of Preparers and Contributors – Lists the agency and consultant personnel who prepared the EIR and who contributed to its preparation.
- Appendices – Contain supporting information for the EIR.

Chapter 2. Project Description

The Trinity County Department of Transportation (County) is proposing to improve approximately 6.6 miles of Wildwood Road (County Road 302) along the west side of Hayfork Creek in central Trinity County, California (see Figure 2-1—Vicinity Map; figures are included at the end of the chapter). The Wildwood Road Realignment and Widening Project (proposed project) would enhance safety and improve sight distance by widening the road, improving the road alignment to reduce the severity of curves, and rehabilitating the roadway structural section and drainage. The proposed project would be funded through the State Transportation Improvement Program (STIP) using state and federal funds managed by the California Transportation Commission through the California Department of Transportation (Caltrans) Office of Local Assistance.

2.1 Project Background

Wildwood Road was first constructed along part of the Hyampom Trail, a pack trail that connected Humboldt Bay to Red Bluff. The trail started in Eureka and followed a path similar to that of State Route (SR) 36 until it turned northeast over South Fork Mountain and down into Hyampom Valley. In Hyampom, the trail branched, with one fork traveling toward Big Bar close to the current alignment of Corral Bottom Road and the other fork following Hayfork Creek along the current alignment of Hyampom Road through Hayfork and becoming what is now Wildwood Road. From Wildwood, the trail continued to Red Bluff along an alignment close to that of present-day SR 36.

During the early 20th century, under the State Highway Act of 1909, the state and federal governments sponsored development of several routes through Trinity County. During this period, Trinity County and the Trinity National Forest joined forces to construct a road connecting Hyampom with Hayfork (Hyampom Road). In 1915, additional highway money became available to connect state highways between counties, including a route from Arcata in Humboldt County to the Sacramento Valley in Tehama County. In 1928, the Trinity National Forest began construction of Hayfork Canyon Road from Hayfork Valley to Wildwood, following the Hyampom Trail. The southern part of the road, near Wildwood, became part of the state highway system as a section of SR 29.

Wildwood Road was surfaced with rock until approximately 1960, when it was paved with asphalt. In the mid-1960s, the State constructed SR 36 on its present alignment, which travels east to west approximately 1 mile south of Wildwood. In April 1968, the State relinquished the present-day Wildwood Road, also known as County Road 302 and Forest Route 3, to Trinity County. The County is responsible for maintenance of the road under an easement from the U.S. Department of Agriculture, Forest Service (Forest Service). No major road improvements or realignments have been done under County ownership. Routine maintenance and snow removal have occurred, and guardrails were added in five locations in 2009. A new culvert at Halls City Creek was installed in 2001, and the bridge over Hayfork Creek in Wildwood is programmed for replacement in 2014/15.

Wildwood Road is narrow and winds through steep terrain surrounded by dense forest and rock bluffs. Accidents occur fairly frequently and often result in injuries based on County records. Since

1995, 12 accidents resulting in 17 injuries and one fatality have been reported between Post Mile[1] 5.0 and Post Mile 11.6 (the project limits). Of these accidents, three were head-on collisions, three involved vehicles hitting trees, and two others resulted in vehicles running into the embankment. Vehicles have also been driven off the road and flipped over or fell 50 to 100 feet over the embankment. These accidents were likely a result of the narrow road width, lack of adequate shoulders, and sharp turns.

Because Wildwood Road was originally a trail, it was constructed by cutting or blasting away the hillside and surfacing it with rock. The current road design does not contain an engineered substructure to preserve the pavement and absorb the weight of heavy loads. Erosion of the steep slopes above the road results in rocks falling onto the roadway, and the road is undermined from below as fill material settles. Drainage systems were also poorly designed, resulting in water flowing under and over the road, further damaging the pavement and creating additional hazards.

Currently, Wildwood Road is a rural major collector that links SR 3 with SR 36 and is the only access to the private lands along the road. It is one of two roads serving Wildwood. It is also frequently used by local residents and commercial businesses in the community of Hayfork as a primary route to Red Bluff and other areas east and south of Trinity County. It provides an important link for recreational and other users to a vast area of Forest Service lands, including a campground, a picnic area, and timber resources. The Forest Service relies on Wildwood Road to access resource areas for timber management and firefighting. The road carries an estimated 220 vehicles per day, of which approximately 7 percent is truck traffic, based on County records. The estimated maximum hourly traffic volume is 30 vehicles.

Due to the number and severity of accidents and the poor condition of the road, the Trinity County Transportation Commission included the proposed project in its 2005 Regional Transportation Plan, adopted September 20, 2005, as part of its 20-year Transportation System Improvement Plan. Inclusion in the Regional Transportation Plan made the project eligible for funding through the STIP.

A Project Study Report was prepared in December 2005, nominating this project for the 2006 STIP. The County proposed improvements to the roadway from Post Mile 5.0 to Post Mile 11.6 to meet current design standards, including a consistent width of two 11-foot-wide lanes with 2-foot-wide paved shoulders on both sides plus an additional graded shoulder up to 1 foot wide where feasible on the outboard side and a 1-foot-wide paved gutter on the inboard side. The environmental studies for this portion of the road, as well as the design, right-of-way expansion, and construction of Segment 1, the northernmost segment, were programmed in the 2006 STIP in December 2005. Due to the high cost of each segment, the remaining work will be programmed in future STIP cycles when additional funds become available.

2.2 Project Location and Setting

Wildwood Road connects SR 36 near the Shasta-Trinity county line to SR 3 north of Hayfork and is approximately 18 miles long. The project area encompasses approximately 6.6 miles of Wildwood Road, beginning at Post Mile 5.0 near Gemmill Gulch and extending north to the intersection with East Fork Road (County Road 343) at Post Mile 11.6 (Figure 2-2—Location Map; figures are

[1] Post Miles are measured northward from SR 36.

included at the end of the chapter). The project area is approximately 8 miles southeast of the community of Hayfork, which is 40 miles west of Redding, in Township 30 North, Range 11 West on the *Dubakella Mountain East* 7.5-minute U.S. Geological Survey quadrangle.

The majority of the project area falls within the Shasta-Trinity National Forest (STNF), South Fork Management Unit. The existing roadway is in a public road easement granted by the Forest Service. The easement extends 25 feet along each side of the existing roadway centerline, with additional areas where necessary to accommodate cuts and fills. Wildwood Road, including the easement, also crosses six private parcels in the project area. Three parcels occur near the southern end, approximately 0.5 mile north of the southern extent (APNs 19-110-03, 19-110-02, and 19-110-04). The other three private parcels encompass approximately 1 mile of the road at its northern extent within the project area (APNs 19-080-01, 19-080-02, 17-060-02).

Wildwood Road is a narrow, winding road through steep terrain along Hayfork Creek. The road runs along the side of a forested cliff, with Hayfork Creek running along the base of the slope to the east of the road. The road crosses four perennial streams and 29 ephemeral or intermittent streams, all tributaries to Hayfork Creek, and culverts have been installed to allow stream flow under the road.

2.3 Project Objectives

Wildwood Road has several deficiencies that affect public safety and road maintenance. Between Post Miles 5.0 and 11.6, it is less than two travel lanes wide and has inadequate shoulders, sharp horizontal curves, limited sight distance, falling rocks and debris, inadequate control of surface runoff, and inadequate substructure.

Wildwood Road is a key part of the local transportation system because it is a primary access route to Forest Service and private lands between the communities of Wildwood and Hayfork. It also serves as a primary route from Hayfork to Red Bluff and other points in the Sacramento Valley. Construction vehicles and other commercial trucks often use Wildwood Road between these two destinations, as do many local residents. A Forest Service campground and picnic area and the Natural Bridge historic site are located along Wildwood Road, as well as some private residences and ranches.

The County is proposing to improve Wildwood Road to meet the following objectives:

- provide a public roadway that meets current design standards,
- enhance traffic safety by providing two safe traffic lanes with shoulders of adequate width and by removing tight-radius curves,
- add guardrails at key locations,
- improve subsurface and surface drainage conditions,
- reduce traffic disruption due to slope failure and rockfalls,
- protect water quality of Hayfork Creek by stabilizing slopes to reduce erosion and sedimentation, and
- reduce maintenance requirements.

2.4 Description of the Proposed Project

2.4.1 Project Overview

The proposed project involves widening Wildwood Road between Post Miles 5.0 and 11.6 to two standard travel lanes with shoulders, improving its alignment to reduce the severity of its curves and improve sight distance, and rehabilitating the roadway structural section and drainage. The new road alignment would extend beyond the existing easement and right-of-way in multiple areas and would require large amounts of fill in some ravines and stream crossings. Approximately 6.6 miles of Wildwood Road, from the intersection with East Fork Road at the East Fork of Hayfork Creek south to the Gemmill Gulch Picnic Area, would be improved. The project would be designed and constructed in three phases, approximately 2 miles at a time, starting at the north end at the intersection with East Fork Road. Preliminary design conceptual maps are provided in Appendix B.

Specific design details for the Wildwood Road improvements will be refined during the design period for each phase. The proposed road improvements are described below.

- All segments of the road would be widened to two 11-foot-wide lanes with 2-foot-wide paved shoulders along both sides. An additional 1-foot-wide gravel shoulder would extend beyond the paved shoulder where feasible on the outboard side, and a paved gutter would be constructed on the inboard side. These improvements would involve roadway excavation and embankment modification. Excavations into inboard slopes or the placement of fill onto outboard slopes would be required to achieve the desired width.

- Several tight-radius curves would be realigned to improve sight distance and safety. They would be designed to achieve 20 miles per hour (mph) design speeds. The rest of the improved roadway may be realigned to meet a 35 mph design speed. Curve realignments will typically require large quantities of fill in deep ravines that carry perennial streams. Concrete culverts would be buried deep in the fill to convey the streams.

- The road would be reconstructed with new structural section, aggregate base, and asphalt concrete pavement with edge and centerline striping and appropriate signage.

- Culverts at all stream crossings would be replaced with new pipes or concrete boxes equipped to handle 100-year storm events and to facilitate fish passage, where appropriate. Some culverts may be fitted with downspouts or outlet protection to prevent erosion of fill slopes and to protect against formation of hydraulic drop. Culvert inverts would be aligned with the channel bottom and angle of the stream. The crossing areas are not located in active salmonid spawning areas; therefore, non-embedded culverts, baffled culverts or designed fishways meeting fish passage criteria are acceptable (National Marine Fisheries Service 2001).

- Retaining walls, rock slope protection, and guardrails may be used to enhance stability and safety. Retaining walls would be either gabion walls (cages built of heavy gage wire and filled with rock), can walls (steel pipes driven vertically and filled with soil), MSE walls (mechanically stabilized earth walls using welded wire, engineering fabric, or geogrids), or soldier pile walls (cast-in-drilled hole piles with timber, concrete, or steel lagging). Pile

driving would not occur adjacent to or within occupied coho salmon habitat; however, if pile driving must occur adjacent to a stream, the work will be conducted during the summer instream work period.

- Chain link may be placed on the cutbanks where necessary to contain rock fall.
- Construction activities would require extensive road closures, but access to most areas along the road would be maintained at all times via either SR 3 north of Hayfork or SR 36 west of Platina.

2.4.2 Project Segments

The County has divided Wildwood Road into three segments that will be designed in more detail over the next several years and that will correlate to the three construction phases of the project (Figure 2-2). As the design of each segment is completed, the County will determine if subsequent documentation under the California Environmental Quality Act (CEQA) is required and, if so, will prepare the documentation; the County will also obtain any additional permits and approvals at that time. The Forest Service will also review its actions (issuance of a special use permit and easement revisions for the proposed project) under the National Environmental Policy Act (NEPA) and prepare the necessary documentation. The dates identified in this environmental impact report (EIR) are subject to the availability of funding and may be delayed by one or more years.

The three segments are:

- Segment 1, which extends from Post Mile 11.6 to 9.7 between the intersection with East Fork Road and the Shiell Gulch Campground. Design of this segment is currently expected to occur from 2016–2017, with construction planned for 2020–2021.
- Segment 2, which extends from Post Mile 9.7 to 7.0 between the Shiell Gulch Campground and the Hayfork/Yolla Bolla Ranger District boundary. Design of this segment is currently expected to occur from 2019–2021, with construction planned for 2022–2024.
- Segment 3, which extends from Post Mile 7.0 to 5.0 between the Ranger District boundary and the Gemmill Gulch Picnic Area. Design of this segment is currently expected to occur from 2022–2024, with construction planned for 2024–2025.

An overview of the proposed improvements along each segment is provided below.

Segment 1 begins in a relatively flat, open section of the roadway adjacent to Murrison Ranch. Several culverts cross the road in this area. Thirteen corrugated metal pipes convey sheet flow drainage from the adjacent field or ephemeral channels. The pipes would be replaced with new pipes sized to handle calculated 100-year flows. One of the existing pipes is an underdrain outlet, and two pipes flow into an adjacent irrigation pipeline that follows the road and serves the ranch. It may be necessary to extend fill over the irrigation pipe to widen the road. Small cuts and fills would facilitate road widening in most of this segment. Sharp reversing curves within the northern 0.7 mile of this segment would be straightened by placing fill on the creek side and cutting the embankment on the uphill side. The elevation of the road in this area would be raised to match the elevation of the

adjacent field. Realignment near Post Miles 10.7 and 10.2 would include large cuts into the bank and a retaining wall on the stream side to remove the sharp reversing curves and allow room for the roadway widening.

Segment 2 begins at the entrance to Shiell Gulch Campground within the STNF. The elevation of the road would be raised near the campground entrance. A large pipe sized for 100-year flows would be placed in a deep gulch at Post Mile 9.2, and the gulch would be filled over the pipe to reduce the severity of a sharp curve. Several other sharp curves would be straightened by excavating into the cut bank. A 500-foot-long retaining wall may be placed to widen the road across a steep section between Post Miles 9.4 and 9.5. A guardrail would also be placed along the retaining wall section. Another deep gulch may be filled over a new culvert to reduce the severity of a curve at Post Mile 7.4. Besides the two large gulches, 12 culverts that convey roadside drainage or ephemeral streams would be replaced in this segment. Segment 2 ends at the Ranger District boundary at Post Mile 7.0.

Segment 3 may be realigned from Post Mile 7.0 to 6.2, with similar activities as Segment 2. A sharp curve where the road follows a drainage along the contour could be straightened by either placing fill along 2,000 feet of relatively flat terrain approximately 400 feet from Hayfork Creek, or installing a culvert and placing fill in the gulch higher up in the drainage at Post Mile 6.6, which would require more fill. Any culvert installed across the gulch would accommodate 100-year flows. A tight curve at Post Mile 5.9 would be realigned away from Hayfork Creek by cutting into the bank. Another curve would be realigned at Post Mile 5.4 to remove a small-radius reversing curve. Smaller cuts would be done to widen the road on its existing alignment from Post Mile 5.8 to 5.0. The elevation of the southern end of the segment would be raised. The existing road is two lanes wide south of Post Mile 5.6. The road crosses Gemmill Gulch over a 60-inch culvert near Gemmill Gulch Picnic Area and Post Mile 5.3. The road work is intended to continue to the relatively straight section south of Gemmill Gulch (Post Miles 4.8 to 5.1). However, if it appears that the picnic area or Gemmill Gulch would be adversely affected, the project could terminate where the existing road becomes two lanes wide at Post Mile 5.6. The existing culvert at Gemmill Gulch would be replaced with a new pipe designed to accommodate 100-year flows and fish passage, due to its proximity to Hayfork Creek. Besides Gemmill Gulch and the major drainage at Post Mile 6.6, six culverts that convey ephemeral drainages or road runoff would be replaced with larger pipes meeting current standards (100-year flows and fish passage as necessary).

2.4.3 Design and Specifications

The County will be responsible for completing the final design of each segment and preparing plans, specifications, and other contract documents. Construction work would be performed by a contractor selected by the County during a competitive bid process. The County will be responsible for ensuring that all required licenses, permits, and approvals are obtained prior to implementation of each segment of the project. The contractor will be required to comply with all applicable occupational health and safety standards, rules, and regulations. In addition, specific requirements for or restrictions on construction activities would be implemented in accordance with mitigation measures described in this EIR or identified in subsequent environmental documents and consistent with all conditions of the required permits. These mitigation measures, conditions, and restrictions will be included in the construction specifications and shall become part of the contract between the contractor and the County. A resident engineer representing the County will be on site to observe all

construction activities and enforce the mitigation measures along with the other contract compliance provisions.

2.4.4 Tree Removal

Trees would be removed from the construction limits and the adjacent safe recovery zone, which extends 10 feet from the edge of pavement (where feasible and necessary based on topography). Trees would not be removed from the Shiell Gulch Campground and Gemmill Gulch Picnic Area. Vegetation plantings after construction would occur along the road in suitable areas. No new upland tree species would be replanted on cut or fill slopes or within 100 feet of the new centerline; only native shrubs, grasses, and forbs would be planted in these areas. Trees removed from riparian areas during construction would be replaced in the riparian areas.

2.4.5 Right-of-Way

No major roadway relocation would occur as part of the proposed project, but some new right-of-way would be required for the minor road realignments and widening. Portions of the new road alignment would extend outside of the existing Forest Service easement, requiring a revision to the easement to encompass the new alignment. The proposed right-of-way limits extend from the new centerline by 30 feet on both sides, providing a total corridor width of 60 feet. Temporary construction easements would be required along the new alignment to accommodate construction operations, provide equipment and material staging and storage areas, and facilitate tie-ins for existing driveways.

Additional areas of Forest Service or private property would be needed during construction to provide for contractor staging and stockpiling areas. Temporary use of Forest Service land outside of the existing easement would require a special use permit. Use of private lands would require a temporary construction easement in addition to any permanent right-of-way that would be acquired.

2.5 Construction Overview

2.5.1 Construction Methods

Construction activities would occur over several years and would be implemented in phases as funding becomes available. Phasing will spread the road closures and traffic impacts over a longer period of time. The activities would generally include clearing and grubbing to remove vegetation and to prepare the road alignment for construction; grading, excavation, and possibly blasting to construct roadway excavations and embankments; installing rock slope protection, retaining walls, and drainage and erosion control structures to protect streams and minimize the potential for water quality impacts or slope failure; preparing the subgrade for pavement; laying an aggregate base and the asphalt concrete; constructing guardrails where needed; and finishing the road by placing signs and painting stripes. If mitigation measures are required, they would be implemented as specified in the measure.

The types of construction equipment and vehicles to be used during construction activities would be determined by the construction contractor. Equipment that may be used includes pick-up trucks, dump trucks, graders, backhoes, excavators, bulldozers, compactors, water trucks, truck-mounted

drills and pile drivers, concrete delivery trucks, asphalt concrete paving machines, rollers, and service vehicles. Muffled blasting may be necessary in some areas of particularly hard rock. The exact number of construction workers needed for the project would also be determined by the contractor and would depend to a large extent on the construction schedule. Between 25 and 45 people are expected to work on the project at any one time, depending on the activities being performed.

2.5.2 Construction Schedule

Construction activities are expected to take two construction seasons for each segment, beginning in the spring (approximately May 1) of the first year and ending in the fall (approximately November 30) of the following year. The construction schedule for each segment depends on receipt of funding and necessary permits and approvals; the estimated start and finish years are identified above under Project Segments. Earth-moving construction activities would not be conducted during the winter months (approximately mid-November through April 30) unless the weather at the beginning and end of the season allows for these activities. Some work on structures, such as pile driving or drilling and pouring concrete in drill holes for retaining walls, may continue as the weather permits. Earth moving would resume in upland areas (outside of streams) in the spring after the threat of major storms has passed (typically by May 1), based on long-range weather forecasts. Construction in streams or other wet areas would not resume until June 15.

Construction would occur between the hours of 7 a.m. and 7 p.m. Nighttime construction is not expected to be needed. Occasional work on Saturdays or holidays may be necessary, but no work would occur on Sundays.

2.5.3 Staging and Stockpile Areas

Staging would occur within the road rights-of-way to the extent feasible, but use of adjacent previously disturbed land may be necessary. One potential staging area has been identified for each segment, and the County will coordinate with the landowners to obtain approval for temporary use of lands outside of the existing easement or right-of-way. Potential staging areas include the flat open field at the north end of the Murrison Ranch and/or the pullout at the intersection of Wildwood Road and East Fork Road (Segment 1), the Shiell Gulch Campground (Segment 2), and Gemmill Gulch Picnic Area (Segment 3). Staging areas would be used for parking, materials, and equipment storage. An office trailer would be located in one of the staging areas to temporarily serve as a central meeting area for construction management activities. Construction workers would not be allowed to camp in the staging areas, except possibly at the Shiell Gulch Campground. They would probably reside in temporary accommodations in Hayfork or Weaverville or at designated Forest Service campgrounds.

2.5.4 Borrow Areas/Stockpiles

Cut and fill quantities for the entire project would be balanced to the extent feasible. Fill material would be acquired from cuts within the project area. Excess spoils generated by cuts during one phase may be saved for a later phase, although the design team would attempt to balance each phase. If materials need to be stockpiled for a later phase, they would be piled in a flat, unvegetated area that is already being used for similar purposes by the County Department of Transportation, Caltrans, or the Forest Service in the general vicinity. The piles would be secured with tarps or bermed with soil,

straw wattles, straw bales, or other devices to prevent runoff. In the event that insufficient materials are generated by project cuts, additional material would be obtained from commercial sources that are in compliance with the Surface Mining and Reclamation Act, or from excess materials derived from other highway projects in the area. No excavation would occur for the sole purpose of providing material for this project.

2.5.5 Waste Disposal

Project design would endeavor to achieve balanced cut and fill and offset the need to dispose of excavated material. If necessary, the construction contractor would be responsible for disposing of excess excavated materials at appropriate disposal sites approved by the County or the Forest Service. The staging areas may ultimately be used for spoils disposal, if necessary and upon approval from the Forest Service or private property owner. Such use would only be allowed if it does not detract from the continued use of the property. Permanent spoils disposal areas would be stabilized with erosion control methods similar to those described below for fill slopes, including compaction and seeding with native grasses.

Debris from construction and staging areas would be kept out of Hayfork Creek and other streams. All debris would be disposed of offsite at a landfill or recycling facility with sufficient capacity and permits to receive the waste. Liquid construction waste would also be disposed of offsite in accordance with the Waste Management and Materials Pollution Control Best Management Practices described in the *Caltrans Construction Site Best Management Practices Manual* (California Department of Transportation 2003). Petroleum-based compounds would be contained and removed to an officially designated landfill authorized to accept that type of waste. Wastewater from construction activities would not be allowed to drain into Hayfork Creek or other drainages. The project specifications would contain requirements for the handling, storage, and cleanup of hazardous materials (e.g., petroleum-based products, cement, or other construction pollutants) in the event of an accidental spill.

2.5.6 Traffic Control

The contractor would be responsible for controlling traffic through the project area and providing for emergency access, if necessary. Construction activities would require single lane closures and periodic closure of both lanes. In areas where the existing road is less than two lanes, periodic complete closures would sometimes be necessary.

During extended road closures, residents would have to access their property from only one end of Wildwood Road (i.e., either from SR 36 or from SR 3 depending on the location of the closure). Because all points on Wildwood Road can be accessed from one end or the other, closures may be implemented all day for several days or possibly months. At night, the road would be left with at least one lane open, with temporary traffic signals or “stop – proceed when clear” signs, depending on sight distance.

A schedule for complete road closures would be worked out well in advance of construction, in consultation with the community, service providers, and emergency response personnel. The County would notify private land owners, the Forest Service, emergency response providers, and others, as

appropriate, of the road closure schedule and alternative access routes. During the periods when the road is open during the day, traffic would be controlled by pilot cars or flaggers on a single travel lane through the construction zone.

Access to the private properties in the northern end of the project area and on East Fork Road would be maintained throughout the construction period, although some delays could occur. Properties at the southern end of the project area in Segment 3 would be the most affected by the closures. Special accommodations would be required of the contractor to ensure that residents of this area are allowed access in and out of their properties with minimal delay (no more than 30 minutes) if construction takes place on both the north and south sides of their driveway.

2.5.7 Instream Construction

Instream construction activities in tributaries to upper Hayfork Creek would be limited to the greatest extent practicable, but would include excavation and removal of existing culverts and associated structures, installation of new culverts, downspouts, outlet protection, or energy dissipaters to reduce the effects of streambed scour and bank erosion downstream of the culvert outlet. Energy dissipation structures include rip-rap, drop structures, and sills. Stream channels in the work areas would need to be dewatered to facilitate work and protect water quality. A temporary dam structure would be constructed by hand using sheet plastic, sand bags, clean gravel, and rock and would be installed in the creek during the summer instream work window (i.e., at low flow). Water would be allowed to pool at the dam and would be pumped around the instream work area. Any short-term water drafting needed for construction would be done in accordance with the National Marine Fisheries Service water drafting guidelines (National Marine Fisheries Service 2001).

2.5.8 Pollution Prevention and Erosion Control

The proposed project would comply with Best Management Practices (BMPs) described in the *Caltrans Construction Site Best Management Practices Manual* (California Department of Transportation 2003) and a Stormwater Pollution Prevention Plan (SWPPP) prepared by either the County or the contractor. The SWPPP would be prepared in accordance with the National Pollutant Discharge Elimination System program (Section 402[p], Clean Water Act [CWA]), administered by the State Water Resources Control Board (State Water Board) on behalf of the U.S. Environmental Protection Agency. Under the program, the County would file a Notice of Intent with the State Water Board to obtain coverage under the General Construction Activity Storm Water Permit prior to the first phase of construction. The SWPPP would describe runoff and erosion control measures to be employed; any toxic substances to be used during construction; and spill prevention and control measures, including, but not limited to, those found in the Caltrans Storm Water Quality Handbooks (California Department of Transportation 2003). These measures would incorporate the best available technology that is economically achievable and best conventional pollutant control technology pursuant to State Water Board requirements and federal law (40 CFR Parts 122-124). A monitoring program would be implemented to evaluate the effectiveness of the measures included in the SWPPP. All project-specific BMPs and other pollution prevention and erosion control measures would be incorporated into the plans and specifications.

The contractor will also be required to conform to the following provisions, which will be incorporated into the Project Specifications:

- Where construction areas encroach on live streams, barriers adequate to prevent the flow of muddy water into streams shall be constructed and maintained between the areas and streams, and during construction of the barriers, muddying of streams shall be held to a minimum.
- Mechanized equipment shall not be operated in the stream channels of the live streams.
- Water containing mud or silt from aggregate washing or other operations shall be treated by filtration or retention in a settling pond adequate to prevent muddy water from entering live streams.
- Oily or greasy substances originating from the contractor's operations shall not be allowed to enter or be placed where they will later enter a live stream.
- Portland cement or fresh Portland cement concrete shall not be allowed to enter flowing water of streams.
- Material derived from roadway work shall not be deposited in a live stream channel where it could be washed away by high stream flows.

Additional erosion control measures, such as the following, would also be included in the project plans and implemented during construction:

- limit ground-disturbing activities to the dry season;
- use sediment traps, desilting basins, and/or sediment barriers, such as silt fencing, straw bales, and wattles;
- use geotextiles, mulch, and other temporary ground covers on disturbed areas and stockpiles;
- stabilize and revegetate disturbed areas immediately after construction;
- use native or non-persistent non-native grasses for quick establishment, followed by native grasses and forbs (no noxious or invasive weed species would be used); and
- do not spray pesticides, which are prohibited by County ordinance on County projects.

The project design would incorporate permanent structures such as inlet and outlet protection at culverts, rock slope and drainage inlet protection, and vegetated drainage ditches and swales that would minimize long-term erosion and discharge of sediment and other pollutants into Hayfork Creek and its tributaries. New drainage facilities would be sized to handle the anticipated flow from the proposed project. New culverts would be sized to handle a 100-year storm event. Sufficient ditch relief culverts would be placed to reduce the distance that water flows along the roadside before being discharged. These features would be designed in accordance with the guidelines in *Five Counties Salmon Conservation Program County Road Maintenance: A Water Quality and Stream Habitat Manual* (Five Counties 2002).

2.5.9 Winterization

Earth-moving activities (i.e., grading) would be suspended during the rainy season (typically mid-November to May 1). The construction areas would be winterized with temporary or permanent erosion control at the end of each construction season (in early November), and most equipment would be removed from the area at that time. Equipment left on site during the winter would be stored in staging areas that are not subject to inundation and do not drain to Hayfork Creek or any tributary. In areas where construction and revegetation have not been completed by November 15, interim erosion control, consisting of quick-establishing sterile grass seed, mulch, and/or geotextiles, would be applied to the unfinished disturbed areas. Construction materials and temporary fills would be removed from within and adjacent to the creek and other drainages. Any unpaved sections of road would be surfaced with rock or temporary pavement. Erosion and sediment control measures would be maintained during the winter suspension period and would be checked daily during any 1/2-inch or greater rainfall event and every seven (7) calendar days until site stabilization is achieved or construction resumes.

2.6 Anticipated Permits or Approvals

Project implementation would require several federal, state, and local permits or approvals. Table 2-1 lists the permits and approvals that would likely be required.

Table 2-1. Anticipated Permits and Approvals

APPROVING AGENCY	PERMIT/APPROVAL	REQUIRED FOR
Federal Agencies		
Federal Highway Administration	NEPA compliance	Federal funding approval
U.S. Forest Service	Special use permit; NEPA compliance	Project activities on Forest Service lands
U.S. Fish and Wildlife Service	Compliance with Section 7 of the Endangered Species Act (16 USC 1536) (informal consultation)	Potential impacts on northern spotted owl and Pacific fisher
National Marine Fisheries Service	Compliance with Section 7 of the Endangered Species Act (16 USC 1536) (informal consultation)	Potential impacts on Southern Oregon/Northern California Evolutionarily Significant Unit (ESU) coho salmon
U.S. Army Corps of Engineers	Compliance with Nationwide Permit 14 – Linear Transportation Projects (Section 404 of the Clean Water Act, 33 USC 1341)	Discharge of fill material into “waters of the United States”
State Agencies		
California Transportation Commission; California Department of Transportation	Funding approval	Funding through the Statewide Transportation Improvement Program (STIP)

Table 2-1. Anticipated Permits and Approvals

APPROVING AGENCY	PERMIT/APPROVAL	REQUIRED FOR
State Water Resources Control Board	Coverage under the General Construction Activity Storm Water Permit (Section 402 of the Clean Water Act, 40 CFR Part 122)	Storm water discharges associated with construction activity for more than 1 acre of land disturbance
North Coast Regional Water Quality Control Board	Water Quality Certification (Section 401 of the Clean Water Act)	Discharge into “waters of the State”
Department of Fish and Wildlife	Streambed Alteration Agreement (Section 1602 of the Fish and Game Code) Section 3082 of the California Fish and Game Code (California Endangered Species Act)	Construction activities in Hayfork Creek and its tributaries Potential impacts on Southern Oregon/Northern California Evolutionarily Significant Unit (ESU) coho salmon
Local Agencies		
Trinity County	Project approval/CEQA compliance	Project implementation

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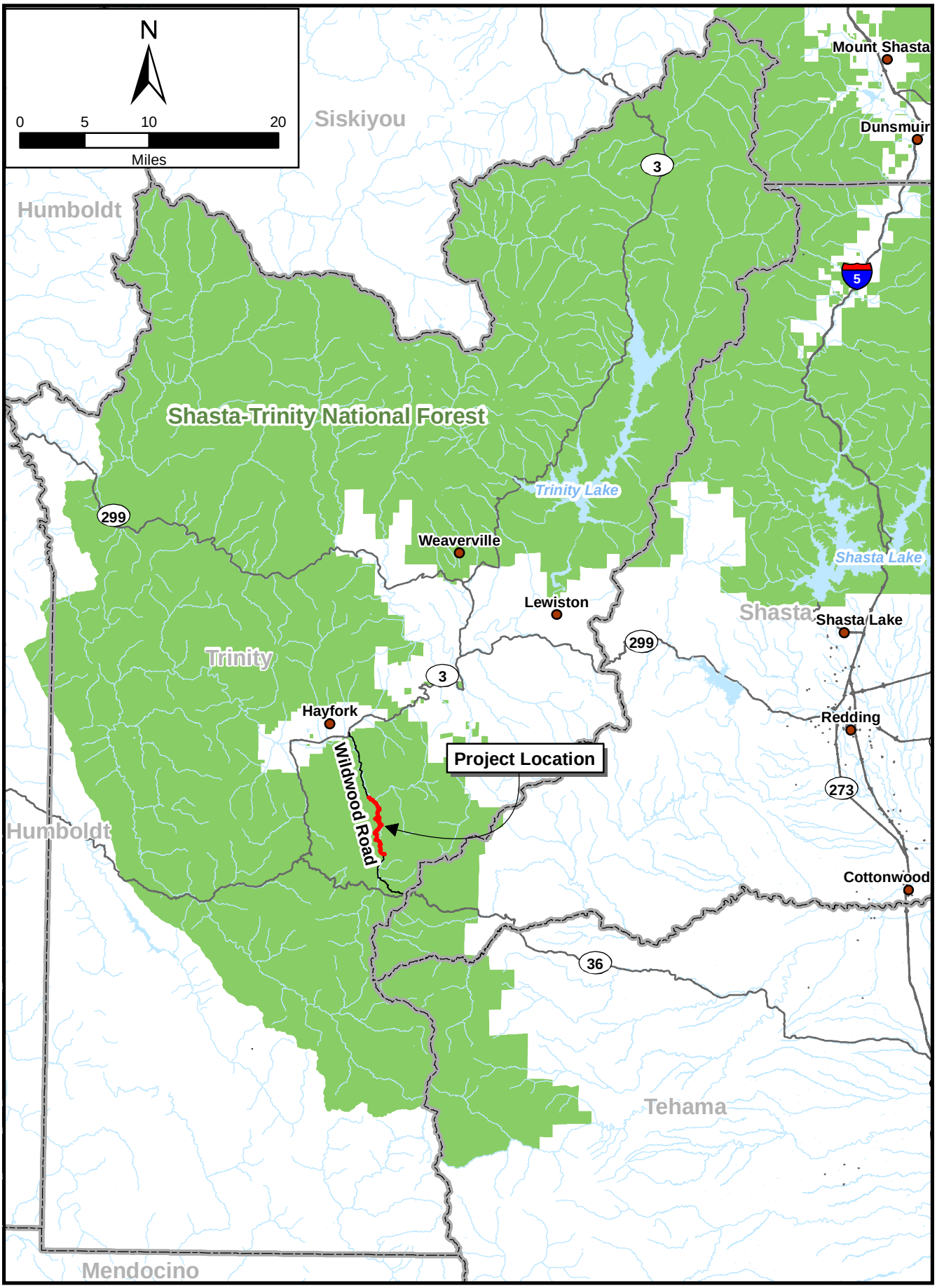

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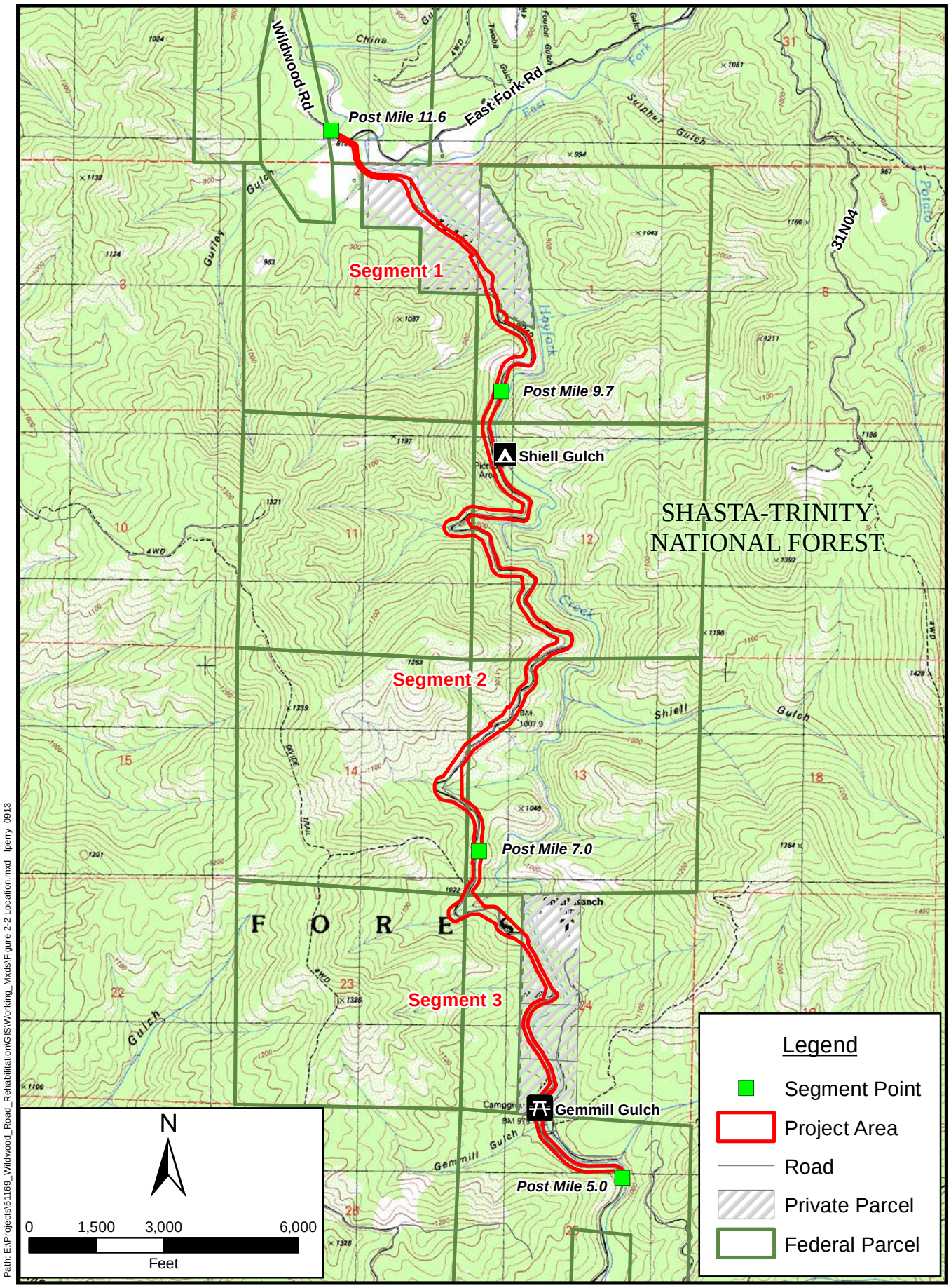
Wildwood Road Project

Figure 2-1
Vicinity Map



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Wildwood Road Project

Figure 2-2
Location Map