

**TRINITY COUNTY  
EAST CONNECTOR ROADWAY PROJECT  
WEAVERVILLE, CALIFORNIA**

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***Draft Environmental Impact Report***

**December 16, 2002**

*Prepared for:*  
**Trinity County  
Department of Transportation  
P.O. Box 2490  
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## LIST OF ACRONYMS

AADT	Average annual daily traffic
AAQS	Ambient Air Quality Standards
AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ACOE	U.S. Army Corps of Engineers
af	acre-feet
APE	Area of Potential Effects
APN	Assessor's Parcel Number
AQP	Air Quality Partnership
BA	Biological Assessment
BAT	Best available technology
BCT	Best conventional pollutant control technology
BLM	U.S. Bureau of Land Management
BMPs	Best Management Practices
C-2	General Commercial
C-3	Heavy Commercial
CalEPA	California Environmental Protection Agency
CALINE-4	
CalOSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Protection
CDFA	California Department of Food and Agriculture
CDFG	California Department of Fish and Game
CEPPC	California Exotic Pest Plant Council
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CHP	California Highway Patrol
CIDH	Cast in pre-drilled holes
CISS	Cast-in steel shells
CNDDB	California Natural Diversity Data Base
CNEL	Community noise equivalent level
CNPS	California Native Plant Society
CO	Carbon monoxide
County	Trinity County
CPSC	Consumer Product Safety Commission
CSD	(Weaverville) Community Services District
CSTEMFAC	
CVP	Central Valley Project
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibel
dbh	Diameter at breast height
DOT	U.S. Department of Transportation

DPR	California Department of Parks and Recreation
DTSC	California Department of Toxic Substances Control
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESA	environmentally sensitive area
ESA	Environmental Site Assessment
ESL	environmental study limits
ESU	evolutionarily significant unit
FAA	Federal Aviation Administration
FDA	U.S. Food and Drug Administration
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FR	Federal Register
ft	foot
HASR	Historic Architectural Survey Report
HAZWOPER	Hazardous Waste Operations and Emergency Response (training)
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
HMA	Hazardous Materials Assessment
HRER	Historic Resources Evaluation Report
HSP	Health and Safety Plan
I	Industrial
ITE	Institute of Traffic Engineers
J & S	Jones & Stokes
$L_{dn}$	24-hour day and night A-weighted noise exposure level
$L_{eq}$	Equivalent sound level
LOS	Level of service
LUST	Leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MMI	Modified Mercalli Index
MOU	Memorandum of Understanding
m	meter
mm	millimeter
Mph	Miles per hour
mps	meter per second
msl	Mean sea level
MUTCD	Manual on Uniform Traffic Control Devices
NAC	Noise Abatement Criteria
NCRWQCB	North Coast Regional Water Quality Control Board
NCUAQMD	North Coast United Air Quality Management District
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service (now NOAA Fisheries)
NO <sub>2</sub>	Nitrogen dioxide

NOAA Fisheries	National Oceanic and Atmospheric Administration, Fisheries (formerly NMFS, National Marine Fisheries Service)
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit (Clean Water Act)
O <sub>3</sub>	ozone
OHWM	Ordinary High Water Mark
OS	Open Space
OSHA	Occupational Safety and Health Administration
PF	Public Facilities
PM <sub>2.5</sub>	(Respirable) particulate matter less than 2.5 microns
PM <sub>10</sub>	(Respirable) particulate matter less than 10 microns
ppm	parts per million
PRC	Public Resources Code
proposed project	Trinity County East Connector Roadway Project
PSR	Project Study Report
R-1A	Residential
R-2	Residential duplexes
RR-5	Rural residential with a five-acre minimum
RTP	Trinity County Regional Transportation Plans
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SC	Scenic Conservation
SHPO	State Historic Preservation Office
SMARA	State Mining and Reclamation Act
SO <sub>2</sub>	Sulfur dioxide
SR	State Route
STIP	State Transportation Improvement Program
SUD	Special Unit Development
SW	Seasonal Wetland
SWANCC	Solid Waste Agency of Northern Cook County
SWRCB	State Water Resources Control Board
SWPPP	Stormwater Pollution Prevention Plan
T & E	Threatened and Endangered
TCDOT	Trinity County Department of Transportation
TCRCD	Trinity County Resource Conservation District
TCTC	Trinity County Transportation Commission
TMDL	Total Maximum Daily Load
TPUD	Trinity Public Utility District
TRD	Trinity River Division (of the CVP, Central Valley Project)
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
WAPA	Western Area Power Administration
WBTCs	Weaverville Basin Traffic Circulation Study
WFPD	Weaverville Fire Protection District

WSD  
USC

Weaverville Sanitary District  
United States Code

# EXECUTIVE SUMMARY

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## INTRODUCTION

The County of Trinity is proposing to construct a new two-lane, undivided, limited-access arterial road along the east side of Weaverville, in Trinity County, California, connecting State Route (SR) 299 at Glen Road to SR 3 at Five Cent Gulch Street, and crossing East Weaver Creek. The proposed project will include a bridge crossing over East Weaver Creek, a new traffic signal at the East Connector Roadway intersection with SR 299 and Glen Road, Class I and II bicycle trails, and a pedestrian/bicycle bridge crossing of East Weaver Creek.

A detailed description of the proposed project is provided in Chapter 1.0, *Project Description*.

## PROJECT ALTERNATIVES

CEQA requires that a range of alternatives that could feasibly attain the basic objectives of the proposed project be considered. Alternatives evaluated for the proposed East Connector Roadway project are as follows:

- No Project Alternative
- Roadway Alternative 1 (Western Roadway Alignment)
- Roadway Alternative 2 (Eastern Roadway Alignment)
- SR 299/Glenn Road/Nugget Lane Intersection Alternative A (no access to Nugget Lane from Glen Road)
- SR 299/Glenn Road/Nugget Lane Intersection Alternative B (no access to Nugget Lane from Glen Road; new access to Nugget Lane from Golf Course Drive)
- SR 299/Glenn Road/Nugget Lane Intersection Alternative C (in-only access to Nugget Lane from Glen Road)
- Bike Trail Option A (Bridge and Trail to Lowden Park)
- Bike Trail Option B (Bridge and Trail to Weaver Street)

Decisions regarding selection of the roadway alignment, SR 299/Glenn Road/Nugget Lane intersection, and bike trail will be made independently of one another. Each of these alternatives is discussed in greater detail in Chapter 2.0, *Project Alternatives*.

## **PURPOSE OF THE EIR**

The project is included in the *Trinity County Regional Transportation Plan* and has been programmed by Trinity County for the 1998 State Transportation Improvement Program (STIP) Augmentation. The East Connector Roadway Project will be constructed utilizing federal-matching funds. Therefore, the project requires review under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The Trinity County Planning Department is the Lead Agency in the preparation of the Environmental Impact report (EIR) and the Federal Highway Administration (FHWA) will be the Lead Agency in the preparation of an Environmental Assessment (EA) for the East Connector Roadway Project, which will be circulated at a later date.

This document has been prepared in accordance with the requirements of CEQA in order to assess potential impacts associated with the proposed East Connector Roadway Connector project. In accordance with CEQA *Guidelines*, Section 15121, the purpose of this document is to provide information to responsible agencies and the general public regarding the potentially significant environmental effects of the project, to identify possible means to minimize those effects, and to describe reasonable alternatives to the project. Effects can be direct, indirect, or cumulative, and can be permanent or temporary (usually only extending through the project construction phase).

It is not the purpose of the EIR to recommend approval or denial of the project. However, the Lead Agency must respond to each significant effect identified in the EIR. The Trinity County Board of Supervisors is required to certify that they have reviewed and considered the information contained in the Final EIR prior to action on the project.

## **ENVIRONMENTAL REVIEW PROCESS**

### **PUBLIC SCOPING PROCESS**

The agency responsible for the design of the project is the Trinity County Department of Transportation (TCDOT).

Trinity County initiated the environmental review process for the EIR with the circulation of a Notice of Preparation (NOP) dated March 15, 2001. The NOP was available for public and agency review and comment for a 30-day period, which began March 15, 2001 and ended April 13, 2001. Scoping meetings were held with individual property owners and agencies directly affected by the project on April 3 and 4,

2001, and with the general public on April 4, 2001. The purpose of the NOP and scoping meetings was to solicit public input on concerns and issues associated with the proposed project. These concerns and issues are summarized below and are discussed in greater detail in Chapter 3.0 of the EIR. Written comments received during the scoping process are included in Appendix B.

## **DRAFT EIR**

This document constitutes the Draft EIR. It discusses the project purpose, need, and background; describes the project alternatives (including a "No Project" alternative); and identifies the affected environment, project effects, and mitigation measures for significant adverse effects. The Draft EIR will be circulated for a 45-day public and agency review period. Copies of the document have been made available to applicable local, state, and federal agencies and to interested organizations and individuals wishing to review and comment on the report. Public copies are available for review at the Weaverville Public Library at 211 Main Street in Weaverville and on the Trinity County website ([www.trinitycounty.org](http://www.trinitycounty.org)). Technical reports that are bound separately from this EIR and are available for public review are listed in Appendix C. These documents are available in Weaverville at the TCDOT at 303 Trinity Lakes Boulevard (SR 3), the Trinity County Planning Department at 190 Glen Road, the Weaverville Public Library at 211 Main Street, and Imaginations in the Trinity Plaza Shopping Center (a private business).

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: East Connector Comments  
Trinity County Department of Transportation  
P.O. Box 2490  
303 Trinity Lakes Blvd.  
Weaverville, CA 96093-2490  
Fax (530) 623-5312

**NOTE: PLEASE SEND U.S. MAIL TO P.O. BOX, NOT THE STREET ADDRESS.**

A public hearing will be held on this Draft EIR before the Trinity County Planning Commission in Weaverville, California, prior to the close of the public comment period. Notices of the hearing will be posted in the *The Trinity Journal* at least 10 days prior to the hearing.

## **FINAL EIR AND CERTIFICATION**

Written and oral comments received in response to the Draft EIR will be addressed in the Final EIR, which will include responses to comments and a Mitigation Monitoring and Reporting Program (MMRP). After reviewing the project and the Final EIR, the Trinity County Planning Commission in a public hearing will recommend to the Board of Supervisors whether to certify the EIR and approve or deny the proposed project and recommend the alternative(s) to be implemented. The County Board of Supervisors will then review the project, the EIR, the Planning Commission's recommendations, and public testimony and will decide whether to certify the EIR and approve or deny the project and select the alternative(s) to be implemented. Following circulation and review of the EA, the FHWA will certify the EA and approve or deny funding for the project.

## **MITIGATION MONITORING AND REPORTING PROGRAM**

CEQA Section 21081.6(a) requires lead agencies to "adopt a reporting and mitigation monitoring program for the changes to the project which it has adopted or made a conditions of project approval in order to mitigate or avoid significant effects on the environment." The MMRP need not be included in an EIR. However, throughout this EIR, measures have been clearly identified in order to facilitate establishment of an MMRP. Any mitigation measures adopted by the County as a condition of approval of the project will be included in the project MMRP to verify compliance.

## **ISSUES TO BE RESOLVED AND AREAS OF CONCERN**

Concerns and issues identified during scoping meetings and in written comments, as well as potential issues identified by Trinity County, Caltrans, and involved agencies and environmental consultants, are summarized below. The following do not appear to be issues for the proposed project and therefore are not considered further in this EIR: energy, coastal zones, wild and scenic rivers, farmlands/agricultural lands.

Project impacts may be direct, indirect, permanent, temporary, or cumulative, and all of these types of impacts, plus recommended mitigation measures, are addressed in Chapter 3.0, *Affected Environment, Environmental Consequences, and Mitigation Measures*. Cumulative effects may occur as a direct or indirect result of implementing the East Connector Roadway as well as other future foreseeable projects in the Weaverville vicinity. Foreseeable projects contributing to cumulative impacts include a proposed new airport in southeast Weaverville, the proposed West Connector Roadway, planned expansion of the County's road maintenance yard on SR 3 in north Weaverville, widening of SR 299 through Weaverville, including widening of the SR 299 over East Weaver Creek to accommodate a bicycle lane and sidewalks,



and vegetation clearing within the flood control zone of East Weaver Creek, as required by the U.S. Army Corps of Engineers (ACOE).

## **GEOLOGY, SEISMICITY, SOILS**

Published mapping shows portions of the project underlain by mudstone, sandstone, and conglomerate sediments of the Weaverville Formation. The potential for unstable slope conditions within materials of the Weaverville Formation could have significant impacts on the project. Although earthquakes have historically been felt in Weaverville, potential seismic issues associated with the project are expected to be less than significant. Nevertheless, the roadway and bridges will need to be designed to withstand projected seismic ground motion in the project area. Impacts would be similar under the various project alternatives.

## **HYDROLOGY, WATER QUALITY, STORMWATER RUN-OFF**

Adverse effects on water quality from roadway construction and operational activities are anticipated to be potentially significant due to the proximity of portions of the proposed project to East Weaver Creek and to Lance Gulch. Construction activities could result in impacts to water quality from erosion and sedimentation and from accidental discharges of toxic pollutants to water bodies. The project design incorporates a retaining wall that will keep fill required for the vehicle bridge abutments and approaches out of the East Weaver Creek ordinary high water mark (OHWM). Temporary fills below the OHWM, but outside the low flow channel, may be required for a temporary crossing to be used during construction only and temporary falsework (temporary scaffolding to facilitate bridge construction) for the bridge may also need to be placed within the OHWM, but outside the low flow channel. Temporary fills at the vehicle bridge location present a potential for erosion; however, such fills would only be permitted from June 15 through October 15 and must be removed after October 15. The Biological Assessment (BA) that was prepared for federally listed and commercially valuable fish species also addresses water quality issues (J&S, 2002b). Measures recommended in the BA to preserve water quality, maintain riparian habitat functions and values, and minimize impacts on aquatic organisms in the project area, have been incorporated into the project description and/or mitigation measures described in this document. Public water supplies are drawn from upstream of the project on East Weaver Creek and would therefore not be impacted by the project. The proposed project would have a beneficial effect on drainage in that a roadside drainage along the east side of the road would keep runoff from the Pioneer Heights area off the Trinity River Lumber Company mill property. Impacts would be similar under the various project alternatives.

## **HAZARDOUS WASTE/MATERIALS**

Based on the project Hazards Materials Assessment (HMA), there do not appear to be contaminated sites within the project area with the potential to affect the proposed project and the project is not likely to encounter hazardous materials or petroleum product contamination that could affect the project (Taber Consultants, 1999b). Tailing piles from old mining activities are present along much of the project corridor, but no evidence of potential hazardous materials was observed in these piles. Much of the project corridor traverses Trinity Lumber Company property; however, the corridor primarily cuts through inactive portions of this property and the operations here do not appear to be a potential contamination threat within the project area. Impacts would be similar under the various project alternatives.

## **AIR QUALITY, CLIMATE**

Air quality in the Weaverville region does not exceed federal Ambient Air Quality Standards (AAQS); however, in the winter months, Weaverville exceeds the stricter state standards for particulate matter under 10 microns (PM<sub>10</sub>), which is principally a measure of dust and wood smoke emission (Trinity County, 1990). The project would need to incorporate dust control and equipment maintenance measures to reduce PM<sub>10</sub> emissions during construction to reduce temporary construction phase impacts. A micro-scale analysis of air quality impacts was conducted at the two intersections where air impacts from carbon monoxide are expected to be most significant due to traffic idling (the SR 299/Glen Road/East Connector intersection and the SR 3/Five Cent Gulch Street/East Connector intersection). The analysis shows that, under worst-case conditions, carbon monoxide levels at these intersections would not exceed federal or state AAQS with operation of the proposed East Connector. Therefore, air quality impacts from the project are expected to be less than significant overall for all project alternatives. Since the project is included in the Regional Transportation Plan and will improve existing traffic congestion conditions, resulting in reductions in the concentration of carbon dioxide and other emissions, the project would be considered consistent with the Federal Clean Air Act (Trinity County, 2001).

The proposed project is located in an area underlain by the Weaverville Formation, which consists of unmetamorphosed sedimentary rock. This type of parent material is not ultramafic and does not have the potential to contain asbestos fibers. Therefore, grading of this material will not result in airborne asbestos.

## **NOISE**

Potentially sensitive noise receptors in proximity to the project include the Weaver Creek Senior Apartments and Golden Age Senior Center on Brown's Ranch Road, as well as individual residences to the east on Brown's Ranch Road and Martin Road. Although the majority of homes are located several

hundred feet away from the proposed roadway corridor, there are several residents closer to the roadway who could potentially experience a minor increase in ambient noise levels from project operation. Future noise levels at all receptor locations are expected to be below established federal and local standards with operation of the East Connector. The increased noise in the Brown's Ranch Road and Martin Road areas would be partially offset by reductions of noise in other areas, particularly along Washington Street in the vicinity of the Weaverville Elementary School and Lowden Park. Project construction would likely result in significant, but temporary noise impacts. The two road alignment alternatives (Alternatives 1 and 2) would have similar impacts in terms of the magnitude of impact and the number of receptors affected. However, Alternative 1 would have a more significant impact on the Weaver Creek Senior Apartments and Two Creeks Mobile Home Park, while Alternative 2 would have a more significant impact on residents east of the senior center along Brown's Ranch Road. In addition, properties along Brown's Ranch Road may experience cumulative noise impacts from the proposed East Connector Roadway and a possible future road to a new airport southeast of Weaverville, which may connect to Brown's Ranch Road.

## **ENERGY**

The proposed East Connector Roadway project will be a limited-access roadway that will accommodate existing traffic in the project area. The project would not be growth-inducing and would not add additional traffic capacity, compared to the No Project Alternative. The project is not expected to result in increased energy consumption, including petroleum consumption, or to deplete existing energy reserves. The project alternatives may reduce energy consumption very slightly by improving traffic operations. However, it is not possible to measure this effect, which would be minimal in comparison to long-term energy consumption of existing and future traffic with or without the project. Energy was not determined to be an issue during the initial project scoping and public scoping process. Therefore, this issue is not addressed in detail in this EIR.

## **WATERS OF THE UNITED STATES (INCLUDING WETLANDS)**

The proposed project could result in the placement of fill into waters of the United States, including East Weaver Creek (a perennial drainage), Lance Gulch (a spring-fed intermittent drainage), and up to three small seasonal wetlands. Alternative 1 would result in less impact to seasonal wetlands, but more impact to East Weaver Creek. Alternative 2 would result in slightly more overall impact to waters of the U.S. (including wetlands) than Alternative 1. Measures to reduce impacts on waters of the United States include constructing compensatory replacement wetlands on land that the County would acquire from Trinity River Lumber Company and establishing buffer zones between construction staging areas and streams. A small portion of the concrete bridge pilings will be located below the OHWM of East Weaver Creek. Two

culverts will be placed in Lance Gulch. Construction and fill will be kept outside the OHWM of all other streams considered waters of the U.S. Construction of the vehicle bridge over East Weaver Creek may necessitate placement of temporary fill within the OHWM, but outside the low flow channel of the creek, but any such fill will only be allowed between June 15 and October 15. It shall be entirely removed during the winter months and following project construction.

## **VEGETATION AND INVASIVE SPECIES/WILDLIFE**

Riparian forest is located in the project study area and is considered a sensitive natural community by the California Department of Fish and Game (CDFG). Construction activities could result in the loss or disturbance of riparian forest. Alternative 1 would have a greater impact than Alternative 2, and Bike Trail Option A would have a greater impact than Bike Trail Option B. CDFG has adopted a no-net-loss policy for riparian habitat value. In addition, the U.S. Fish and Wildlife Service (USFWS) mitigation policy identifies California's riparian habitats in Resource Category 2, for which no net loss of existing habitat value is recommended (46 FR 7644, January 23, 1981). Impacts on riparian habitat are generally considered significant by the CDFG and the USFWS, and require mitigation as part of the proposed project. Measures are recommended to maintain riparian habitat functions and values along East Weaver Creek. Implementation of the project is also expected to have a minor impact on upland pine forest habitat and on the movement of wildlife, which will be similar for all alternatives (Alternative 2 would remove or disturb more upland forest than Alternative 1). Measures are also recommended to prevent the introduction or spreading of noxious weeds. Impacts on the riparian forest adjacent to East Weaver Creek will be cumulative with removal of vegetation for widening of SR 299 over East Weaver Creek to accommodate a bicycle lane and sidewalk, and vegetation clearing within the flood control zone of East Weaver Creek, as required by the U.S. Army Corps of Engineers (ACOE).

## **THREATENED AND ENDANGERED SPECIES**

The project study area includes habitat for Southern Oregon/Northern California Coast coho salmon (a species state and federally listed as threatened). Work associated with the installation of the bridge will result in temporary construction activity next to East Weaver Creek. Minor temporary and permanent impacts to the creek will occur, including disturbance of streamside vegetation, with somewhat greater impacts under Alternative 1 than Alternative 2, due to the greater disturbance or loss of riparian vegetation. However, the project is not expected to result in any long-term adverse effects on the streams or fish habitat, including spawning or rearing habitat, or on designated critical habitat. The analysis in the BA (J&S, 2002b) concludes that the project will result in a "may affect, likely to adversely affect"

determination due to potential effects to threatened species during construction. Formal consultation with the National Atmospheric and Oceanic Administration (NOAA) Fisheries (formerly National Marine Fisheries Service [NMFS]) regarding this issue is ongoing.

Disturbance within the East Weaver Creek system could result in impacts on the yellow-breasted chat, a California species of special concern, or little willow flycatcher, state-listed as Endangered. Up to four singing male yellow-breasted chat were found along East Weaver Creek during bird surveys for the East Connector project, but no nesting behavior was observed. No willow flycatchers were observed during the bird surveys, but potential habitat exists in the riparian area along East Weaver Creek. To prevent the take of eggs or nestlings yellow-breasted chat or little willow flycatcher, the cutting of woody vegetation will be limited, to the extent possible, to the non-breeding season (August 1–May 1). Root removal or other ground-disturbing clearing activities would not be conducted until after June 15. If woody vegetation must be removed from riparian areas during the breeding season, a wildlife biologist will survey the area to ensure that no nests of yellow-breasted chat or little willow flycatcher would be affected by the vegetation removal. If nests are present, the vegetation will not be removed until the nests are abandoned.

Other wildlife of special concern with the potential to occur in the project area include the northwestern pond turtle, foothill yellow-legged frog, and Cooper's hawk. None of these species were identified in the field. Construction noise disturbance will reduce the use of the project area by most wildlife species during the construction period. Construction activities could disturb nesting raptors in the project area and northwestern pond turtle and foothill yellow-legged frogs. Various measures have been identified to avoid and reduce potential effects on aquatic and riparian habitat. Incorporating these and other measures, including timing of tree removal to avoid the nesting season, and preconstruction surveys for turtles and frogs, will result in no take of special-status fish or wildlife species during construction. No special-status plants were located during floristic surveys in the project study area. Therefore, implementation of the proposed project will not affect special-status plants.

## **FLOODPLAINS**

The proposed vehicle bridge over East Weaver Creek is located in a reach of floodplain mapped by Federal Emergency Management Agency (FEMA) by approximate study methods. Proposed development in FEMA-mapped floodplains requires a Flood Development Permit from the Floodplain Administrator and cannot raise the floodplain elevation more than one foot without a variance issued from the Planning Commission. The proposed East Connector vehicle bridge was designed to pass the most probable 100-year flood and also the most probable 50-year flood plus an additional 3-foot clearance for debris. New culverts in Lance Gulch will be sized to pass the 100-year flood. Piers or columns for the three-span

vehicle bridge will be located outside the low flow channel of the creek, but within the 100-year floodplain. The eastern road approach to the bridge will also encroach into the 100-year floodplain under either alternative. The encroachments will cause the floodplain elevation to increase by between 0.67 feet and 0.89 feet, depending on the alternative alignment and bridge design. Round columns will cause a greater increase in floodplain elevation than pier walls. The increase may cause flows to back up in Five Cent Gulch, or shallow overflow to the west of East Weaver Creek, which could impact the medical center on SR 3. This potential impact will be mitigated by raising the elevation of an existing ridge along the west side of the creek by 0.6 feet. High flow and scour may occur at the proposed bridge location and bridge pile foundations will be designed to accommodate scour demands based on geotechnical studies. The hydrologic analysis demonstrates that scour and effects on the base flood elevation dissipate before reaching Brown's Ranch Road Bridge. The bicycle/pedestrian bridge (either option) is located completely out of the 100-year floodplain and therefore would have no effect on hydrology, scour or base flood elevation.

## **COASTAL ZONE**

The project is not located in a coastal zone and coastal zones were not determined to be an issue during the initial project scoping and public scoping process. Therefore, this issue is not addressed in detail in this EIR.

## **WILD AND SCENIC RIVERS**

The project does not encompass any portion of a designated wild and scenic river and impacts to wild and scenic rivers were not determined to be an issue during the initial project scoping and public scoping process. Therefore, this issue is not addressed in detail in this EIR.

## **PARKS, RECREATIONAL AREAS, WILDLIFE AND WATERFOWL REFUGES**

The proposed bike trail along East Weaver Creek would provide additional bike and pedestrian recreational opportunities and would provide additional access to an existing County-operated local community park (Lowden Park). Option A is a safer route for the bike trail than Option B since it avoids a three-way intersection (Park Avenue, Weaver Street, and Lowden Lane) and travel on County roads. The project will improve access to recreational areas to the north of Weaverville, but is not likely to impact the overall use of these areas. The project may draw some visitors away from downtown historic district sights, but will also make this area more accessible to visitors. These effects will likely balance out to have an overall negligible effect on the number of visitors.

## **LAND USE, PLANNING AND GROWTH**

The proposed project is consistent with the Circulation Element of the Trinity County General Plan, the Weaverville Community Plan, and the Regional Transportation Plan. The project would change existing land uses to road right-of-way. The Trinity River Lumber Mill owns a 2-acre parcel of land on the end of Martin Road (APN 024-210-1000) that is topographically separate from the mill facility, and would be severed from the mill by the proposed project. As part of the right-of-way acquisition, the Mill may be interested in retaining this parcel and developing it for residential use. Therefore, in anticipation of this being part of the right-of-way agreement, this Draft EIR analyzes the rezoning of a single 2-acre parcel from industrial to single family residential (all alternatives).

Alternative B would alter or remove one existing commercial property at the SR 299/Glen Road intersection. The project would also create land use and safety incompatibilities with adjacent industrial properties and senior facilities along Brown's Ranch Road. The land use and safety impact to the senior facilities would be greater under Alternative 1 than Alternative 2 since residents of Weaver Creek Senior Apartments would have to cross the East Connector to reach the Golden Age Senior Center.

The proposed East Connector Roadway is designed to meet an existing need to reduce congestion from through-traffic along SR 299. The East Connector Roadway would be a limited access roadway. Access to the East Connector would be provided at its two terminals (SR 299 and SR 3) and at Brown's Ranch Road and Pioneer Lane, which would be extended southward to the new roadway. Additional access to existing facilities along the new road, such as the California Highway Patrol (CHP) office, Trinity River Lumber Company, and Trinity Plaza Shopping Center would be provided. No other permits for individual encroachments, including access to any potential new residential or commercial developments along the East Connector, would be issued by TCDOT. Any potential future development would be required to have internal streets collecting traffic to a single encroachment onto the East Connector. Residential areas adjacent to the mill property are situated on top of a bluff 20 to 35 feet above the proposed roadway, and are already accessed by Martin Road or Brown's Ranch Road. These areas are nearly completely built-out or subdivided to the maximum density allowed by zoning. Therefore, the East Connector is not likely to induce significant new development along its length.

## **FARMLANDS/AGRICULTURAL LANDS**

The project is not located on farmlands or agricultural lands. There are two adjacent parcels on Brown's Ranch Road that are zoned for agricultural use. No right-of-way will be taken from these parcels, and the road will not bisect the agricultural zone or otherwise conflict with agricultural use of this property or

result in conversion to non-agricultural use. Impacts to farmlands or agricultural lands were not determined to be an issue during the initial project scoping and public scoping process. Therefore, this issue is not addressed in detail in this EIR.

## **COMMUNITY IMPACTS (SOCIAL, ECONOMIC)**

The project may have indirect economic impacts on a number of businesses located along SR 299 and SR 3, including businesses in the historic downtown district on Main Street (SR 299), since it would divert traffic away from these businesses. This impact would be similar for all road alignment alternatives. Businesses near the SR 299/Glen Road/Nugget Lane intersection may also be negatively impacted by changes in access and parking (i.e., closed or restricted access to Nugget Lane from Glen Road and loss of parking spaces along Nugget Lane). This impact is greatest under Alternatives A and B and less significant under Alternative C, which provides in-only access to Nugget Lane from Glen Road. On the other hand, under the No Project Alternative, poor circulation and access, increasing congestion, and degraded traffic levels of service would impair Weaverville's economic potential.

Under Alternative B only, construction of the project may require the removal or alteration of one commercial building at the intersection of SR 299 and Glen Road. Minor fiscal impacts are associated with the acquisition of additional right-of-way and resultant loss of property taxes (Alternative 2 would require acquisition of more right-of-way than Alternative 1). This impact would be largely balanced by increases in property taxes from possible re-zoning of the 2-acre parcel owned by the mill, and improvements to the quality and character of the Weaverville downtown area.

The project would sever a portion of the Trinity River Lumber Company property (APN 024-210-0800) rendering it unusable to future mill operations. Trinity County proposes to purchase the severed portion of the mill outright. In addition, there are security and safety concerns related to increased traffic adjacent to industrial and residential properties (similar for all alternatives).

Alternative 1 will have an adverse effect on the safety of senior citizens who use the Golden Age Senior Center and walk, drive or take powered wheelchairs or carts crossing Brown's Ranch Road because it will increase traffic along this segment of the road. Alternative 1 runs along the existing Brown's Ranch Road alignment at this location. Selection of Alternative 2 would reduce the impact on the senior citizens who travel between the Center and Senior Apartments or Mobile Park on Brown's Ranch Road.



## **PUBLIC SERVICES/UTILITIES/EMERGENCY SERVICES**

The East Connector project would not cause an increased need for public services, utilities, or emergency services. Emergency response times would likely improve under all project alternatives due to improvements in traffic circulation and congestion and the addition of an alternate route. Project implementation will involve undergrounding of existing overhead utilities and relocation of one fire hydrant (Alternative 2 only). Undergrounding of existing utilities would be consistent with County goals and would be considered a beneficial impact of the project. The WCSD plans to place a water main to improve circulation and reliability of Weaverville's water distribution system to their existing service area, as proposed in their Master Plan (Pace Engineering 2002).

## **TRAFFIC AND TRANSPORTATION**

The East Connector project was developed and designed to help alleviate existing and projected future traffic and circulation problems in the Weaverville Basin. In addition, the project would add bicycle and pedestrian facilities, including Class I and II lanes along the East connector and a proposed new bike/pedestrian path along Levee Road, in line with existing planning goals and objectives for the Weaverville community. Therefore, project traffic and transportation impacts would be largely beneficial. In 2020, without the East Connector project, the overall level of service (LOS) at the SR 3/SR 299 intersection would be "C" and the LOS at the SR 299/Washington Street and SR 299/Glen Road intersections would be "D." With the project, overall LOS at the SR 3/SR 299 intersection would be improved to "B" and overall LOS at the SR 299/Washington Street intersection would be improved to "A." The project traffic analysis shows that the East Connector would cause an LOS of "E" at the SR 299/Glen Road intersection without signalization. However, installing a left-turn pocket and a signal at this intersection, as proposed as part of the East Connector project, would improve the overall intersection LOS to "C". The East Connector would also slightly increase delays for traffic entering SR 3 from Five Cent Gulch Street, causing LOS for that movement to drop from LOS "B" to LOS "C". However, the overall intersection LOS will remain "A" in 2020, with or without the project. This impact is considered less than significant, since it would not cause an acceptable intersection LOS to become unacceptable. The East Connector does not contribute to the cumulative adverse impact of traffic congestion in the basin; rather, it reduces the impact of future growth and development projects.

Temporary and permanent changes in access to businesses at the SR 299/Glen Road intersection vary in significance with the three intersection alternatives, as discussed under *Community Impacts*, above. Safety impacts related to increased traffic along Brown's Ranch Road and East Connector intersections with Brown's Ranch Road for the two main alignment alternatives were also discussed under *Community*

*Impacts.* Installation of a traffic signal at the SR 299/Glen Road/East Connector intersection would improve the safety of pedestrians crossing SR 299 to shop at the Trinity Plaza Shopping Center and businesses on the opposite side of SR 299.

Construction-related traffic delays will not be significant since the majority of the project is on a new route not presently open to traffic. Closures of one lane and controlled traffic may cause minor delays during construction of intersections with SR 299, SR 3, Glen Road, Martin Road and Brown's Ranch Road, but no complete road closures will be necessary.

### **VISUAL RESOURCES/AESTHETICS**

For most of its length, the proposed East Connector Roadway would be located on Trinity River Lumber property and the project is expected to be visually compatible with industrial operations on this property. Landscaping between the lumber mill and the new roadway would screen the industrial operations from the road. The proposed roadway would also be visually compatible with commercial land uses located at the project's two terminals. The greatest visual impact would probably be observed along Brown's Ranch Road, at the Golden Age Senior Center, which is adjacent to either of two alternate road alignments, and at the Weaver Creek Senior Apartments and Two Creeks Mobile Home Park. These impacts are likely to be most severe if the road is constructed to the east of the senior center, along a corridor that is currently forested (Alternative 2), and less severe if the western alignment is chosen (Alternative 1), since that alignment partially follows the existing Brown's Ranch Road past the Senior Center. The Senior Center would largely shield the view of the Alternative 2 alignment from the senior apartments and mobile home park. Outbuildings at the senior center, plus vegetation and topography, would also shield views of this alignment from the Center. Distance from the road, and intervening topography and vegetation would largely shield views of the East Connector from residences east of the roadway along Brown's Ranch Road and Martin Road. Therefore, these impacts are considered less than significant. Mitigation is recommended for the potentially significant impacts from the proposed bridge crossings.

Light and glare impacts are not expected from the project since the project does not include new street lighting, except for a new traffic signal at an intersection with existing lighting. Headlights are not expected to glare into adjacent windows, due to the vegetation and topographic separation between the proposed alignment and residential properties. SR 299 and SR 3 are designated State Scenic Byways and the Weaverville Community Plan stresses the importance of protecting and enhancing the appearance of the community along SR 299 and SR 3. The project is not likely to significantly impact the visual effects of the approach to Weaverville along these highways. Project-related reductions in traffic congestion would make the historic downtown area more attractive for visitors. Undergrounding of utilities that would result

from the project would also be visually beneficial, as would potential residential development instead of industrial development on the two-acre parcel on Martin Road that may be rezoned from industrial to residential as part of the right-of-way acquisition agreement with Trinity River Lumber Company.

## **HISTORIC AND ARCHAEOLOGICAL RESOURCES**

A project architectural survey identified 33 parcels containing buildings and/or structures within the project area of potential effects (APE). Of these, only one (the Trinity River Lumber Company property) contained buildings constructed prior to 1956. None of the buildings or structures in the APE appears to meet the criteria for listing on the National Register of Historic Places (NRHP) or the criteria for "historic resources" or "unique archaeological resources" under CEQA. The archaeological survey recorded the following resources in the project APE: an area of dragline dredge tailings; an area of hydraulic mine tailings; a small historic scatter of domestic artifacts; and a water ditch segment. These four resources were evaluated and do not appear to meet the criteria for "historic resources" or "unique archaeological resources" under CEQA. Cultural resources reports have been submitted to SHPO for concurrence with this determination (J&S, 2002a, d, e, g). In addition, SR 299 and SR 3 were evaluated and judged to lack sufficient integrity to qualify for the California Register. Natural drainages, such as East Weaver Creek and Lance Gulch within the project area, are often identified as culturally sensitive locales. The possibility remains that buried archaeological resources could be encountered during construction of the East Connector Roadway and there is a concern that such resources be protected. Potential impacts that could occur during construction are similar for all project alternatives and standard mitigation is proposed for such potential impacts.

## **SIGNIFICANT UNAVOIDABLE ADVERSE EFFECTS**

Analyses contained in this EIR and supporting technical studies have not identified any significant unavoidable adverse impacts resulting from the proposed project.

## **IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

The No Project alternative would not directly involve the use of resources or cause significant irreversible environmental effects.

The project alternatives would involve the commitment of natural, physical, human, and fiscal resources. Labor, fossil fuels, and construction materials would be required to construct the East Connector roadway. Labor and natural resources are also used in the fabrication and preparation of bridge and roadway

construction materials. Workers for the project would be drawn from the regional labor pool. Fuels and materials that would be consumed in constructing the East Connector are generally not retrievable. However, they are not in short supply, and the material requirements for this project would be relatively minor compared to the overall demand for such materials. The use of such materials for the project would not have a significant adverse effect upon their continued availability.

The project alternatives would also require a substantial expenditure of funds, which would not be retrievable. Funding for the design, right-of-way acquisition, construction, and maintenance of this project comes from local, state, and federal transportation funds which are derived primarily from road and fuel taxes. These funds are specifically designated for road construction or maintenance and cannot be used for other purposes. No county or state General Funds will be used for design, right-of-way, construction, or maintenance of the East Connector Roadway. The commitment of these resources is based on the concept that the Weaverville community would benefit from improved traffic circulation within the community and that the benefits obtained would outweigh the commitment of resources.

In addition to the labor, fuel, and material requirements of the East Connector, the project would result in the following significant irreversible environmental effects:

- Grading and paving of approximately 6 acres of land and grading of additional lands that would not be paved, including the cut and fill slopes (all project alternatives)
- Conversion of existing land uses (residential, commercial, industrial) to roadway use and possible conversion of one 2-acre industrial-zoned parcel to residential zoning (all project alternatives)
- Placement of fill in "waters of the U.S." including filling of one jurisdictional wetland and one or two non-jurisdictional wetlands (all project alternatives; Alternative 2 would have a greater impact)
- Loss of riparian and upland pine forest habitat, with potential irreversible impacts to wildlife using this habitat (all project alternatives; Alternative 1 and Option A would have a greater impact on riparian habitat; Alternative 2 would have a greater impact on upland forest habitat)
- Changes in access to businesses at the SR 299/Glen Road/Nugget Lane intersection (all project alternatives; intersection Alternatives A and B would have the greatest impact; impact from Alternative C would be reduced)
- Modification or removal of one commercial building at the SR 299/Glen Road/Nugget Lane intersection (Alternative B only)

Mitigation measures proposed for the above significant irreversible environmental impacts reduce these impacts to less than significant. Although mitigated, the impacts remain irreversible. For example, the placement of fill in wetlands would be mitigated by the development of compensatory replacement wetlands

along a portion of Trinity River Lumber Company property that would be severed by the proposed project. However, the loss of existing wetlands would remain an irreversible impact.

## **SUMMARY OF ENVIRONMENTAL IMPACTS**

**Table ES—1** presents a summary of project impacts and proposed mitigation measures that would avoid or minimize potential impacts. In the table, the level of significance of each environmental impact is indicated both before and after the application of the recommended mitigation measures(s). For detailed discussion of all project impacts and mitigation measures, the reader is referred to the environmental analysis in Chapter 3.0.

**TABLE ES-1  
SUMMARY OF SIGNIFICANT IMPACTS AND MITIGATION MEASURES<sup>1</sup>**

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p>3.1 GEOLOGY, SOILS, AND SEISMICITY</p> <p>Geology Impact-1: The proposed project may result in increased erosion potential after construction, until final landscaping is established.</p>	PS/I	<p>Geology Mitigation-1: Activities that increase the erosion potential shall be restricted to the fullest extent possible to the relatively dry summer and early fall period to minimize the potential for rainfall to mobilize and transport sediment to East Weaver Creek. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures must be in place and operational at the end of each construction day and maintained until disturbed ground surfaces have been successfully revegetated.</p> <p>Geology Mitigation-2: Type D erosion control measures (i.e., hydroseeding) shall be implemented during construction of the proposed project in nonriparian upland areas. These measures shall conform to the provisions in Section 20-3 of the Caltrans Standard Specifications and the special provisions included in the contract for the project. Erosion control shall consist of one application of erosion control materials within nonriparian upland areas to embankment slopes, excavation slopes, and other areas designated by the project engineer. These materials shall consist of fiber, seed, commercial fertilizer, and water. These materials shall conform to Section 20-2 of the Caltrans Standard Specifications. Commercial fertilizer used for nonriparian upland areas shall conform to the provisions in Section 20-2.02 of the Caltrans Standard Specifications.</p>	LS
<p>Geology Impact-2: Differential ground settling may occur along structural pavement sections built on coarse mine tailings material containing or overlying compressible "slickens", or on expansive soils.</p>	PS/I	<p>Geology Mitigation-3: A California Registered civil engineer shall design the proposed facility in accordance with the Caltrans Design Manual, AASHTO Design Guide, California Standard Plans and California Standard Specifications, and in accordance with the recommendations of a site-specific Geotechnical Review. Materials exploration and testing shall be conducted during design and construction to determine the suitability of materials encountered and any necessary treatments. Tailings of boulders and cobbles lacking a finer grained matrix will be either removed, mixed with a finer grained material and replaced or overlaid with a soil and geotextile sub-base. Expansive soils or zones of weak, compressible material within on underlying tailings, if encountered, will be either removed and replaced with competent material, or surcharge loaded so that potential for settlement is eliminated.</p>	LS

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*Trinity County East Connector Roadway Project  
Draft EIR*

TABLE ES-1  
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p>Geology Impact-5: Construction activities associated with the proposed East Connector Roadway project would temporarily expose soils to wind and water erosion within the proposed project area.</p>	S	<p>Geology Mitigation-5: The following measures will be implemented:</p> <ul style="list-style-type: none"> <li>• Soil exposure will be minimized through the use of BMPs, ground cover, and stabilization practices. Exposed dust-producing surfaces will be sprinkled daily until wet while avoiding producing runoff.</li> <li>• The TCDOT contractor will conduct daily inspections and maintenance of erosion and sediment control measures. Failures will be repaired each work day if they occur.</li> <li>• All temporary erosion and sediment control measures will be removed after the working area is stabilized or as directed by the project engineer.</li> </ul>	LS
<p>3.2 HYDROLOGY, WATER QUALITY, STORMWATER RUNOFF                      trees and shrubs will be planted along a 1,000 foot long sec surfaces resulting from construction of the East Connector Roadway and concentration of runoff from Pioneer Heights could cause additional loads of surface runoff to the subsurface drainage system of Lance Gulch.</p>	PS/I	<p>Hydrology Mitigation-1: Drainage plans will be completed during project design by a California-registered civil engineer. The drainage system will be adequately sized to handle anticipated flows from a 100-year storm event. If it is determined by the Rational Formula that the additional runoff generated from the road surface, combined with the drainage from Pioneer Heights, will exceed the capacity of the existing subsurface drainage system that conveys Lance Gulch beneath the Trinity Plaza Shopping Center and SR 299, then a detention basin will be constructed on the east side of the East Connector, in the vicinity of the intersection with Pioneer Lane. The detention basin will meter flows and attenuate storm peaks, to reduce peak volumes of discharge to the Lance Gulch system. The basin will also serve as a sedimentation basin, reducing sediment discharge to Lance Gulch from both the East Connector and the Martin Road/Pioneer Heights area.</p>	LS
<p>Hydrology Impact-2: Road surfaces could carry pollutants such as sediments, fuels and oils to surface water bodies such as East Weaver Creek or Lance Gulch.</p>	PS/I	<p>Hydrology Mitigation 2: Road runoff will not be discharged directly to East Weaver Creek or Lance Gulch. It will be conveyed through unlined, vegetated ditches and swales to surface water bodies. Vegetation and soils in the ditches will slow flows, trap solids and absorb liquid pollutants such as fuels and oils.</p>	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p>Hydrology Impact-3. Temporary water quality impacts could occur as a result of construction of the East Connector Roadway roadway, bridge and bicycle paths.</p>	S	<p>Hydrology Mitigation-3. The following measures will be implemented:</p> <ul style="list-style-type: none"> <li>• No contact of wet concrete with the live stream will be allowed. Groundwater that comes in contact with wet concrete during construction of the footing excavations will not be allowed to enter the creek but will be pumped to a truck or upland for disposal or treatment, or it may be discharged to a sediment-stilling basin and percolated back into the soil.</li> <li>• If drilling muds are used to drill holes within the ordinary high-water zone, all drilling muds and fluid within all drilled holes will be pumped through a closed system, contained on-site in tanks, removed from the project area, and disposed of off-site at an appropriate facility.</li> <li>• The TCDOT contractor will remove all spoils materials from the drilled pier holes and dispose of the material in a manner that will not result in discharge of runoff of sediment into Waters of the United States.</li> <li>• Heavy equipment will not be operated in the active flow channel of East Weaver Creek.</li> <li>• No diversion of surface flows will be allowed.</li> <li>• Maintenance and refueling areas for equipment will be located a minimum of 150 ft away from the active stream channel. If equipment must be washed, washing will occur where the water cannot flow into the creek channel.</li> <li>• Spill containment booms will be maintained on-site at all times during construction operations and/or staging or fueling of equipment.</li> </ul>	LS

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ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p>Hydrology Impact-5 An additional 26 acres of new impermeable surfaces resulting from construction of the East Connector Roadway and proposed Weaverville Airport could cause additional loads of surface runoff to East Weaver Creek or Lance Gulch.</p>	S	<p>Mitigated by Hydrology Mitigation-1 (see above) and detention ponds proposed to mitigate surface runoff impacts from the airport project.</p>	LS
<p>Hydrology Impact-4 Use of staging areas near East Weaver Creek or Lance Gulch could result in discharge of construction materials or chemicals to the water bodies.</p>	S	<p>Hydrology Mitigation-4. The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver Creek. TCDOT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent sediment and pollutant discharges to Lance Gulch and East Weaver Creek. There will be no removal of riparian vegetation for staging purposes.</p>	LS
<p>3.3 HAZARDOUS WASTE/MATERIALS</p>			
<p>Haz Mat Impact-1: Construction of the proposed East Connector Roadway could result in the</p>	PS/I	<p>Haz Mat Mitigation-1: If obvious signs of contamination in soils or groundwater are encountered during excavation (odors, sheens or discolored soil), work in that excavation will stop immediately. The TCDOT and the Trinity County Division of Environmental Health will be</p>	LS

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ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p>exposure of construction workers to contaminated soils or groundwater.</p>		<p>notified. The soils and/or groundwater will be sampled and tested for suspected contaminants. A Workplan and Site Safety Plan will be prepared addressing safety procedures for completing the excavation, and disposal of the spoils and wastewater generated by the excavation. The workplan shall be approved by the Trinity County Division of Environmental Health and/or the NCRWQCB. Only workers with current Hazardous Waste Operations and Emergency Response (HAZWOPER) training shall be permitted to work in this area. Grading and construction on uncontaminated sections of the project may continue. Remediation of the contaminated soil and or groundwater in the surrounding area shall be the responsibility of the party responsible for the contamination.</p>	LS
<p>Haz Mat Impact-2: Construction of the proposed East Connector Roadway could result in the exposure of the public, including construction workers, to contamination in demolition debris (Alternative B only).</p>	PS/I	<p>Haz Mat Mitigation-2: If any structure is to be demolished as part of this project, the building will be surveyed and tested for lead based paint and asbestos-containing building materials by a qualified consultant. If present, the contractor will be notified of the presence and location of the materials, and will be required to prepare a Health and Safety Plan (HSP) prior to the initiation of building demolition. The HSP would meet OSHA and Cal-OSHA requirements and other state and local regulations for the handling and disposal of lead-based paint and/or asbestos, and other potentially hazardous materials associated with the demolition of structures. If asbestos-containing building materials are present, the North Coast Unified Air Quality Management District (NCUAQMD) will be notified at least 10 working days prior to the start date of the demolition. The Contractor shall follow the recommendations of the NCUAQMD regarding demolition, dust control, removal and disposal of asbestos-containing building materials..</p>	LS
<p>Haz Mat Impact-3: Fuels, oils, greases, solvents, concrete or other materials used in construction or construction equipment could be accidentally released to the environment.</p>	PS	<p>Haz Mat Mitigation-3: The Contractor shall exercise every reasonable precaution to protect streams from pollution with fuels, oils and other harmful materials. The Contractor will be required to have adequate spill containment equipment on hand at all times. All waste petroleum products and empty petroleum product containers will be disposed of properly at a recycling or disposal site legally authorized to accept that type of waste. The Trinity County Environmental Health Department and NCRWQCB must be notified immediately in the event of a release of significant quantities of hazardous materials. In the event of a release into East Weaver Creek, CDFG must also be notified.</p>	LS

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3.4 AIR QUALITY	S	<p>See also Hydrology Mitigation-3 and -4 above.</p> <p>Air Quality Mitigation-1: The County shall require contractors to reduce particulate emissions by complying with these dust suppression measures:</p> <ul style="list-style-type: none"> <li>• Enclose, cover, or water all soil piles twice daily or with sufficient frequency to maintain dampness. Water shall be applied in a fine spray that does not result in runoff.</li> <li>• Water all exposed soil twice daily, or with sufficient frequency to maintain dampness. Water shall be applied in a fine spray that does not result in runoff.</li> <li>• Surface all haul roads with rock, pavement or chemical stabilizers, or water with sufficient frequency to maintain dampness. Water shall be applied in a fine spray that does not result in runoff.</li> <li>• Maintain at least 2 feet of freeboard on all haul/dump trucks, or cover loads.</li> </ul>	LS
3.5 NOISE	S	<p>Noise Mitigation-1A: Construction activities producing significant noise sources shall be scheduled for periods of the day when construction noise would have the least impact on the residents of adjacent and nearby homes and businesses, specifically during normal working hours (7:00 a.m. to 6:00 p.m.) on weekdays, and the hours of 8:00 a.m. to 5:00 p.m. on Saturday or Sunday.</p> <p>Noise Mitigation 1B: Compressors and generators shall be located within designated staging areas (shown on Figure 1-3), as far as possible from sensitive receptors (e.g. the north end of Staging Area 3, the south end of Staging Area 4, the east end of Staging areas 1 and 2, etc.). Impact tools and intake and exhaust ports on power construction equipment shall be muffled or shielded. Construction activities shall comply with appropriate noise-related ordinances and regulations, including Caltrans standards specifications Section 7-1.011 "Sound Control Requirements."</p>	LS

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3.7 WATERS OF THE U.S. (INCLUDING WETLANDS)			
Waters Impact-1: The project will result in the filling or disturbance of jurisdictional and non-jurisdictional seasonal wetlands.	S	<p>Waters Mitigation-1: The County will acquire the portion of the Trinity River Lumber Company property between the East Connector and Lance Gulch, and preserve the area as a vegetated buffer zone. The open space will provide a vegetated buffer of 100 feet or more, between the roadway and the Gulch. Seasonal wetlands will be created in this area, adjacent to, and hydrologically connected with, Lance Gulch. The area of the created seasonal wetlands shall be, at a minimum, equal to the area of seasonal wetlands (both jurisdictional and non-jurisdictional) that is filled or destroyed as a result of this project, in accordance with a "no net loss" of wetlands performance standard.</p> <p>The compensatory replacement wetlands will be designed by a qualified wetland scientist during the design phase of this project and the mitigation plan will be submitted to the ACOE with the application for a Section 404 permit.</p> <p>The wetlands shall be constructed during construction of the East Connector, and vegetated during revegetation and landscaping of the East Connector and bicycle/pedestrian paths. The design of the compensatory wetlands shall consider the future construction of the proposed Class 1 bicycle/pedestrian path by the Weaverville Basin Trails Committee, so that construction of the trail will not result in placing fill in the compensatory wetlands.</p>	LS
Waters Impact-2: Columns and pier walls for the vehicle bridge over East Weaver Creek would cause a small area of disturbance to waters of the U.S from discharging fill materials (bridge pier walls or columns and eastern approach fill) to waters of the U.S.	S	<p>Waters Mitigation-2 Encroachment of approach fill slopes into OHWM will be completely eliminated, as follows: If Alternative 1 is constructed, the eastern approach will include a retaining wall at Station 102+00 to Station 102+60. If Alternative 2 is constructed, the eastern approach will include a retaining wall at Station 102+00 to 102+40 and either a retaining wall or a 1.5:1 fill slope at Station 101+60 to 101+80. The pier wall bridge foundation option, which results in less fill within waters of the U.S. than the column option, will be the preferred bridge design. Pier walls will be selected over column supports, unless structural, geotechnical or hydrologic constraints make this option infeasible.</p>	LS

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<p>Waters Impact-4: Use of staging areas (1, 2, and 4) adjacent to East Weaver Creek and Lance Gulch could result in the potential placement of fill material and disturbance of up to 0.087acre of waters of the U.S. .</p>	S	See Hydrology Mitigation-4 above	LS
<p>Waters Impact-5: Construction of other projects in the Weaverville area, including the proposed West Connector Roadway and new Weaverville Airport could result in cumulative impacts from the disturbance and placement of fill material into streams and/or wetlands that are considered waters of the United States and regulated under Section 404 of the CWA.</p>	S	See Waters Mitigation-1 and -2 above.	LS
<p>3.8 VEGETATION AND INVASIVE SPECIES/WILDLIFE</p>			
<p>Habitat Impact-2 Riparian forest vegetation along East Weaver Creek would be removed or disturbed during construction of the two-lane arterial road and associated bicycle lanes, roadway bridge, and bicycle/pedestrian bridge over East Weaver Creek.</p>	S	<p>Minimize removal and disturbance of riparian habitat along East Weaver Creek. The County will ensure that the removal or disturbance of riparian habitat that is not required for construction or access to the project site will be prohibited by installing orange construction barrier fencing (and sedimentation fencing in some cases) between the construction site and the riparian/creek area. The protected area will be designated as an "environmentally sensitive area."</p> <p>The fencing will be installed before construction activities begin and will be maintained throughout the construction period. The following paragraphs will be provided in the construction</p>	LS

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		<p>specifications for environmentally sensitive areas:</p> <p>“The Contractor’s attention is directed to the areas designated as Environmentally Sensitive Areas. These areas are protected, and no entry by the Contractor for any purpose will be allowed. The Contractor shall take measures to ensure that Contractor’s forces do not enter or disturb these areas, including giving written notice to his employees and subcontractors.</p> <p>Temporary fences around the Environmentally Sensitive Areas shall be installed as the first order of work. Temporary fences shall be furnished and constructed, maintained, and later removed as shown on the plans, as specified in the special provisions, and as directed by the Project Engineer. Fabric for temporary fences shall be commercial-quality polypropylene, orange in color, a minimum of 48 inches high, and approved by the County.”</p>	
		<p><b>Habitat Mitigation-2</b> Avoid long-term impacts on woody riparian vegetation and associated habitat by trimming trees and shrubs rather than removing the entire woody species, where possible when creating temporary access to the construction site. Where possible, shrubs and trees shall be cut at least 1 foot above the ground level to leave the root systems intact and allow for more rapid regeneration following construction.</p> <p><b>Habitat Mitigation-3</b> Woody riparian vegetation (tree and shrub species) that will be removed entirely (including their root systems) for construction of the bridge, road or trail will be replaced at a minimum of a 2:1 ratio (two trees/shrubs planted for every one tree/shrub removed). The replacement trees and shrubs will be planted along a 1,000 foot long section of the west bank of East Weaver Creek behind the County maintenance yard. Native riparian plants will be replaced in kind at a 2:1 ratio. Non-native plants will be replaced with native plants at a 2:1 ratio. A detailed Riparian Revegetation Plan will be developed during the design phase of this project, in coordination with CDFG, ACOE and/or NOAA Fisheries. The plan will include planting specifications, an implementation plan and schedule, success standards, maintenance</p>	

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**TABLE ES-1  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p>Habitat Impact-3: The project could result in the introduction or spread of noxious weed species, which could displace native species, changing the diversity of species or number of species of plants.</p>	S	<p>requirements, and a monitoring program. Minimum success standard shall be two surviving, healthy plants per one removed at the end of two years. Monitoring will be conducted for a minimum 2-year period, or until established success/survival standards are met. Remedial actions will be implemented if success standards are not achieved in two years. Annual monitoring reports will be submitted to CDFG, ACOE and NOAA Fisheries, if requested in support of the Section 7 consultation process, until success standards have been achieved.</p> <p>Hydrology Mitigation-4 The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver Creek. TCDOIT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent sediment and pollutant discharges to Lance Gulch and East Weaver Creek. There will be no removal of riparian vegetation for staging purposes.</p>	LS
<p>Avoid the introduction or spread of noxious weeds into previously uninfested areas or the spread of existing noxious weeds.</p> <p>The County will implement the following measures:</p> <ol style="list-style-type: none"> <li>1. Educate construction supervisors and managers on weed identification and the importance of controlling and preventing the spread of noxious weed infestations.</li> <li>2. Clean construction equipment immediately prior to transporting into Trinity County.</li> <li>3. Seed all disturbed areas with certified weed-free native mixes. Mulch with certified weed-free mulch. Rice straw may be used to mulch upland areas.</li> <li>4. Conduct a follow-up inventory of the construction area to verify that construction</li> </ol>	S	<p>Hydrology Mitigation-4 The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver Creek. TCDOIT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent sediment and pollutant discharges to Lance Gulch and East Weaver Creek. There will be no removal of riparian vegetation for staging purposes.</p>	LS

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<p>Habitat Impact-6: Riparian forest vegetation along East Weaver Creek would be removed or disturbed during construction of the road and pathway alignments or use of staging areas.</p>	S	<p>See Habitat Mitigation-1, -2, -3, and Hydrology Mitigation-4 above</p>	LS
<p>Habitat Impact-7: Tree removal associated with the project could result in the disturbance of nesting migratory birds or the removal of occupied nests if construction occurs during the breeding season (generally between March 15 and August 1).</p>	PS/I	<p>Habitat Mitigation-5: To prevent the take of eggs or nestlings of migratory birds, the cutting of woody vegetation will be limited, to the extent possible, to the nonbreeding season (August 1–March 15). Root removal or other ground-disturbing clearing activities would not be conducted until after June 15. If woody vegetation must be removed during the breeding season, a wildlife biologist will survey the area to ensure that no migratory bird would be affected by the vegetation removal. If nests are present, the vegetation will not be removed until the nests are abandoned.</p>	LS
<p>Habitat Impact-8: The proposed project would result in cumulative impacts on riparian habitat along East Weaver Creek.</p>	S	<p>Habitat Mitigation-6 The cumulative effects of vegetation removal will be minimized by timing vegetation removal for the proposed East Connector project to coincide with vegetation removal for flood control maintenance along East Weaver Creek. This will minimize the amount of vegetation that is removed and the duration of the disturbance and will help avoid tree removal during the nesting season. In the year the bicycle/pedestrian bridge is constructed, the vegetation removal for flood control will be adjusted to compensate for loss of vegetation from both sides of the creek for bridge construction, by leaving vegetation on both sides of the creek in the 100-foot sections upstream and downstream of the bicycle/pedestrian bridge.</p>	LS

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<p>3.9 THREATENED AND ENDANGERED (T &amp; E) SPECIES</p> <p>T&amp;E Species Impact-1: Construction could result in the loss or destruction of riparian habitat, resulting in impacts on special status wildlife.</p>	PS/I	<p>See also Habitat Mitigation-1, -2, -3, and Hydrology-4above</p> <p>See Habitat Mitigation-1, -2, -3, and Hydrology Mitigation-4, above.</p>	LS
<p>T&amp;E Species Impact-2: Water pollution from roadway runoff could adversely affect aquatic wildlife.</p>	SI	<p>See Hydrology Mitigation-2 above</p>	LS
<p>T&amp;E Impact-3: Temporary construction phase impacts to aquatic species could result from construction activities in or near streams, due to water disturbance, sedimentation and potential for pollutants s.</p>	PS/I	<p>T&amp;E Species Mitigation-1: Construction activities will be scheduled so that they do not interfere with the reproductive cycles of fish species or the foothill yellow-legged frog. Work within the ordinary high water zone and riparian zone of East Weaver Creek or Lance Gulch will take place from June 15 to October 15, except for tree trimming and cutting, which will take place as described in T&amp;E Species Mitigation-4. This time frame will avoid the majority of the adult and juvenile migration, spawning, and incubation of anadromous fish species and will avoid the breeding season of the foothill yellow-legged frog.</p> <p>T&amp;E Species Mitigation-2: If the County determines that in-water work in Lance Gulch is necessary, the County will retain a qualified wildlife biologist to conduct a pre-construction survey for foothill yellow-legged frog and northwestern pond turtle. The survey would be conducted within 24 hours of the start of construction activities in the creek. If a foothill yellow-legged frog or northwestern pond turtle is located in or adjacent to the construction zone, the biologist will try to passively move the species out of the area by creating a disturbance in the water. The biologist will attempt to capture and move the yellow-legged frog downstream, out of the construction zone. If a turtle becomes trapped in the construction zone, a biologist will</p>	LS

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ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p>T&amp;E Species Impact-4: Construction activities associated with the project could result in the disturbance of nesting raptors or the removal of occupied nests if construction occurs during the breeding season (generally between February 1 and August 1).</p>	PS	<p>remove the turtle from the area and place it downstream of the construction zone.</p> <p>See also Hydrology Mitigation-3 and -4, and Haz Mat Mitigation-3 above</p> <p>T&amp;E Mitigation-3: Remove upland woody vegetation during the raptor non-breeding season (August 1 to February 1) and begin construction in upland areas prior to the raptor breeding season. If construction prior to the raptor breeding season is not practical, a wildlife biologist will conduct a pre-construction survey for raptor nests. If an active raptor nest is found within the construction zone, a 500-foot buffer zone will be maintained around the active nest until young have fledged.</p>	LS
<p>T&amp;E Species Impact-5: Tree removal associated with the project could result in the disturbance of nesting little willow flycatchers or yellow-breasted chat or the removal of occupied nests if construction occurs during the breeding season (generally between May 1 and August 1).</p>	PS	<p>T&amp;E Mitigation-4: To prevent the take of eggs or nestlings of little willow flycatcher and yellow-breasted chat, the cutting of woody riparian vegetation will be limited, to the extent possible, to the nonbreeding season (August 1–May 1). Root removal or other ground-disturbing clearing activities would not be conducted until after June 15. If woody vegetation must be removed from riparian areas during the breeding season, a wildlife biologist will survey the area to ensure that no Little Willow Flycatcher or Yellow-breasted Chat nests would be affected by the vegetation removal. If nests are present, the vegetation will not be removed until the nests are abandoned.</p>	LS
<p>T&amp;E Species Impact-6: The proposed project would result in cumulative impacts on critical habitat for coho salmon along East Weaver Creek.</p>	S	<p>SeeHabitat Mitigation-6 above</p>	LS
<p>3.10 FLOODPLAINS</p>			

<sup>1</sup> Table does not include impacts identified as less than significant and requiring no mitigation (see Chapter 3).

**TABLE ES-1  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p>Floodplains Impact-1: Encroachment into the 100-year floodplain for the vehicular bridge and eastern roadway approach to the bridge will raise the base flood elevation, potentially causing shallow overflow of the west bank of East Weaver Creek and Five Cent Gulch at the confluence with East Weaver Creek. This overflow could jeopardize existing structures.</p>	S	<p>Floodplains Mitigation-1: The existing ridge line along the west bank of East Weaver Creek immediately downstream of the proposed bridge location shall be raised by constructing an earth berm along the ridge line. The berm will be of sufficient height so that the final elevation of the ridge along the west bank of East Weaver Creek is higher than the predicted elevation of the 100-year flood at that location, as calculated by the hydraulics engineer for the selected bridge alternative (approximately 0.6-foot high).</p>	LS
<p>Floodplains Impact-2: Project-related construction materials and petroleum products could wash into East Weaver Creek in a flood.</p>	PS/I	<p>Floodplains Mitigation-2: All temporary fills, excavation spoils, materials stockpiles and construction equipment will be entirely removed from the 100-year floodplain, as mapped by the hydraulics engineer, on October 15. In no event will construction occur during winter storms.</p>	LS
<p>3.14 LAND USE, PLANNING AND GROWTH</p>			
<p>Land Use Impact-2: Alternative B would alter or remove one existing commercial property located at the SR 299 and Glen Road intersection.</p>	S	<p>Land Use Mitigation-1: If Alternative B is selected, the County will purchase the affected property and provide appropriate compensation to the property owner, building owner, and business owner in compliance with federal and state law and provide relocation assistance to the business owner, if necessary.</p>	LS
<p>Land Use Impact-3: The East Connector Roadway and bicycle/pedestrian trail could create land use and safety incompatibilities with adjacent industrial properties</p>	PS	<p>Land Use Mitigation-2: If Alternative 1 is selected, the northern intersection of the East Connector with Brown's Ranch Road would be all-way stop controlled. A pedestrian crossing would be provided at the all-way stop intersection. The pedestrian crossing will be clearly marked with "Pedestrian Crossing" signs and pavement striping.</p>	LS

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TABLE ES-1  
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
and senior facilities.		<p>Land Use Mitigation-3 The County will provide fencing along property lines separating the East Connector and Class I bicycle trail from the mill and construction yard. In addition, fast-growing trees and shrubs, such as cedar or cypress trees, will be planted between the East Connector and the mill, to screen views of the mill. The bicycle/pedestrian path will be routed along the creek side of Levee Road where it crosses the entrance to the construction yard.</p>	
<p>Land Use Impact-4: Creation of a new roadway could indirectly induce development along its length.</p>	PS/I	<p>Land Use Mitigation-4 The County would, as a condition of project approval, limit access to the East Connector as follows. The East Connector is to be classified as a limited-access minor arterial route and adjacent property access will be minimized to preserve the functionality of the route as an Arterial. The TCDOT is the agency responsible for issuing Encroachment Permits on County Roads. The TCDOT will only issue permits for encroachment onto the East Connector on a limited basis, as follows: Land uses existing on properties immediately adjacent to the East Connector at the time of construction of the East Connector may be allowed up to two encroachments, provided proposed encroachments can be located and designed to meet TCDOT standards at the time of their construction. This includes Trinity Plaza Shopping Center, Trinity River Lumber Company, California Highway Patrol, and Golden Age Senior Center. Future development along the East Connector shall only be allowed a single encroachment point for any entire development plan (subdivision, industrial park, etc.) Internal collector roads will be required for any development proposed along this route, connecting to a single encroachment point on the East Connector. No parking will be allowed on the East Connector, and any adjacent development (existing or future) shall be required to provide adequate off-street parking. All other applicable building, zoning, land use, subdivision ordinance, encroachment permit requirements, etc. shall apply. In no case shall future encroachments onto the East Connector be spaced closer than 300 feet from any other encroachment or roadway intersection.</p>	LS
<p>Land Use Impact -6: Construction of the proposed East Connector Roadway project would produce short-term adverse effects on adjacent residential and commercial</p>	S	<p>Land Use Mitigation-5 During construction activities, the County shall limit the amount of daily construction equipment traffic by staging most construction equipment and vehicles on the project site at the end of each work day rather than removing them.</p>	LS

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**TABLE ES-1  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p>areas in the community of Weaverville from construction activities.</p>	PS	See Land Use Mitigation-2, above	LS
<p>Land Use Impact-6: Combined traffic from the East Connector Roadway project and a proposed new airport access road could create land use and safety incompatibilities with adjacent residential properties and senior facilities along Brown's Ranch Road.</p>	PS	<p>Community Impact Mitigation-1: If Alternative A is selected, the County will vacate their right-of-way on Nugget Lane across the properties that contain the Weaver Valley Market (APN 024-480-3100) and the On Your Feet Shoe Store (APN 024-500-4000). This will provide additional flexibility to the businesses to improve internal circulation and parking. If Alternative B is selected, the County will vacate only Nugget Lane north of Glen Road (APN 024-480-3100). South of Glen Road, Nugget Lane would continue to a new intersection with Golf Course Drive.</p>	LS
<p>3.15 COMMUNITY IMPACTS (SOCIAL AND ECONOMIC)</p>			
<p>Community Impact-1: Commercial enterprises along Nugget Lane may lose business due to changes in access from Glen Road to Nugget Lane (Alternatives A, B, C).</p>	PS	<p>Community Mitigation-2 Under all three intersection alternatives, on-street parking would be provided on the west (eastbound) side of SR 299 adjacent to Weaver Valley Market. This would allow eastbound trucks to park on SR 299 and walk to the Market, without having to perform any tight-radius turns.</p>	
<p>Community Impact -2: The loss of sales revenues from traffic diverted</p>	PS	See also Traffic Mitigation-1, below.	LS
<p>Community Mitigation-3 The County would not place signs directing traffic to Trinity Lake or Trinity Alps via the East Connector and would discourage Caltrans from doing so.</p>			

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TABLE ES-1  
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
away from the SR 299, SR 3, and downtown business districts in Weaverville could impact the local economy..			
3.17 PUBLIC SERVICES AND UTILITIES			
Public Services/Utilities Impact-2: Construction activities associated with the East Connector Roadway project could result in short-term impacts to the response time of various emergency services.	PS	Public Services/Utilities Mitigation-1: Public safety and emergency services will be kept informed of construction activities and schedules for use in planning emergency response routing, if necessary. No roads will be completely closed at any time during construction. Emergency response plans and drills should be revised accordingly to take advantage of the new route.	LS
3.18 TRAFFIC AND TRANSPORTATION			
Traffic Impact-1: Alignment Alternative 1 would cause senior citizens traveling to and from the Golden Age Senior Center from the Senior Apartments, Twin Creeks Mobile Home Park or other locations on Brown's Ranch Road to have to cross a wider, busier street with potentially faster travel speeds than the existing crossing of Brown's Ranch Road in front of the Senior Center..	S	See Land Use Mitigation-2 Above.	LS
Traffic Impact -2: Access to Nugget Lane at Glen Road would be	PS	Traffic Mitigation-1:	LS

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TABLE ES-1  
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
closed (Alternatives A and B) or restricted to "in only" in both the north and south directions (Alt C).		<ul style="list-style-type: none"> <li>Sub-alternative A: Allow on-street parking on the south side of Glen Road adjacent to the existing shoe store.</li> <li>Sub-alternatives A, B and C: Add a new entrance to Nugget Lane from SR 299 approximately half way between Glen Road and Martin Road, across from the existing Burger King driveway.</li> </ul>	
		See also Community Mitigation-4 and -5 above.	
3.19 VISUAL RESOURCES/AESTHETICS			
Visual Impact-1: Although most of the alignment is at least partially screened from views from SR 299 and SR 3 by existing vegetation, the topography and development, the project would result in a minor loss of visual quality at locations adjacent to the new roadway.	LS, but mitigation proposed to further reduce effects	Visual Mitigation-1: Following project construction, the County will plant a screen of fast-growing evergreen trees and shrubs such as cypress, cedar and ceanothus between the East Connector and the Trinity River Lumber Company mill, and at other locations to screen or break up views of the roadway from adjacent land uses. Trees will only be planted outside the creek levees where space and solar exposure permit. Species that are fast growing and low maintenance and that have dense lower branches and foliage will be selected to establish a good screen as quickly as possible	LS
Visual Impact-2: The proposed bridge crossings of East Weaver Creek could impact visual resources in the area, such as East Weaver Creek	S	Visual Mitigation-2: The proposed roadway and bicycle/pedestrian bridges will be designed and built using colors and textures that blend, rather than contrast, with the surrounding natural environment.	
Visual Impact-4: Removal of existing trees and riparian vegetation in the project corridor prior to project construction would have a temporary visual effect on	LS, but mitigation proposed to further reduce effects	See Visual Mitigation-1 above	LS

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TABLE ES-1  
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
nearby land uses.	S	See Habitat Mitigation-6, above.	
Visual Impact 5 Temporary cumulative visual/aesthetic effects would result from the removal of existing trees and riparian vegetation along the proposed bike path and bike bridge, combined with removal of riparian vegetation within the adjacent flood control maintenance segment of East Weaver Creek.			
3.20 HISTORIC AND ARCHAEOLOGICAL RESOURCES			
Cultural Resource Impact -2: Excavations associated with the East Connector project could result in the accidental destruction of previously undiscovered archaeological or historical resources, or could result in the uncovering of Native American human remains.	PS		LS
		Cultural Resource Mitigation-1: Contractors and construction personnel involved in any form of ground disturbance (i.e., trenching, grading, etc.) shall be advised of the possibility of encountering subsurface cultural resources or human remains. If such resources are encountered or suspected, work within 100 feet of the discovery shall be halted immediately and the Trinity County Planning Department shall be notified. In accordance to CCR Section 15064 (f) and PRC Section 21083.2(i), a qualified professional archaeologist shall be consulted, who shall assess any discoveries and develop appropriate management recommendations for treatment of the resource. If bone is encountered and appears to be human, California Law requires that potentially destructive construction work is halted and the Trinity County Coroner is contacted. If the coroner determines the human remains are of Native American origin, the coroner must contact the Native American Heritage Commission. The Native American Heritage Commission will attempt to identify the most likely descendant(s), and recommendations will be developed for the proper treatment and disposition of the remains in accordance with CCR Section 15064.5(e) and PRC Section 5097.98. A note to this effect shall be included on all construction plans and specifications.	

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# CHAPTER 1.0

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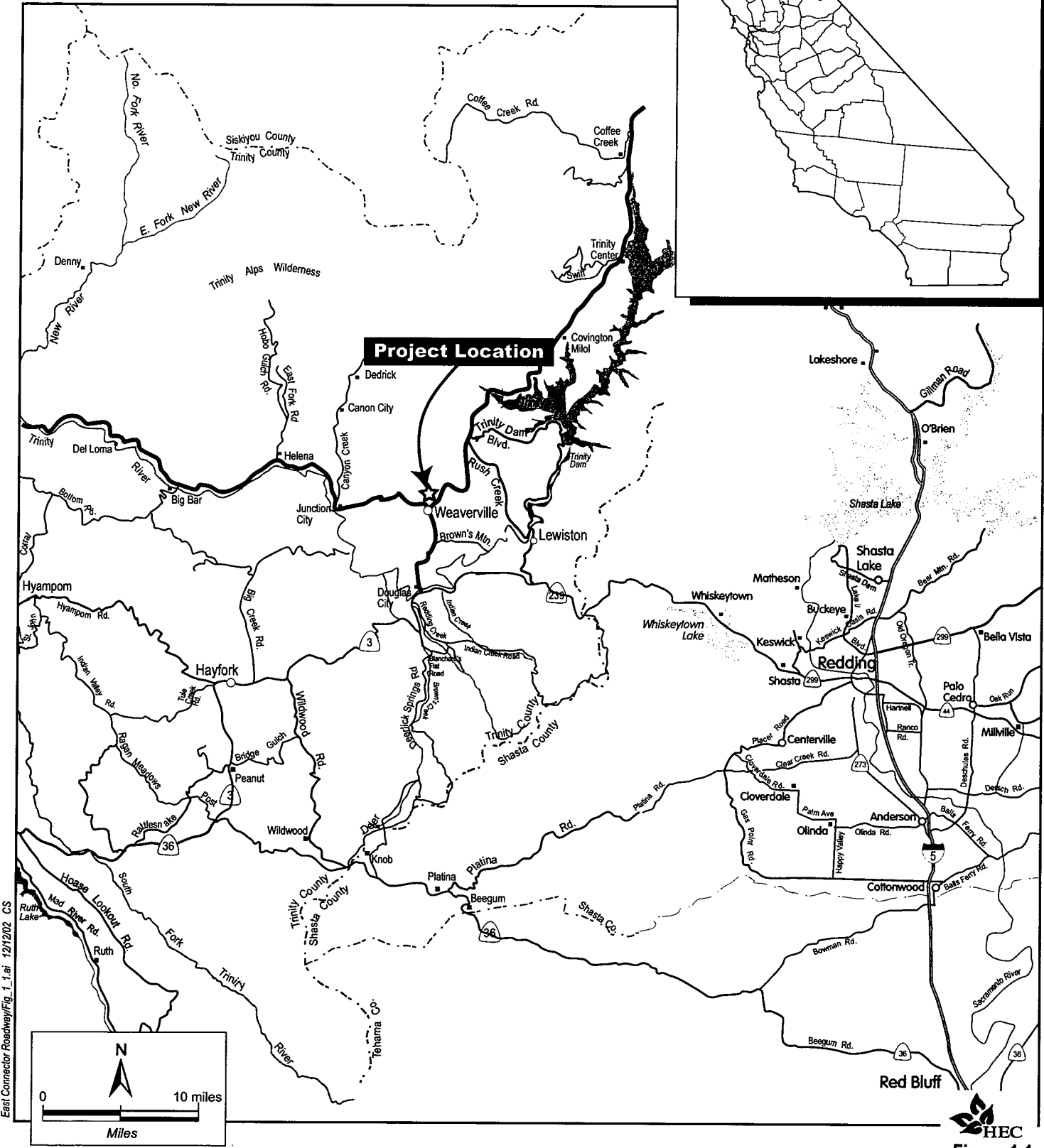
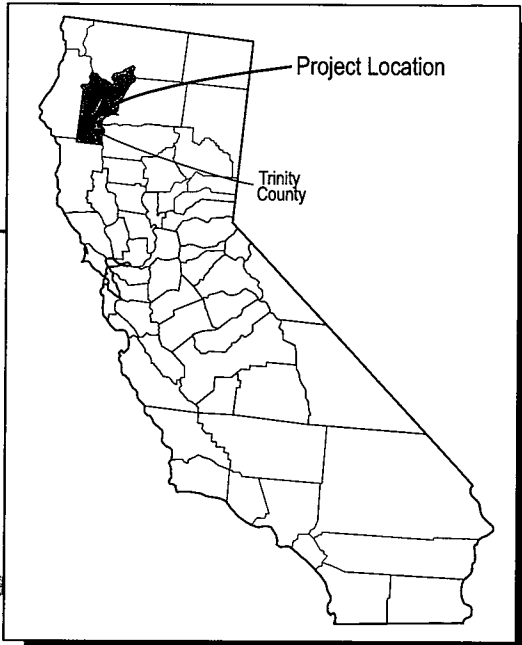
## PROJECT DESCRIPTION

The County of Trinity is proposing to construct a new two-lane, undivided, limited-access arterial road along the east side of Weaverville, in Trinity County, California, connecting State Route (SR) 299 at Glen Road to SR 3 at Five Cent Gulch Street, and crossing East Weaver Creek. The proposed project will include a bridge crossing over East Weaver Creek, a new traffic signal at the East Connector Roadway intersection with SR 299 and Glen Road, Class I and Class II bicycle trails, and a pedestrian/bicycle bridge crossing of East Weaver Creek (see **Figures 1-1** and **1-2**).

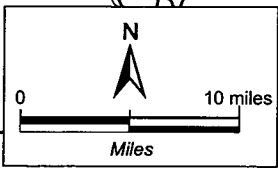
This environmental analysis considers two alignment alternatives, two alternative locations for the pedestrian/bicycle bridge crossing of East Weaver Creek, and three alternative layouts for the new signalized intersection of the East Connector with SR 299 and Glen Road. The “No Project” alternative is also considered in this environmental analysis. Trinity County has not selected a preferred alternative, but developed these alternatives to provide the decision-makers with optional ways to resolve certain design issues. In particular, the two alignment alternatives vary in their relation to the Golden Age Center. One alignment would use the existing Brown’s Ranch Road alignment in front of the Center, while the other would pass on a new alignment behind the Center. The two pedestrian/bicycle path options differ with respect to where they end in relation to Lowden Park. The three alternative designs for the intersection with Glen Road and SR 299 propose various ways to deal with the impacts the traffic signal will have on access to businesses on Nugget Lane, a nearby frontage road.

The project is described in more detail in Section 1.4, and alternatives are described in detail in Chapter 2.0. Table 2-1 summarizes the relative impacts of the various alternatives. The Trinity County Board of Supervisors will select the project alternatives when they certify the Final EIR. There selection will be based upon this environmental analysis, public and agency comments, testimony at public hearings, County staff responses to comments, and Planning Commission recommendations.

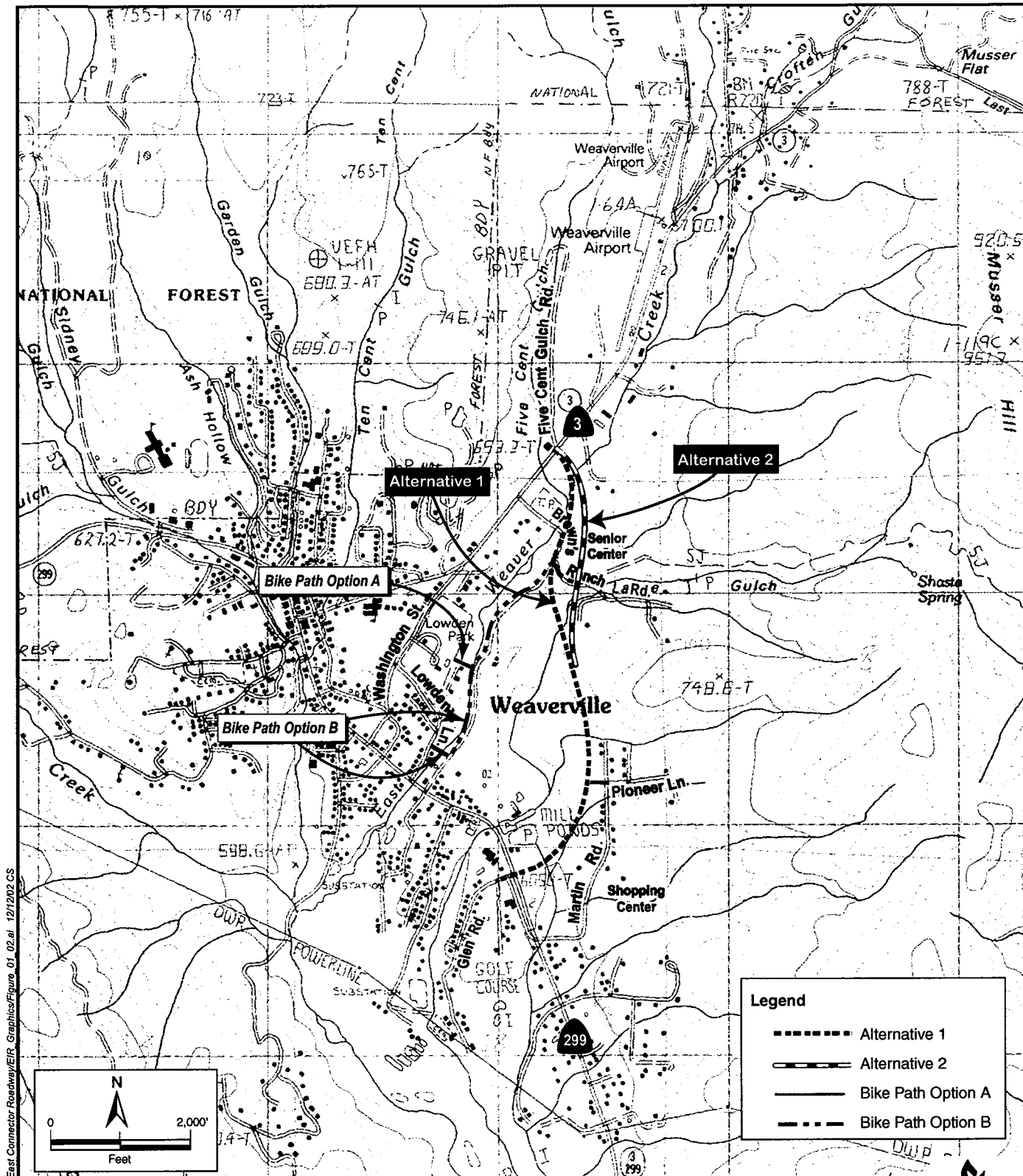
The project is included in the *Trinity County Regional Transportation Plan* and has been programmed in the 1998 State Transportation Improvement Program (STIP) Augmentation by Trinity County for State and Federal funding. Therefore, the project requires review under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Trinity County is the Lead Agency in the preparation of the Environmental Impact Report (EIR) and the Federal Highway Administration (FHWA) is the Lead Agency in the preparation of the Environmental Assessment (EA) for the Trinity



East Connector Roadway/fig\_1\_1.ai: 12/12/02 CS



**Figure 1-1**  
Regional Location  
East Connector Roadway Project



East Connector Roadway/EIR Graphics/Figure 01\_02.bl 12/12/02 CS

Source: U.S. Geological Survey, 7.5-Minute Quadrangles  
 Weaverville, CA; Rush Creek Lakes, CA;  
 Trinity Dam, CA; Lewiston, CA



**Figure 1-2**  
 Project Location  
 East Connector Roadway Project

County East Connector Roadway Project. The EA will be completed and circulated by FHWA in accordance with NEPA at a later date.

## **1.1 PROJECT LOCATION**

The Weaverville Basin is the transportation, commercial, and recreational hub for Trinity County. The proposed East Connector Roadway Project is located within the area referred to as the Weaverville Basin. Major transportation facilities within the Weaverville Basin consist of SR 299 and SR 3, with a series of mostly discontinuous county roads that provide local access to and from the major state highway facilities. Due to the nearby mountainous terrain and the rural nature of the area, a significant portion of the commercial development in the area is focused along the state highway corridors. The combination of local, interregional, and recreational traffic lead to congestion in the downtown Weaverville area, particularly during summer. Most streets and highways in the Weaverville Basin are two-lane roadways of varying width. The major roadways are described as follows:

- **State Route 299**, also known as Main Street through Weaverville, is the main east-west local transportation line through downtown Weaverville. This street carries both regional and local traffic through the core of the downtown area. SR 299 serves as the primary regional connection between Eureka in Humboldt County and Redding in Shasta County. It also provides a vital link to local circulation because most of the surrounding residential roads are dead-end, requiring local traffic to access SR 299 for all local or regional trips. SR 299 also serves as Main Street, where the main activity of Weaverville is located, including historic downtown as well as newer commercial development east of downtown. There are no traffic control devices on SR 299 in the Weaverville Basin. During peak-traffic demand periods, traffic along SR 299 generally experiences slight delays.
- **State Route 3** is the main north-south highway through Trinity County. South of Weaverville at Douglas City, SR 3 joins SR 299, separating again to the north at a junction in downtown Weaverville. SR 3 provides the only access to downtown Weaverville for Trinity County residents to the north. SR 3 also provides access to recreation areas north of Weaverville. SR 3 is relatively free of delays because no traffic control devices are on the route, with notable exception of the intersection with SR 299 in downtown Weaverville. SR 3 is stop-controlled at this location; in peak periods, long delays can be expected, especially for the left turn onto eastbound SR 299.
- **Washington Street** is an important link in the roadway network and currently provides the only high-capacity connection between SR 299 and SR 3. Local traffic and some through traffic use this road. Washington Street also connects to residential and commercial

development and serves Lowden Park, the major park in Weaverville. Weaverville Elementary School is located across Washington Street from Lowden Park. A 25-mile-per-hour speed limit is posted for the entire length. Parking is provided on both sides of the road adjacent to the park and school. A designated Class II bicycle lane is provided for the entire length of Washington Street. Delays are common at the Washington Street intersection on SR 299 during peak-traffic periods.

## 1.2 PROJECT BACKGROUND

Congestion on the state highways in the downtown Weaverville area has been a recognized problem by Caltrans and Trinity County since 1984. A variety of planning efforts to improve transportation capacity in the Weaverville Basin have occurred since that time.

In 1989, the *Trinity County Long Range Traffic Study* (Nelson/Nygaard, 1989) proposed several new roadways, including “Levee Road” and the “Martin/Browns Connector”. At the same time, Caltrans prepared an analysis of four Highway Bypass alternatives, presented in *Preliminary Planning Study on SR 299 in Trinity County* (Caltrans, 1989).

In 1990, the *Weaverville Community Plan* identified a series of traffic and roadway improvements intended to improve, or at least maintain, the basin’s circulation system with the least disruption of Weaverville’s neighborhoods. These included a “Brown’s Ranch/Airport Connector” and a “Martin Road/Brown’s Ranch Connector,” which together make up the presently proposed East Connector.

On the November 1992 ballot there was an advisory measure requesting voters’ opinions on the possibility of a Caltrans Bypass around Weaverville. Sixty-five percent of the voters favored a bypass along the West Weaver Creek drainage. In March 1997, Trinity County held a public hearing to discuss possible requests to Caltrans for highway improvements, including the West Weaver Bypass. At that time, public comments were generally opposed to a State Highway Bypass. The Trinity County Transportation Commission (TCTC) voted against requesting Caltrans to build the bypass, and decided instead to take a detailed look at options for improving traffic circulation in the Weaverville Basin.

The TCTC appointed a Citizen’s Advisory Committee on January 20, 1998. In March 1998, TCTC hired Transportation Consultants Leigh, Scott & Cleary, Inc. (LSC) to work with the Citizens Advisory Committee to study existing and projected traffic patterns in Weaverville and to come up with a plan to guide the improvement of transportation facilities in the basin, to relieve traffic congestion on SR 299; to improve safety for motorists, pedestrians and bicyclists; and to best serve the traffic demands while maintaining the high quality of life enjoyed by Weaverville residents and visitors. There were six

Advisory Committee meetings, three public workshops, a public hearing, and a meeting before the TCTC and Board of Supervisors to adopt the study and prioritized project list.

As part of the study, the Committee considered several variations of what is now the East Connector, including an “Eastside Connector-Martin/Glen to SR 3”, an “East Roadway”, an “East Roadway Extension to Ransom Road”, an “East Roadway plus Levee Road,” an “East Roadway plus Levee Road with Lowden Bridge”, and a “Levee Road”. The combination of scientific analysis by LSC and community input from the Committee and public workshops resulted in a *Recommended Plan* to accomplish the objectives. The *Weaverville Basin Traffic Circulation Study* (LSC, Inc., 1998) identified the East Connector Roadway Project as the top-priority project to improve traffic conditions in the Weaverville Basin. The project was identified as “the most effective immediate means of addressing traffic congestion while also expanding Weaverville’s roadway network to address possible future growth” (in the Basin). The resulting *Phasing Plan* identified “construction of the East Roadway from the SR 299/Glen Road intersection to SR 3, construction of the traffic signal at the SR 299/Glen Road intersection, improvement of Levee Road as a parkway and construction of a bicycle path over East Weaver Creek on the Lowden Lane alignment” as the first priority, for “implementation as soon as possible.” The TCTC adopted the recommendations in the *Weaverville Basin Traffic Circulation Study* in a public hearing on November 4, 1998, and directed staff to use them during the update of the *Regional Transportation Plan*.

The East Connector Roadway Project is included in the *Trinity County Regional Transportation Plan*, which was adopted in October 2001 (Trinity County, 2001), and the *Circulation Element of the Trinity County General Plan*, adopted in March 2002 (Trinity County, 2002a).

### 1.3 PROJECT OBJECTIVES

Weaverville’s main traffic problems result from the large volume of vehicles using SR 299 and SR 3. The current Weaverville Basin street pattern requires almost all vehicle trips in the area to travel on the state highway system, thereby increasing turning movements and congestion on SR 299 and SR 3. Large volumes of traffic on the state highways result in increased delays for local traffic attempting to enter the highways from side streets. The current traffic levels are perceived by local residents to reduce the quality of life in the Weaverville Basin, especially during the peak summer season. Impacts of traffic on the community are intensified by the lack of alternate routes to SR 299 and SR 3. Virtually every vehicle trip requires travel along SR 299. Pedestrian and bicycle facilities in the Weaverville Basin are discontinuous and considered to be insufficient.

Traffic is expected to grow due to increased through traffic and slow but steady growth in the Weaverville Basin. By 2020, this growth in traffic levels in the existing roadway system would further increase

congestion problems. If left unaddressed, future traffic congestion would degrade the attractiveness of the Weaverville Basin for both residents and visitors. High volumes of traffic, particularly truck traffic, and limited parking off SR 299 in the historic downtown area detract from this area and discourage tourists and local residents from stopping.

Caltrans accident data for 1999 to 2001 indicates that the SR 299/Glen Road intersection has an overall vehicle accident rate greater than the statewide average for a similar facility (see also Section 3.18). The higher than average vehicle accident rate at this location may be partly attributable to the existing two-way left turn lane along this stretch of SR 299. This location also presents a safety hazard for pedestrians crossing between businesses on the west side of SR 299 and the Trinity Plaza Shopping Center on the east side of SR 299.

As mentioned in the previous section, these problems have been the subject of several planning efforts, resulting in the following objectives found in the Weaverville Community Plan, Weaverville Basin Traffic Circulation Study and the Circulation Element of the County General Plan:

*Weaverville Community Plan, Transportation Element, 1990:*

- Provid(e) for a number of circulation improvements throughout the Community, including an eventual truck alternate route. One of the major proposals of this Plan consists of a series of traffic and roadway improvements which are intended to improve, or at least maintain, the basin's circulation system with the least disruption of Weaverville's neighborhoods.
- **Goal #1:** To provide a streets and highways system which effectively, efficiently and safely serves the variety of transportation needs of the community.
- **Goal #1.1:** Improve the communities circulation by implementation of the various roadway improvements identified on Exhibit "T-2" (a map showing several "Potential New Roads" in Weaverville, including: "Brown's Ranch/Airport Connector" and "Martin Road/Brown's Ranch Connector" which together make up the presently proposed East Connector.)
- **Goal #1.2:** Plan for improved capacity and level of service of State Highway 299, which will not impact the historic nature of the downtown area. The Plan specifically rejects the implementation of four traffic lanes through this area.

*Weaverville Basin Traffic Circulation Study; 1998*

The overall goals of this study were to address the Weaverville Basin's existing and future transportation deficiencies in a manner that:

- Is cost-effective
- Improves safety for motorists, pedestrians and bicyclists
- Preserves the existing attractive small-town character of the community

- Improves the overall quality of life in the area
- Minimizes traffic impact on any specific neighborhood
- Contributes to the economic vitality of the area

Transportation improvement projects proposed in the WBTCs were evaluated according to the following criteria:

- Reduction in congestion, including reduction in delays at intersections
- Benefit to regional through travel
- Serviceability for Weaverville residents
- Impact on pedestrian and bicycle travel safety and convenience
- Reduction in existing or future traffic safety deficiencies
- Impact on emergency response
- Impact on residential neighborhoods
- Benefit to the historic district, including “improvement from traffic reductions”
- Consistency with land use and development plans
- Impact on historic structures
- Preservation of the uniqueness of the community and small town quality
- Level of community support
- Impact on the local business economy
- Acres of land required
- Acres of impermeable land created
- Air quality impacts
- Cost and cost-effectiveness

*Circulation Element of Trinity County General Plan; 2002*

- Finding 1: Increasing seasonal traffic congestion in Weaverville creates potential safety issues and adverse impacts to the community.
- Finding 2: State Route 299 in Weaverville operates at level-of-service E during peak periods. During peak periods, vehicle movements along SR 299 are slowed, while movements onto the highway experience significant delay. Conflicting traffic movements (turn from side streets, parking ingress and egress, delivery vehicles, etc.) cause additional delays.
- Objective 1.13: As feasible under financial constraints, expand the transportation system to accommodate and attract new businesses and visitors.
- Objective 1.14: Support and promote economic development through the efficient movement of freight and tourist travel to, and through Trinity County.



- Policy 1.14.A: Support efforts to maintain and improve Trinity County’s highway system as important inter-regional trucking routes, as well as connecting highways in adjacent counties.
- Objective 4.1: Increase the total mileage of safe bike routes, trails and pedestrian walkways.

More specifically, the East Connector project is proposed to meet the following objectives:

- Provide an efficient arterial connection for through traffic traveling between the east and north sections of Weaverville
- Reduce the dependency on SR 299 for local travel within the Weaverville historic district
- Reduce delays at intersections with SR 299, particularly at SR 3, Washington Street and Glen Road
- Reduce traffic on Washington Street between Weaverville Elementary School and Lowden Park
- Improve vehicle and pedestrian safety, and reduce the accident rate, on SR 299 in the vicinity of Glen Road, Nugget Lane and the Trinity Plaza Shopping Center
- Increase the availability and continuity of bicycle lanes and pedestrian trails, and provide a safe, off-highway route to Lowden Park and Weaverville Elementary School
- Provide an alternate route for emergency vehicle access and emergency evacuation plans

The Trinity County East Connector Roadway Project is proposed to meet these objectives by providing a limited access arterial route between SR 3 and SR 299, relatively free of driveways, adjacent development and on-street parking, as an efficient alternative means for residents and frequent visitors to get around in Weaverville without passing through the historic district or using Washington Street, past the elementary school and Lowden Park. Levels of service for left turns onto SR 299 from SR 3, Washington Street and Glen Road would improve as a result of the project.

The project would primarily have an effect on east-to-north through traffic from Redding to the Trinity Lake area and would be used primarily by locals and truck through traffic. East-to-west through traffic on SR 299 (Redding to Eureka) would have no reason to use the East Connector, nor would traffic traveling east on SR 299 and turning north on SR 3 (Eureka to Trinity Lake). The East Connector would be a county road and would not be signed to indicate that it goes to SR 3 or Trinity Lake. Visitors unfamiliar with the area would continue to take SR 299 west to SR 3 and not the East Connector. Therefore it is hoped that traffic congestion in the historic district would decrease without diverting a significant number of economically valuable visitors from driving by the businesses in the historic district because those who do not know the area would continue to use the SR 299 to SR 3 route. Residents as well as non-residents who do know the area would still use SR 299 when they have some particular purpose for obtaining services or goods along SR 299 west of the East Connector.

The reduction in traffic on SR 299 would improve pedestrian and bicycle safety as well as vehicular safety. In addition, replacement of the existing two-way left turn lane with exclusive left-turn pockets and addition of a traffic light at the SR 299/Glen Road intersection would improve vehicle and pedestrian safety at this location. A bicycle/pedestrian trail and bridge that would access the Lowden Park area from the Brown's Ranch Road area, and Class II bike lanes along the East Connector, would add to bicycle and pedestrian facilities in the project area. Improved circulation and alternate routes would improve emergency response.

## 1.4 PROJECT DESCRIPTION

The intersection locations of the East Connector Roadway Project with SR 3 and SR 299 were determined in the *Weaverville Basin Traffic Circulation Study*. The following five major components were considered when developing alignment alternatives for the East Connector Roadway Project:

1. The intersection at SR 3
2. The structure crossing of East Weaver Creek
3. The location of the East Connector in relation to the Golden Age Center with respect to the crossing of Brown's Ranch Road
4. The location of the proposed roadway alignment across the Trinity River Lumber Mill property
5. The intersection of the East Connector at SR 299 in relation to the CHP building on SR 299 across from Glen Road and impacts on businesses along the Nugget Lane frontage road at Glen Road

### 1.4.1 ROADWAY IMPROVEMENTS

The proposed Trinity County East Connector Roadway Project would include the following roadway components:

- A two-lane undivided, limited-access arterial with 3.6-m lanes (12 ft) and 1.8- to 2.4-m (6- to 8-ft) shoulders, including a Class II bicycle lane
- An intersection with SR 3 controlled with stop signs on the East Connector and Five Cent Gulch Street
- Widening of SR 3 at the intersection to provide for left-turn lanes from southbound to the East Connector and from northbound to Five Cent Gulch Street
- A new bridge over East Weaver Creek that will meet all National Oceanic and Atmospheric Administration (NOAA) Fisheries fish passage criteria, passing the 50-year flow with at least

3 feet of clearance for debris, and the 100-year flow with approximately 1 foot of clearance for debris

- Two new culvert crossings of Lance Gulch designed to handle a 100-year storm event. These crossings are outside the range for anadromous fish due to a subsurface drainage system beneath SR 299 and the shopping center downstream. Culverts will be provided at two locations where the proposed East Connector crosses Lance Gulch in order to maintain existing drainage patterns.
- One or two intersections with Brown's Ranch Road (two alternatives are under consideration)
- Extension of Pioneer Lane to tie into the East Connector
- Realignment of Glen Road to tie into the intersection of the East Connector with SR 299
- Possible closure of Nugget Lane at the intersection with Glen Road (three alternatives for the SR 299/Glen Road intersection and access to Nugget Lane are under consideration)
- Elimination of the existing SR 299 access on the south side of the CHP building and new access to the back of the building directly off the new East Connector
- Access to the Trinity Plaza Shopping Center at SR 299 and Glen Road from the East Connector and a transit stop at this location
- Up to two new access points to the Trinity River Lumber Mill off the East Connector to supplement the existing two access points off SR 299, to reduce congestion on SR 299 due to truck traffic entering at mid-block.
- A traffic signal at the East Connector/SR 299/Glen Road intersection
- Re-striping of the existing two-way left-turn lane on SR 299 to incorporate exclusive left-turn lanes from eastbound SR 299 to the East Connector and from westbound SR 299 to Glen Road
- A new access to Nugget Lane from SR 299, directly across from the existing Burger King driveway
- A deceleration lane for the westbound SR 299 to the East Connector movement
- Left-turn lanes (pockets) on the East Connector at all county road and state highway intersections

The East Connector Roadway Project will meet Caltrans and the American Association of State Highway and Transportation Officials (AASHTO) standards for a 55-kilometers per hour (35-miles per hour) design speed for both the horizontal and vertical alignments. A maximum grade of 6 percent was set in the development of vertical profiles. The roadway structural section was assumed to consist of 100-millimeter (mm) Asphalt Concrete (Type A) pavement over 200-mm Class 2 Aggregate Base. The

project grading would include roadway cuts and fills and embankment construction. Cut-and-fill slopes were assumed at 1 (vertical) to 1.5 (horizontal) throughout the project.

#### **1.4.2 BICYCLE LANES/TRAILS**

Bicycle activity in the downtown Weaverville area is enhanced by the presence of bicycle lanes on SR 3, SR 299, and Washington Street. Maintaining the continuity of bicycle lanes and extending the existing bicycle trails to reach locations in the developed areas on the fringe of Weaverville is a goal of the *Trinity County Regional Transportation Plan* and the *Circulation Element of the Trinity County General Plan*. Currently, approximately two percent of the overall trips in the Weaverville Basin consist of bicycle trips. The following components are proposed in conjunction with the East Connector Roadway Project:

- Class II bicycle lanes in both directions along the entire East Connector Roadway
- A separate Class I bicycle trail adjacent to Levee Road on the east side, with a crossing of East Weaver Creek near Lowden Park
- Provisions (environmental clearance) for a possible future Class I bicycle/pedestrian trail along the east side of the East Connector from Pioneer Lane to Brown's Ranch Road, if this land is acquired by the County to compensate the mill for severance of this portion of their property

##### *CLASS II BICYCLE LANES*

The proposed Trinity County East Connector Roadway Project would include 1.8- to 2.4-m (6- to 8-ft) Class II bicycle lanes in both directions along the entire alignment. The bicycle lanes are not exclusive, because they are part of the roadway shoulder. Parking would not be permitted along the East Connector Roadway.

##### *CLASS I BICYCLE/PEDESTRIAN TRAILS*

The proposed Class I bicycle trail would parallel Levee Road and would be 2.4 m wide with a concrete surface. The Class I bicycle trail structural section is assumed to consist of 100-mm Portland Cement Concrete pavement over 200-mm Class 2 Aggregate Base. A bicycle/pedestrian bridge crossing of East Weaver Creek is also proposed. The structure type is a single-span prefabricated bridge. The proposed Class I bicycle trail would provide a connection to Lowden Park and the elementary school.

The impacts of a possible future Class I bicycle trail along the east side of the East Connector Road from Pioneer Lane to Brown's Ranch Road also are being analyzed as part of this project. The trail would be separated from the East Connector shoulder by a minimum of 1.5 m (5 ft). The County is considering acquiring right-of-way from a severed portion of the Trinity River Lumber Mill in the northeast corner, as compensation for the loss of usefulness of this portion of the mill. If the right-of-way is acquired, the

County will consider providing access to the Weaverville Basin Trails Committee to construct and maintain this additional Class I bicycle trail. The effects of this potential pedestrian/bicycle trail are therefore analyzed in this document.

### 1.4.3 OTHER PROJECT COMPONENTS

In addition to the roadway and bicycle/pedestrian components presented above, the East Connector Roadway includes the following additional components:

- Rezoning of a 2-acre parcel owned by the Trinity River Lumber Mill at the end of Martin Road from Industrial to a Single Family Residential zoning designation (R-1A; 0.5-acre minimum parcel size) allowing up to four new residential parcels. This may be a part of property acquisition negotiations with Trinity River Lumber Company and, if desired by the Lumber Company and approved by the Board of Supervisors, would become effective at the time the right-of-way is acquired from the mill property. Therefore, the potential environmental effects of this rezone are considered an indirect effect of this project.
- A utility pole at the intersection with SR 299 will be removed, and the overhead electric lines will be undergrounded.
- If Alternative 2 is built, one fire hydrant on Brown's Ranch Road will be relocated.
- The East Connector is included in the Weaverville Community Services District's (WCSD's) Master Water Plan (Pace Civil, Inc., 2002) for improvements to the Weaverville water supply system. The District proposes to install a water main within the new road right-of-way. This water line would be installed during construction of the East Connector. The Master Plan does not propose any expansion of the District Boundaries, or extension of service into currently unserved areas. The water line will not extend into presently unserved areas, but will provide a looped system for better circulation and emergency backup water supply between the presently served areas on Martin Road/Pioneer Heights and Brown's Ranch Road (Pace Civil, Inc., 2002). The new line would loop these sections of Weaverville together, giving the District the ability to supplement the system with Trinity River water from their existing diversion at Douglas City if the source at East Weaver Creek failed, or bypass the existing line from East Weaver Creek if the pipe failed. The purposes of these improvements are circulation, better gravity feed and reliability rather than expansion. The new water main would draw water from the WCSD's existing water diversions in East Weaver Creek or the Trinity River at Douglas City. The new line would not change the amount of water drawn from the Weaver Creek/Trinity River watersheds.

#### 1.4.4 CONSTRUCTION METHODOLOGY

Construction work for the proposed project would be performed by (a) contractor(s) selected by TCDOT. Two to 25 workers would be employed throughout the duration of the proposed project. TCDOT or its contractor would obtain all required licenses, permits, and approvals necessary for performance of the work. The contractor would be required to comply with all applicable occupational health and safety standards, rules, and regulations. In addition, specific requirements or restrictions on construction activities may be included in accordance with recommended mitigation measures described in the environmental documents (EA and EIR), or conditions of the various required permits.

##### *SCHEDULE*

Construction of the proposed project would last approximately 8 months, over two construction seasons, expected to begin in 2004 or 2005. Construction would take place daily between the hours of 7 a.m. to 6 p.m. on weekdays, and the hours of 8 a.m. to 5 p.m. on Saturday and Sunday. TCDOT does not anticipate a need for night-time construction for the proposed project.

##### *DRAINAGE DESIGN*

During both the construction and operation phases of the proposed project, direct discharge of surface runoff to East Weaver Creek and associated drainages would be avoided. New and existing drainage facilities, including channels, vegetated swales, detention basins, culverts, and drop inlets, would be sized to handle the anticipated flow from the proposed project. New culverts and bridges will be designed to convey a 100-year storm. Drainage facilities will be designed by a California-registered Civil Engineer during project design and will be included in the final design plans. Additional temporary construction drainage control facilities would be addressed in a Stormwater Pollution Prevention Plan (SWPPP) for the project.

##### *EROSION CONTROL*

Erosion control measures will be taken to aid in erosion control during and after construction. Measures implemented during construction will include practices such as limiting ground disturbing activities to the dry season, use of sediment barriers such as silt fencing, straw bales and wattles, sediment traps and basins, and use of geotextiles, mulch and other temporary ground covers on disturbed areas and stockpiles. After construction of the proposed project, the right-of-way would be stabilized and landscaped in accordance with County and Caltrans landscape guidelines and specifications. Erosion control will use either native or non-persistent non-native grasses for quick establishment, followed up with native grasses and forbs. Native and/or non-native shrubs and trees may be used for the final landscaping. No noxious or invasive weed species would be used. Final erosion control will also include permanent structures such as inlet and outlet protection at culverts, rock slope protection at bridge

abutments, drainage inlet protection, vegetated drainage ditches and swales and detention basins, if needed.

Erosion control will be developed further in the project design phase and specific methods will be detailed in the project plans and specifications, and in the SWPPP prepared by the contractor and approved by the TCDOT engineer. In addition, the contractor would be required to implement water pollution control measures that are included in Section 7-1.01G of the Caltrans Standard Specifications, as discussed below under "Pollution Prevention." Additional erosion control and water pollution prevention measures are proposed as mitigation measures in Section 3.1 (*Geology, Seismicity Soils*) and Section 3.2 (*Hydrology, Water Quality, Stormwater Runoff*).

#### *WINTERIZATION*

Where construction and revegetation is not complete by October 1, interim erosion control will be established. Quick establishing non-native grass seed, mulch and/or geotextiles will be used for winterization. Construction in all areas will be suspended during the rainy season (typically mid-November to May 1). Erosion and sediment control measures will be maintained during the winter suspension period and will be checked within 24 hours of each 0.5-inch or greater rainfall event, and every 14 calendar days during the winter suspension period or until site stabilization is achieved. Significant amounts of sediment that leave the site will be cleaned up within 24 hours of their deposition. Construction will resume in upland areas in the spring after threat of major storms has past (approximately May 1), based on long-range weather forecasts. Construction in or near surface waters will resume on June 15.

#### *DISPOSAL OF EXCAVATED MATERIAL/IMPORTATION OF FILL MATERIAL*

The project design would attempt to balance cut and fill quantities to limit the amount of soils imported and waste soils requiring disposal. A potential source of clean fill material is the filled area between the Trinity Plaza Shopping Center and the CHP building. This material consists of clean native materials from Oregon Pass, imported from a Caltrans construction project on SR 299. The owner of the shopping center is interested in leveling this area and would make the material available. This area is within the project study area, and use of this material has been evaluated environmentally. It has been determined that use of this material will not result in impacts on sensitive biological or cultural resources. If needed, this material would be made available to the contractor as an option. If soil import is necessary and the TCDOT contractor declines to use this source, the contractor would be solely responsible for securing a source of fill material, from a commercial source or some other source that is in compliance with the Surface Mining and Reclamation Act (SMARA). Excavated soil that is generated by this project for road cuts would also be used for fill in creating road embankments.

If excavated material is generated that requires disposal, it may be stockpiled in the TCDOT maintenance yard at the north end of the project, for use on other projects. Alternatively, it may become the property of the contractor. The TCDOT contractor would be responsible for transporting both excavated and imported materials, and for disposing of excavated materials, with TCDOT providing oversight.

*OTHER CONSTRUCTION WASTE*

Liquid construction waste would be disposed of in a proper manner. Petroleum-based compounds would be contained and removed to an acceptable off-site disposal location. Wastewater from concrete and other construction activities would not be allowed to drain into East Weaver Creek and associated drainages. Washing of construction vehicles or other equipment in drainage paths to the creek would be prohibited. The Contract Specifications would contain requirements for the preparation for and cleanup of an accidental spill of petroleum-based products, cement, or other construction pollutants (see additional discussion below).

Solid debris from the construction site or from other activities associated with the proposed activities would be kept out of East Weaver Creek and associated drainages. Solid waste will be disposed of at a landfill certified by the Integrated Waste Management Board to accept that particular type of waste.

*POLLUTION PREVENTION*

The contractor shall implement water pollution control measures that conform to Section 7-1.01G of Caltrans Standard Specifications. Some of these key water pollution control measures are listed below.

- The contractor shall exercise every reasonable precaution to protect East Weaver Creek and Lance Gulch from pollution with fuels, oils, and other harmful materials, and shall conduct and schedule operations so as to avoid or minimize muddying and silting of East Weaver Creek or Lance Gulch. Care shall be exercised to preserve roadside vegetation beyond the limits of construction.
- Water pollution control work is intended to provide prevention, control, and abatement of water pollution of East Weaver Creek and Lance Gulch, and shall consist of constructing those facilities which may be shown on the plans, specified herein or in the special provisions, or directed by the engineer.
- The contractor shall provide temporary water pollution control measures, including, but not limited to, dikes, basins, ditches, and application of straw and seed, which become necessary as a result of the contractor's operations. The contractor shall coordinate water pollution control work with all other work done on the contract.
- Before starting any work on the project, the contractor shall submit, for acceptance by the TCDOT engineer, a program to control water pollution effectively during construction of the



project. The program shall show the schedule for the erosion control work included in the contract and for all water pollution control measures that the contractor proposes to implement in connection with construction of the project to minimize the effects of the operations on adjacent streams and other bodies of water. The contractor shall not perform any clearing and grubbing or earthwork on the project, other than that specifically authorized in writing by the engineer, until the program has been accepted.

- If the measures being taken by the contractor are inadequate to control water pollution effectively, the engineer may direct the contractor to revise the operations and the water pollution control program. The directions will be in writing and will specify the items of work for which the contractor's water pollution control measures are inadequate. No further work shall be performed on those items until the water pollution control measures are adequate and, if also required, a revised water pollution control program has been accepted.
- The engineer will notify the contractor of the acceptance or rejection of any submitted or revised water pollution control program in not more than 5 working days.
- Unless otherwise approved by the engineer in writing, the contractor shall not expose a total area of erodible earth material, which may cause water pollution, exceeding 70,000 square meters (m<sup>2</sup>) for each separate location, operation, or spread of equipment before either temporary or permanent erosion control measures are accomplished.
- Where erosion that will cause water pollution is probable due to the nature of the material or the season of the year, the contractor's operations shall be so scheduled that permanent erosion control features will be installed concurrently with or immediately following grading operations.
- Nothing in the terms of the contract nor in the provisions in this Section 7-1.01G shall relieve the contractor of the responsibility for compliance with Sections 5650 and 12015 of the Fish and Game Code, or other applicable statutes relating to prevention or abatement of water pollution.

The proposed project will also comply with regulations involving the control of pollution in storm water discharges under the National Pollutant Discharge Elimination System (NPDES) program (Section 402[p], Clean Water Act [CWA]). The regulations, which apply to new construction projects disturbing more than 0.4 hectare (1 acre) of earth, are administered by the State Water Resources Control Board (SWRCB) on behalf of the U.S. Environmental Protection Agency (USEPA). Under the program, TCDOT would file a Notice of Intent with the SWRCB to obtain a General Construction Activity Storm Water Permit prior to construction of the proposed project. The SWRCB and Federal Law (40 CFR Parts 122-124) require that best available technology that is economically achievable (BAT) and best conventional pollutant control technology (BCT) be used to reduce pollutants. TCDOT or its contractor would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP), which would include information on runoff, erosion control measures to be employed, any toxic substances to be used during

construction activities, and spill prevention and control measures. A monitoring program would be implemented to evaluate the effectiveness of the measures included in the SWPPP.

Additional water pollution prevention measures are proposed as mitigation measures in Section 3.1 (*Geology, Seismicity Soils*) and Section 3.2 (*Hydrology, Water Quality, Stormwater Runoff*).

*TRAFFIC DIVERSION*

Traffic control may be necessary for the construction of the proposed project during improvements at the East Connector/SR 299/Glen Road intersection, at the SR 3 intersection, at the Brown's Ranch Road intersection, and at the Pioneer/Martin Road intersection. TCDOT will notify the public with an announcement in the local newspaper (Trinity Journal) and posting near the project location. This project can be accomplished using lane reductions rather than complete closures or detours. Construction would be scheduled to minimize interruptions during peak traffic periods. Public safety and emergency services would be kept informed of construction activities for use in planning emergency response routing.

*CONSTRUCTION PHASING*

Construction of the proposed project would be staged to allow maintenance of existing traffic movements at SR 299, SR 3, and other affected roadways and intersections during all stages of construction. The proposed project would be constructed in several stages, as described below.

*PHASE 1 - CLEAR AND GRADE ROADWAY*

Phase 1 would consist of the removal of vegetation, drainage facilities, and existing improvements for the entire length of the proposed new two-lane, undivided, limited-access road, including one fire hydrant on Brown's Ranch Road if Alternative 2 is selected. The earthwork would be completed, and the area would be graded to form the road prism. Construction of the proposed roadway bridge crossing and the bicycle trail crossing over East Weaver Creek also may begin at this time. Construction in the creek or riparian areas will only take place from June 15 to October 15. Riparian vegetation clearing involving cutting, trimming, and topping riparian trees and shrubs will only take place from August 1 to March 15, or during the non-breeding season for migratory birds. However, no root removal or other ground-disturbing clearing activities will occur in riparian areas until after June 15.

*PHASE 2 – INSTALLATION/UNDERGROUNDING OF UTILITIES*

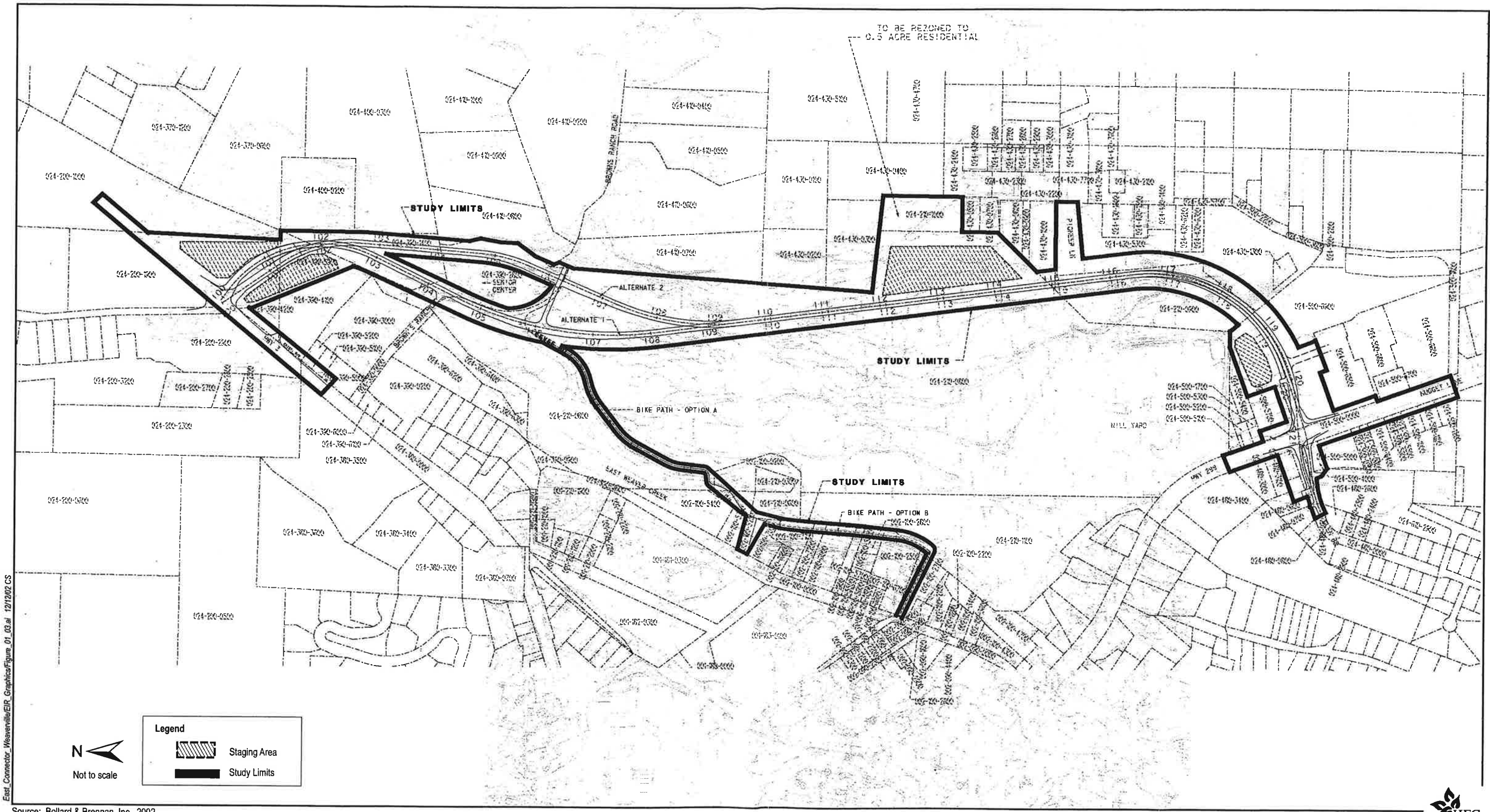
In cooperation with the utility companies, a water main for use by the Weaverville CSD would be installed in the road prism at this time. A utility pole at the intersection with SR 299 will be removed, and the overhead electric lines will be undergrounded.

*PHASE 3 - CONSTRUCTION OF LANES*

The two-lane, undivided, limited-access arterial with 3.6-m (12-ft) lanes and 1.8- to 2.4-m (6- to 8-ft) shoulders and associated intersection improvements and Class II bike lanes, and the Class I bicycle trail along Levee Road would be constructed, including surfacing and striping.

*STAGING AREAS*

One or more staging areas, including a temporary office trailer, equipment and materials storage, and a parking area for construction workers and equipment, would be needed for the duration of the proposed project. Four potential staging areas have been designated and included in the project study area (see **Figure 1-3**). Two of the staging areas are located at the northern end of the road corridor (Staging Areas 1 and 2), on County property between SR 3 and East Weaver Creek. The third staging area (Staging Area 3) would be located on a disturbed upland portion of the Trinity River Lumber Mill property, at the mid-point of the road corridor on the east side. The fourth staging area (Staging Area 4) spans Lance Gulch at the southern end of the road corridor on Trinity Plaza Shopping Center property. A temporary access



East\_Connector\_Weaverville/EIR\_Graphics/Figure\_01\_03.dwg 12/12/02 CS

Source: Bollard & Brennan, Inc., 2002



**Figure 1-3**  
 East Connector Study Limits (Showing Staging Areas, Assessor's Parcel Numbers, and Roadway Stations)  
 East Connector Roadway Project

agreement would be obtained from the property owner(s) for any temporary staging areas on private property. After construction is completed, the staging areas would be revegetated with native species, with the exception of Staging Area 1, which is scheduled to be converted to an extension of the TCDOT's Maintenance Yard.

#### *ROADWAY BRIDGE SPECIFICATIONS AND CONSTRUCTION*

##### *BRIDGE TYPE*

The proposed structure consists of a three-span cast-in-place pre-stressed box girder (CIP PS Box Girder) bridge. The structure proposed for the Alternative 1 realignment is 48.7 m (160 ft) long with a 19.5 m (approx. 64 ft) center span and 14.6 m (approx. 48 ft) end spans. The structure is at an approximate 18 degree skew, relative to the East Weaver Creek channel. The structure proposed for the Alternative 2 alignment will have no skew and is 42.8 m (approx. 140 ft) long with a 17.2 m (approx. 56.5 ft) center span and 12.8 m (approx. 42 ft) end spans. The bridge will use reinforced concrete abutments at each end, placed outside of the ordinary high water level of East Weaver Creek. The structure will be supported by two pilings: either pier walls or standard column supports. If pier walls are selected, the pier wall will be approximately 1.5 to 2 ft wide. If columns are selected, a single column approximately 1.5 m (5 ft) in diameter is proposed at the center of each pier location. The pier wall and single column alternatives are proposed as the feasible alternatives because both options would minimize debris build-up at the structure.

##### *FOUNDATION TYPE*

The preferred foundation type proposed for this project will be a pile foundation, most likely consisting of either driven precast or steel piles, or piles cast in pre-drilled holes (CIDH piles) or cast-in-steel shells (CISS). Foundation exploration has not been completed at the bridge, but a preliminary site assessment has indicated that the stream bed material is generally a mix of large cobbles and sandy gravel. The presence of large cobbles may affect the practicality of using concrete driven piles. A geotechnical study of the site will reveal the size of underlying cobbles. The preliminary site assessment also uncovered evidence of high flow and a potential for scour at the proposed bridge foundations (Taber Consultants, 1999a). The bridge pile foundations proposed have been selected to accommodate scour demands. Future geotechnical surveys with boring logs and soil samples are necessary to determine the depth and type of pile foundation system most suitable for this site. This information will ultimately be used to select the preferred foundation alternative and design the foundation.

##### *HYDRAULICS*

The proposed bridge is located in a reach of floodplain mapped by FEMA by approximate study methods. The proposed bridge was designed to pass the most probable 100-year flood and also the most probable 50-year flood plus debris.

The relationship between the bridge opening and upstream water surface was used to identify a bridge length necessary to meet the requirements of FEMA (maximum increase in Base Flood elevation of 1.0 foot) and the recommended minimum design standards of Caltrans and FHWA. The structure profile was based on Caltrans and FHWA hydraulics requirements. The soffit elevation of the bridge was set for 3.0 ft above the 50-year flood water surface elevation. Given the size of East Weaver Creek and the potential for debris, the appropriate clearance to consider for debris was determined to be 3.0 ft.

#### *IN-STREAM CONSTRUCTION*

Temporary falsework (scaffolding) will be required during construction of the cast-in-place concrete structure. All falsework required for the construction of the proposed structure will be placed outside of the low flow channel. Falsework will not be placed in the ordinary high water channel until after June 15th and shall be removed from the ordinary high water channel no later than October 15th. No equipment will be operated within the active creek during the erection or removal of falsework.

Access to the proposed bridge construction location can be obtained from both sides of the creek. Equipment will not need to work in the active creek (low flow/wetted channel) in order to construct the bridge, falsework, or the roadway approaches. The contractor may elect to construct a temporary creek crossing adjacent to the proposed permanent structure to provide convenient access to allow equipment to cross over the creek for purposes of building the new bridge. The temporary crossing would be approximately 16 ft wide and would consist of placement of a flat rail car or similar temporary bridge component on top of fill approaches on either side of the creek. The temporary crossing structure and the fill approaches will not encroach into the low flow channel and will maintain passage of the low flow channel during construction. Once construction is complete, the temporary crossing and all associated fill would be completely removed. If construction is not complete by October 15, any fill associated with the temporary crossing will be removed from the ordinary high water channel on October 15.

#### *PILE SYSTEM AND DEWATERING ACTIVITIES*

For the driven piles option, precast concrete or steel piles will be driven at the abutments and each pier location. CISS piles may also involve driving steel casings. The number, depth, and size of pile will be determined by the subsequent foundation report during project design. Pile driving should take approximately 1 week to complete.

For the CIDH/CISS piles option, the hole will be drilled to a specified tip elevation. A dense drilling fluid will be used during the drilling operation. Once the drilled hole is finished, steel casing may be placed in the drilled hole if necessary to assure caving of the hole does not occur. The steel casing may be placed in the drilled hole or driven into the hole by the CISS method. Concrete will be pumped into the bottom of the hole, displacing the drilling fluid.

The soil removed from the hole during drilling will be placed in a staging area outside of the low flow channel. Then a front end loader will pick it up and put in into a dump truck for transport to an off-site disposal area. The disposal area will be located outside of the ordinary high water mark, in a depression or bermed area where it will not be entrained in stormwater or redeposited in the creek or tributary drainages. Water from the drilled holes or excavations will be pumped directly into a tank and/or water truck for removal and transport to an off-site disposal area. The off-site disposal area will be the same or similar to the spoils disposal area, outside the ordinary high water in a depression or bermed area where it will percolate into the ground without being entrained in stormwater or redeposited in the creek or tributary drainages. The drilling fluid will be pumped to and from a holding tank through a closed system. As the concrete displaces the drilling fluid, it will be pumped to a tank and/or truck for re-use or removal to an off-site disposal facility.

A plan detailing the pile construction method used will be submitted to the TCDOT resident engineer for approval. The method must meet the terms and conditions of the contract and must conform to the permit requirements and mitigation measures in the environmental documents, which will be incorporated into the project specifications.

It is not anticipated that cofferdams would be necessary to construct the structure foundation because structural elements are outside of the low flow channel, and bridge construction will occur during the low-flow season (June 15 to October 15). However, if cofferdams are necessary for foundation construction, saturated material excavated from within the cofferdam will be placed in an adjacent temporary sediment stilling basin, located outside of the ordinary high water mark, in an area where it will percolate back into the soil without being entrained in storm water or redeposited in the creek or tributary drainages.

#### *CONCRETE*

Concrete casting for the structure would be done in tightly sealed forms to prevent any releases to East Weaver Creek. Precast structural elements would be placed on the site using cranes. No cement will be allowed to contact the live stream. Any water that does come in contact with wet concrete, such as groundwater in footing excavations isolated from the live stream, will not be allowed to enter the creek. It will be pumped to a truck for disposal or treatment, or it may be discharged to a sediment stilling basin located outside of the ordinary high water mark, in an area where it will percolate back into the soil without being entrained in stormwater or redeposited in the creek or tributary drainages. If concrete application tools or mixing equipment is washed out on site, a temporary washout area will be constructed on permeable ground at least 100 feet away from any stream. It would consist of a basin constructed of plywood or sandbags and covered with plastic sheeting. Upon completion of the concrete work, the water in the basin would be released by dropping one side of the basin. The water would be allowed to

percolate into the soil. The solids would remain in the plastic and would be removed and disposed of at a landfill upon project completion.

*PEDESTRIAN/BICYCLE BRIDGE SPECIFICATIONS AND CONSTRUCTION*

For both Options A and B, a prefabricated bridge that can span the entire width of the creek from levee to levee is proposed. The bridge construction will involve the following elements:

- Because the bridge structure itself is prefabricated, no construction will be required to construct the bridge itself. The prefabricated structure will be delivered to the project site, assembled, and placed with a crane.
- The structure is a clear span; there will be no piers required within the creek.
- All construction will take place outside of the limits of the ordinary high water mark of the creek.

Access to the site is available from both sides of the creek. No equipment will need to be within the limits of the creek channel or the ordinary high water mark to construct/install the bridge. Falsework is not expected to be necessary for installation of this prefabricated bridge.

## **1.5 INTENDED USES OF THIS EIR**

### **1.5.1 DECISIONS SUBJECT TO CEQA**

The Trinity County Board of Supervisors will use this Draft EIR, public and agency comments, testimony at public hearings, County staff responses to comments and recommendations of County staff and the County Planning Commission, in their decisions regarding certification of the Final EIR, selection of alternatives, and approving or denying the project.

When certified as a Final EIR, the final document will provide required CEQA compliance for the County actions required to construct the new roadway, including right-of-way acquisition and construction.

The right-of-way agreement with Trinity River Lumber Company may involve rezoning a 2-acre parcel owned by the Company at the end of Martin Road (APN 024-210-1000) from Industrial to Residential (R-1A) ½ acre minimum. The impacts of this action are addressed in this EIR. If the Lumber Company desires to have this parcel rezoned as part of the right-of-way agreement, the County will tier the CEQA analysis for that action off this EIR. This will be done during right-of-way acquisition, probably in 2004. This EIR will serve as a Program EIR for this purpose.

The County Floodplain Administrator will consider the information in this EIR when issuing a Floodplain Development Permit for the two bridges crossing East Weaver Creek.



The Certified Final EIR will also provide CEQA compliance for other actions by State agencies connected with construction of the new road, trails and bridges, including:

- California Transportation Commission to allocate future funding for design, right-of-way and construction.
- California Department of Transportation (Caltrans) to issue Encroachment Permits for the intersections with SR 299 and SR 3.
- California Department of Fish and Game to issue a Streambed Alteration Agreement (Section 1601) for the construction of facilities in waters of the State (bridge over East Weaver Creek and culverts in Lance Gulch).
- North Coast Regional Water Quality Control Board for water quality certification or waiver for discharge of fill in waters of the U.S. (Section 401 certification).
- State Water Resources Control Board for coverage under General Permit for Storm Water Discharges Associated with Construction Activity (NPDES permit).

### **1.5.2 RELATED ENVIRONMENTAL REVIEW AND CONSULTATION**

The Federal Highway Administration (FHWA) is the funding agency for this project, and is required to comply with the National Environmental Policy Act (NEPA). FHWA is preparing an Environmental Assessment for this project. The Environmental Assessment will be made available for public review for a minimum of 30 days before the FHWA makes a final decision on the project.

As the Federal lead agency, FHWA is also conducting formal consultation with NOAA Fisheries (formerly National Marine Fisheries Service) regarding potential impacts to the federally threatened Southern Oregon/Northern California Coho salmon, and its critical habitat, as required by Section 7 of the Endangered Species Act. The consultation will also address potential impacts to Essential Fish Habitat for the coho salmon and Upper Klamath and Trinity Rivers Chinook salmon as required by the Sustainable Fisheries Act of 1996, which amended the Magnuson-Stevens Fishery Conservation and Management Act. A Biological Assessment has been prepared to initiate this formal consultation process (J&S 2002b)

The FHWA is also consulting with the State Historic Preservation Office regarding potential impacts to cultural (historic and archaeological) resources, as required by Section 106 of the National Historic Preservation Act. An Historic Property Survey Report, Historic Resources Evaluation Report, Historic Architectural Survey Report and an Archaeological Survey Report have been prepared and submitted to the State Historic Preservation Office by FHWA for their concurrence (J&S 2002a, d, e, f).

The FHWA will use the Final NEPA document to issue future funding to Trinity County for right-of-way acquisition and construction, through the California Transportation Commission.

In addition to the federal consultation requirements, Trinity County will consult with the California Department of Fish and Game regarding potential impacts to the state-threatened coho salmon, under Section 2080.1 of the California Endangered Species Act.

The U.S. Army Corps of Engineers will consider the NEPA and CEQA documents and agency consultations when issuing Trinity County a permit to discharge fill material into waters of the U.S., under Section 404 of the Clean Water Act. The permit will cover fill placed in jurisdictional wetlands, and within the Ordinary High Water of East Weaver Creek and Lance Gulch.

# CHAPTER 2.0

## PROJECT ALTERNATIVES

### 2.1 ALTERNATIVE DEVELOPMENT PROCESS

Three alignment options were evaluated for the Trinity County East Connector Roadway Project in the *East Connector Roadway Project Study Report (PSR)* (Psomas, 1999). PSR Alternative 3 was discarded from further environmental review, but is summarized below in Section 2.3. PSR Alternatives 1 and 2 were selected for further environmental review. Altogether, five alternatives for the roadway are given consideration: two alternatives for the roadway alignment at Brown's Ranch Road (EIR Alternatives 1 and 2), and three alternatives for the SR 299/Glen Road/Nugget Lane intersection (Alternatives A, B, and C). Alternatives 1 and A are similar to PSR Alternative 1, while EIR Alternatives 2 and B are similar to PSR Alternative 2. PSR Options A and B remain as the project alternatives for the proposed bike path. Two roadway bridge options are also considered. In addition, a No Project Alternative is considered. The County has not selected a preferred alternative, and each alternative for the road and bike path is given equal and independent consideration. The project alternatives are shown in **Figures 2-1 through 2-4** and discussed in detail below.

Prior to development of the East Connector project, the *Weaverville Basin Traffic Circulation Study (WBTC)* studied several variations of the East Connector and other possible projects to alleviate traffic congestion in Weaverville. See Section 1.2, *Project Background*.

### 2.2 PROJECT ALTERNATIVES CONSIDERED IN DETAIL

#### 2.2.1 EAST CONNECTOR ROADWAY ALIGNMENT ALTERNATIVES

##### *ALTERNATIVE 1*

This alternative alignment begins at a new signalized intersection of SR 299 opposite Glen Road, adjacent to the south end of the CHP building. From the SR 299/Glen Road intersection, the Alternative 1 alignment continues to the northeast, where it crosses the lumber mill property. The proposed roadway would skirt the east side of the existing lumber mill detention ponds and continue north to intersect Brown's Ranch Road.

The alignment would use a portion of Brown's Ranch Road, passing approximately 18 m (60 ft) to the west of the Golden Age Senior Center (road edge to closest building edge) and continuing north. The alignment would then cross East Weaver Creek near the roadway's terminus at SR 3 across from Five Cent Gulch Street. The existing curve at the southern intersection with Brown's Ranch Road would be realigned to form a "T" intersection with the East Connector. Brown's Ranch Road would be controlled by stop signs at both intersections with the East Connector (located north and south of the senior center). Pioneer Lane would be extended to connect with the new roadway and would be controlled with a stop sign at the new intersection with the East Connector.

Access to the mill property from the new roadway would be provided directly across from the intersection with Pioneer Lane, and possibly at a second entry point. There would be no stops required for traffic on the East Connector, except at the intersections with SR 3 (stop sign) and SR 299 (traffic signal). Left-turn lanes are planned on the East Connector wherever it intersects with county roads and state highway routes. Class II bike lanes are planned within the roadway shoulder along the entire roadway.

#### *ALTERNATIVE 2*

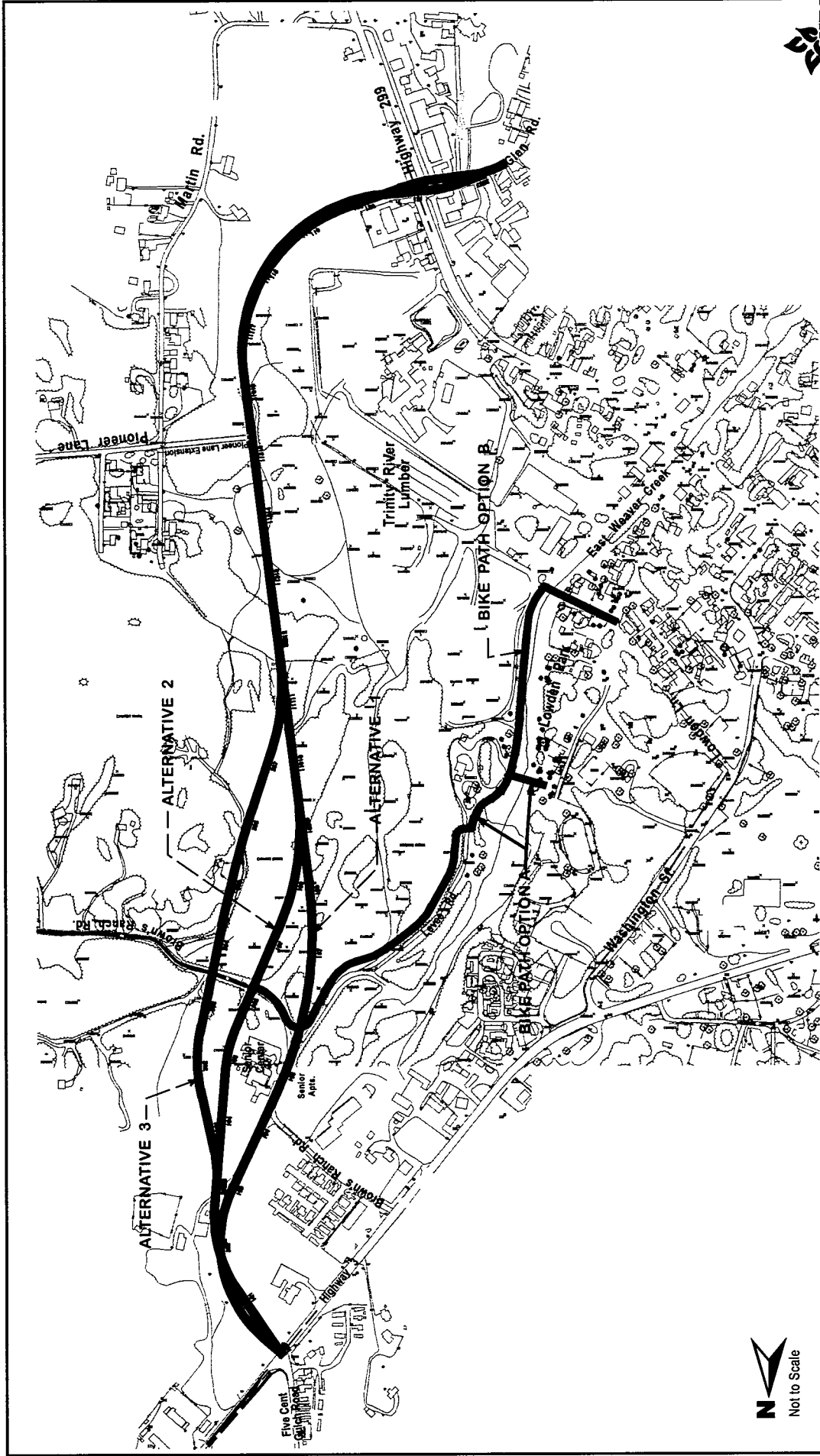
On the northern end, Alternative 2 would intersect SR 3 at the same location as Alternative 1 and would cross East Weaver Creek 17 m (55 ft) downstream (south) of Alternative 1. The road would continue south and would pass approximately 20 m (65 ft) to the east of the Golden Age Senior Center, between the center and an unnamed tributary to Lance Gulch. The alignment would then continue south where it would intersect Brown's Ranch Road at a single intersection. Brown's Ranch Road would be stop sign-controlled, whereas the East Connector would be free-flowing. South of Brown's Ranch Road, the alignment would run along the eastern edge of the lumber mill property and eventually tie into SR 299, across from Glen Road at a signalized intersection. Other features of this alternative are identical to Alternative 2.

### **2.2.2 SR 299 / GLEN ROAD / NUGGET LANE INTERSECTION SUB-ALTERNATIVES**

All alternatives at this intersection include a traffic signal, and protected left turn pockets on SR 299.

#### *SUB-ALTERNATIVE A*

Glen Road would be slightly realigned at its terminus with SR 299 to line up with the new East Connector. Access to the Nugget Lane frontage road from Glen Road would be eliminated. The existing driveway between the car wash and Coast Central Credit Union would remain open to two-way in and out



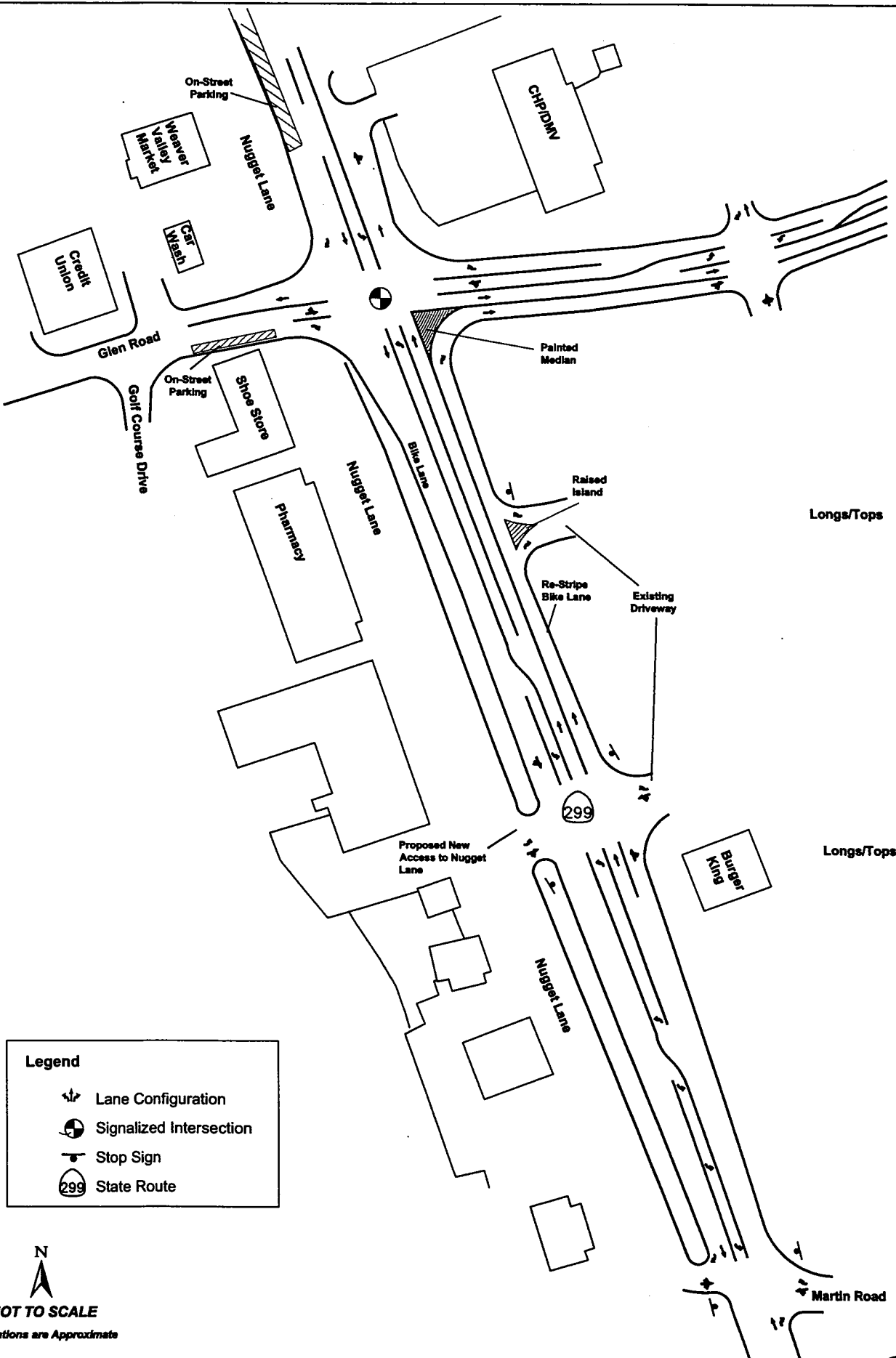
East Connector Weaverville/ERI Graphics/Figure\_02\_01 at 12/12/02 CS



**Figure 2-1**  
Project Location of East Connector Alternatives  
East Connector Roadway Project

Source: Psomas

East Connector Roadway/FEIR\_Graphics/Figure\_03\_18\_10.ai 12/10/02 CS



**Legend**

- Lane Configuration
- Signalized Intersection
- Stop Sign
- State Route

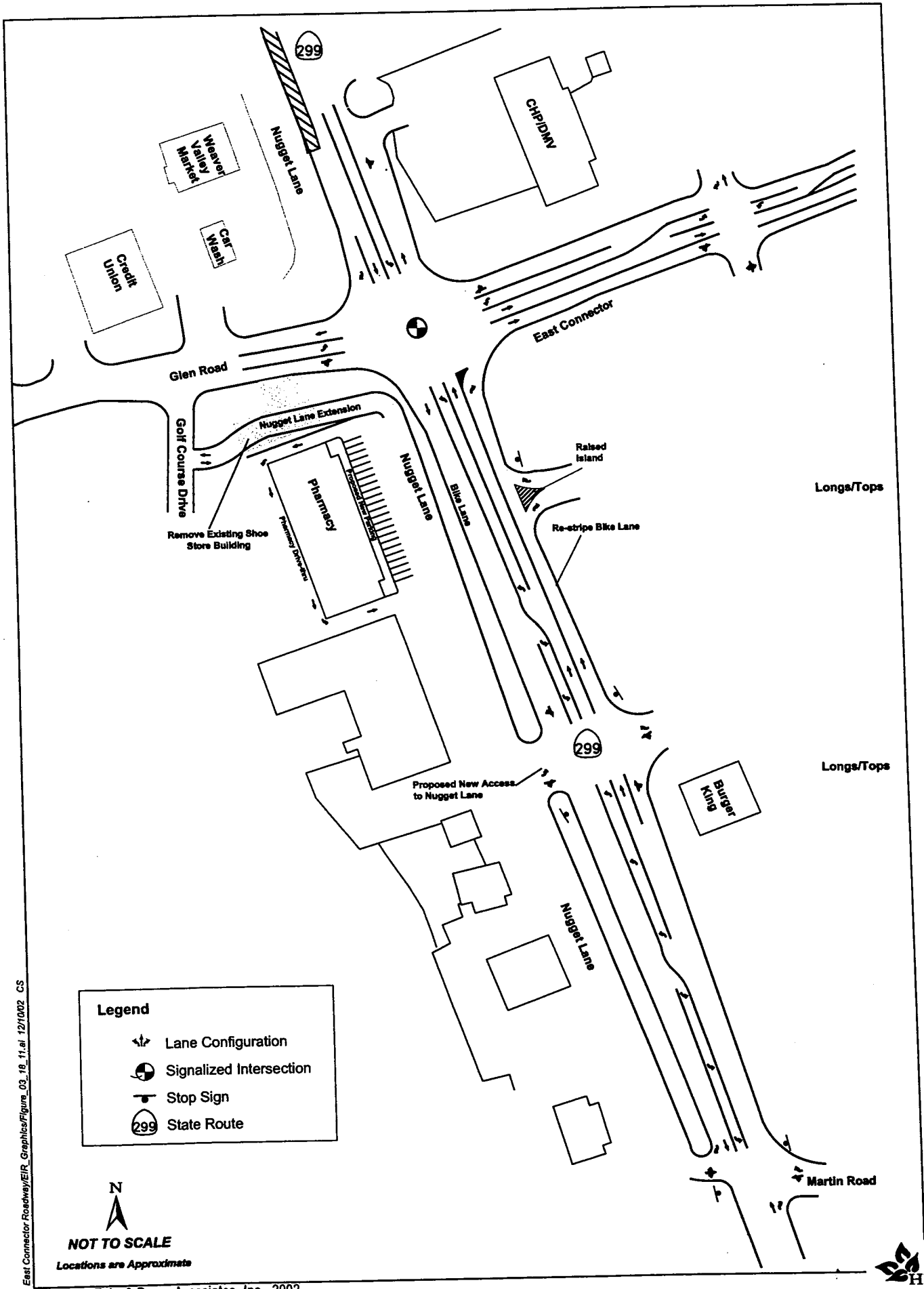


**NOT TO SCALE**  
Locations are Approximate

Source: Fehr & Peers Associates, Inc., 2002







**Figure 2-2**  
State Route 299/Glen Road Intersection Sub-Alternative A  
East Connector Roadway Project



East Connector Roadway/EIR\_Graphics/Figure\_03\_19\_11.al\_12/1002\_CS

**Legend**

-  Lane Configuration
-  Signalized Intersection
-  Stop Sign
-  State Route 299

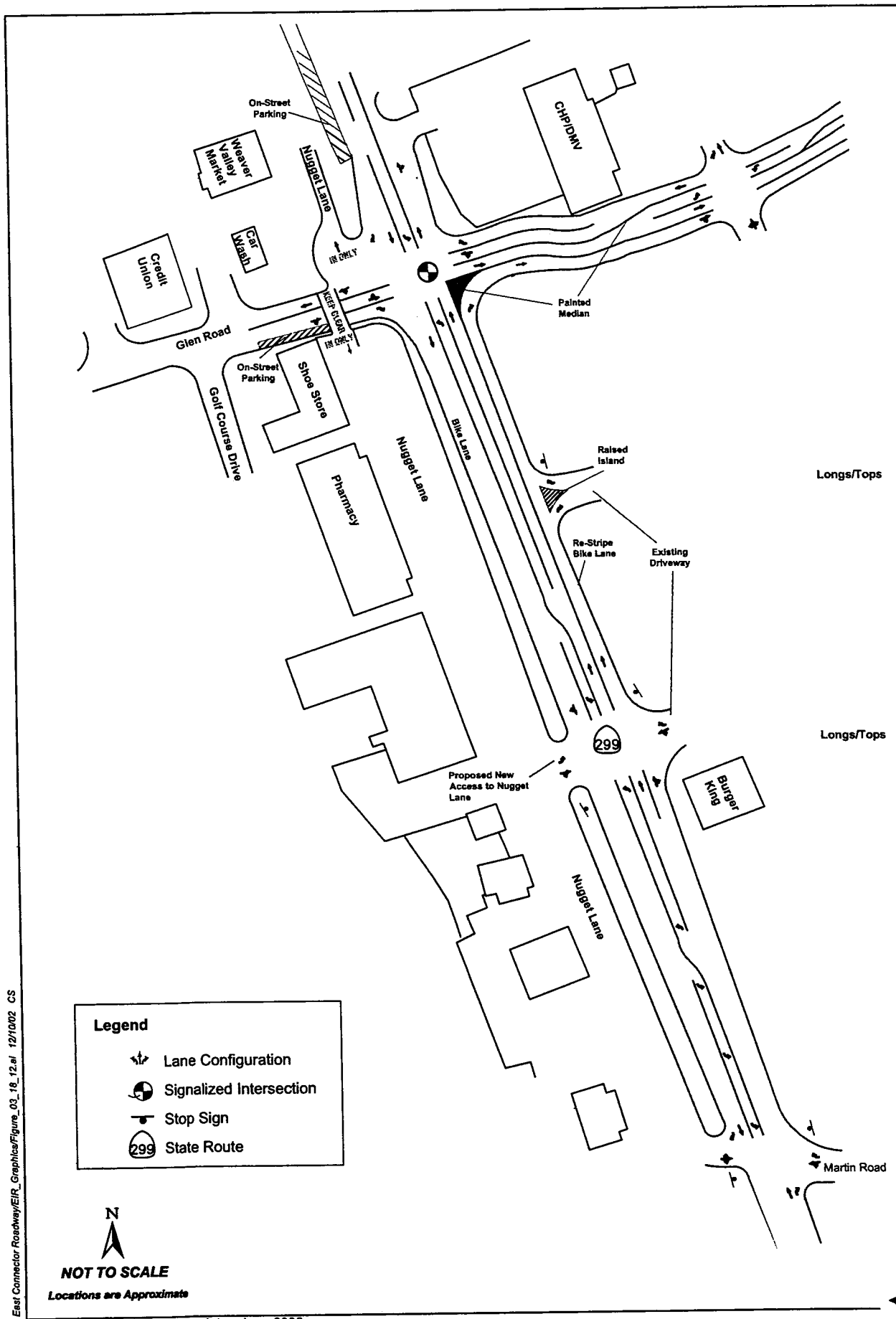
N  
**NOT TO SCALE**  
 Locations are Approximate

Source: Fehr & Peers Associates, Inc., 2002



**Figure 2-3**  
 State Route 299/Glen Road Intersection Sub-Alternative B  
 East Connector Roadway Project

East Connector Roadway/EIR\_Graphics/Figure\_03\_18\_12.sif 12/10/02 CS



**Legend**

- Lane Configuration
- Signalized Intersection
- Stop Sign
- State Route

N  
**NOT TO SCALE**  
*Locations are Approximate*

Source: Fehr & Peers Associates, Inc., 2002



**Figure 2-4**

State Route 299/Glen Road Intersection Sup-Alternative C  
 East Connector Roadway Project



traffic. No turn pockets would be provided on Glen Road for this private driveway, but left and right turns would be allowed.

#### *SUB-ALTERNATIVE B*

Glen Road would be realigned further south (compared to Alternative A) at its terminus with SR 299 to better line up with the new East Connector across SR 299. This alignment would require the removal of the shoe store building on the south side of Glen Road. Access to the Nugget Lane frontage road from Glen Road would be eliminated. A new access to Nugget Lane would be provided from Golf Course Drive, through the area currently occupied by the shoe store building. This building would be demolished under Alternative B. Like Alternative A, the existing driveway between the car wash and Coast Central Credit Union on the other side of Glen Road would remain open to two-way in and out traffic. No turn pockets would be provided on Glen Road for this private driveway, but left and right turns would be allowed.

#### *SUB-ALTERNATIVE C*

Under Alternative C, the East Connector curve at the CHP building would be tightened to minimize the skew of the intersection across SR 299 while allowing the shoe store to remain. An in-only access to Nugget Lane would be provided on both sides of Glen Road. Northbound and southbound cars and trucks on SR 299 would be able to turn onto Glen Road and enter Nugget Lane on either side. The turn from eastbound 299 onto Nugget Lane would be nearly a U-turn, but the turning radius would accommodate trucks. More likely, however, southbound trucks would enter at the Ben Franklin driveway to the north and would have to turn around to exit, or use the existing driveway between the car wash and Coast Central Credit Union, which would remain open to two-way in and out traffic. "Keep Clear" striping would be provided across Glen Road at Nugget Lane to prevent traffic stopped at the signal from blocking entry to south Nugget Lane. The Golf Course Drive access would not be provided.

### **2.2.3 BICYCLE PATH ALTERNATIVES**

A Class I bicycle trail would be constructed from the intersection of the East Connector with Brown's Ranch Road, running south along the east side of Levee Road to a bicycle/pedestrian bridge crossing East Weaver Creek. Two alternative locations are being evaluated for the location of the bicycle/pedestrian bridge.

#### *OPTION A*

Option A would cross from the Yingling Construction Company access on Levee Road to the County property at the end of Park Avenue, adjacent to the Community Garden. This trail would provide direct

access to Lowden Park without using county roads, and to Weaverville Elementary School by crossing Washington Street from Lowden Park.

### *OPTION B*

Option B would continue south along the Levee Road and cross East Weaver Creek farther downstream. The trail would pass through the Weaverville CSD maintenance yard to Weaver Street, near the intersection with Park Avenue and Lowden Lane. Travel for a short distance on county roads with sidewalks would be necessary to reach Lowden Park or Weaverville Elementary School.

### **2.2.4 NO PROJECT ALTERNATIVE**

The No Project Alternative would not construct the Trinity County East Connector Roadway Project. Although this alternative results in no immediate costs or environmental impacts, the alternative would not provide a long-term solution for the operational and circulation issues in the Weaverville Basin. This alternative would not provide an alternative route between SR 3 and SR 299 and a means for residents to get around in Weaverville without using SR 299, and would not relieve existing and future traffic congestion and associated air quality problems in and adjacent to Weaverville. In addition, this alternative would not support implementation of the *Weaverville Basin Traffic Circulation Study* and would be inconsistent with the *Trinity County Regional Transportation Plan*, the *Circulation Element of the Trinity County General Plan* and the *Weaverville Community Plan*.

### **2.3 ALTERNATIVES CONSIDERED AND WITHDRAWN**

The Alternative 3 alignment is similar to Alternative 2, except that this alignment would pass to the east of the senior center and east of the unnamed tributary to Lance Gulch. The alignment would cross Brown's Ranch Road approximately 90 m (295 ft) east of the location proposed for Alternative 2. This alignment would remain on the east side of the gulch, eventually crossing it and tying into the alignment proposed for Alternative 2. Alternative 3 would take right-of-way from additional private residential properties, and an agricultural property, while still severing a portion of the mill property. It would pass closer to residences on Brown's Ranch Road, and would require removal of more ponderosa pine forest and foothill pine forest than the other alternatives. It would require an additional water crossing. Because this alternative would result in greater environmental and right-of-way impacts the alternative was discarded from further environmental review.

### **2.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CEQA requires that an EIR identify the "environmentally superior alternative" where such an alternative exists. In some cases, it is difficult to identify an alternative that is clearly "environmentally superior" or

would have the least impact on the environment. This is the case when each of the project alternatives will reduce some impacts and increase others. When none of the alternatives appears to be “environmentally superior,” the EIR must at minimum compare the significant effects of each alternative. **Table 2-1** summarizes the relative impacts of the various alternatives considered in detail, including the No Project Alternative. From this analysis, Alternative 1, Sub-alternative C, and Option A appear to be the “environmentally superior alternatives” overall. However, each alternative reduces some impacts and increases others. Therefore, decision makers should weigh the various impacts and benefits of each alternative, and may decide that some impacts or benefits outweigh or offset some others.

Table 2-1. East Connector Roadway Alternatives Comparison of Impacts

	Roadway Alignment Alternatives				SR 299/Glen Road/East Connector Intersection Sub-Alternatives			Bike/Pedestrian Trail and Bridge Alternatives	
	No Project	Alt 1	Alt 2	Alt A	Alt B	Alt C	Option A	Option B	
<b>Geology, Seismicity, Soils</b>	no impact	same	same	no impact (intersection already paved)	no impact (intersection already paved)	no impact (intersection already paved)	same	same	
<b>Hydrology, Water Quality, Stormwater Runoff</b>	no impact	same	same	no impact (intersection already paved)	no impact (intersection already paved)	no impact (intersection already paved)	same	same	
<b>Hazardous Waste/Materials</b>	no impact	same	same	no impact (intersection already paved)	greatest impact from alteration or removal of one building	no impact (intersection already paved)	same	same	
<b>Air Quality</b>	no impact	same	same	same	same	same	same	same	
<b>Noise</b>	no impact	greater impact (to senior population)	lesser impact to senior population (Weaver Creek Apts)	same	same	same	same	same	
<b>Energy</b>	no impact	no impact	no impact	no impact	no impact	no impact	no impact	no impact	
<b>Waters of the U.S. (Including Wetlands)</b>	no impact	slightly less impact from total fill of 0.95 ac waters of the U.S.	slightly more impact from total fill of 0.96 ac waters of the U.S.	no impact	no impact	no impact	no impact	no impact	
<b>Vegetation and Invasive Species/Wildlife</b>	no impact	greater impact to 1.3 ac riparian habitat	less impact to 0.95 ac riparian habitat	no impact	no impact	no impact	greater impact to 0.15 riparian vegetation	less impact to 0.03 riparian veg	
<b>Threatened and Endangered Species</b>	no impact	greater impact due to riparian habitat impacts	less impact due to less riparian habitat impacts	no impact	no impact	no impact	greater impact due to riparian habitat impacts	less impact due to less riparian habitat impacts	

Table 2-1. East Connector Roadway Alternatives Comparison of Impacts

	Roadway Alignment Alternatives			SR 299/Glen Road/East Connector Intersection Sub-Alternatives			Bike/Pedestrian Trail and Bridge Alternatives	
	No Project	Alt 1	Alt 2	Alt A	Alt B	Alt C	Option A	Option B
<b>Floodplains</b>	no impact	slightly greater impact (up to 0.89 foot raise in Base Flood elevation)	slightly less impact (up to 0.83 raise in Base Flood elevation)	no impact	no impact	no impact	no impact	no impact
<b>Coastal Zone</b>	no impact	no impact	no impact	no impact	no impact	no impact	no impact	no impact
<b>Wild and Scenic Rivers</b>	no impact	no impact	no impact	no impact	no impact	no impact	no impact	no impact
<b>Parks, Recreational Areas, Wildlife and Waterfowl Areas</b>	no impact	no impact	no impact	no impact	no impact	no impact	no impact	no impact
<b>Land Use, Planning and Growth</b>	Greatest impact (incompatible with existing land use plans)	less impact in some areas (greater land use incompatibility and safety impacts to seniors; more severed mill property)	greater impact to in some areas (less safety impact to Senior Center, but greater land use incompatibility for residents on Brown's Ranch Road; greater impact on future plans for sr. apts. at Sr Center. more ROW take.	less impact. No businesses removed, but access to Nugget Lane closed at Glen Road.	greatest impact (1 commercial property altered or removed and Nugget Lane closed at Glen Road)	Least impact to businesses on Nugget Lane, in-only access to Nugget Lane.	less impact	greater impact from safety issue with 3-way intersection and County roads at end of trail, land use issues with the Weaverville CSD yard, and more ROW required
<b>Farmlands/Agricultural Lands</b>	no impact	no impact	no impact	no impact	no impact	no impact	no impact	no impact

**Table 2-1. East Connector Roadway Alternatives Comparison of Impacts**

	Roadway Alignment Alternatives					SR 299/Glen Road/East Connector Intersection Sub-Alternatives			Bike/Pedestrian Trail and Bridge Alternatives	
	No Project	Alt 1	Alt 2	Alt A	Alt B	Alt C	Option A	Option B		
<b>Community Impacts (Social and Economic)</b>	No physical impact, but project benefits not realized.	less impact on residents on Brown's Ranch Road, but severing a large area of mill property, safety issues for Senior Center.	greater impact for similar reasons described for Land Use, above	less impact from change in access to businesses on Nugget Lane	greatest impact from 1 commercial property that must be altered or removed; changes in access to businesses on Nugget Lane, resulting in reductions of sales and property taxes	least impact due to limited (in-only) access to Nugget Lane	less impact	greater impact due to safety and the loss of property taxes		
<b>Public Services and Utilities</b>	no impact	same impact/same benefit due to new alternate emergency routes	same impact/same benefit due to new alternate emergency routes	same impact/same benefit	same impact/same benefit	same impact/same benefit	no impact	no impact		
<b>Traffic and Transportation</b>	greatest impact from continued circulation and traffic delay problems	Reduced benefit, due to reduced efficiency and safety at Senior Center crossing	greatest benefit/ least impact	same benefit	same benefit	same benefit	same benefit	same benefit		

**Table 2-1. East Connector Roadway Alternatives Comparison of Impacts**

	Roadway Alignment Alternatives				SR 299/Glen Road/East Connector Intersection Sub-Alternatives			Bike/Pedestrian Trail and Bridge Alternatives	
	No Project	Alt 1	Alt 2	Alt A	Alt B	Alt C	Option A	Option B	
<b>Visual Resources/ Aesthetics</b>	no impact	least impact due to construction along existing Brown's Ranch Road	greatest impact due to construction of new road east of sr. center	no impact (existing intersection); minor benefit due to under-grounding of utilities	no impact (existing intersection); minor benefit due to under-grounding of utilities	no impact (existing intersection); minor benefit due to under-grounding of utilities	no impact	no impact	
<b>Historic and Archaeological Resources</b>	no impact	same	same	no impact	no impact	no impact	same	same	

# CHAPTER 3.0

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## AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND MITIGATION MEASURES

This chapter provides an integrated presentation of the affected environment, environmental consequences and mitigation measures for the identified issue areas. Potential effects of implementing the proposed project, including permanent, temporary (construction phase), and cumulative effects, are identified, along with mitigation measures recommended to lessen or reduce the identified impacts.

The affected environment describes the environment in the project area as it exists before the commencement of the project. The affected environment is presented from site, local, subregional and/or regional perspectives, as appropriate to each environmental topic. Environmental consequences describe estimated changes to the affected environment – physical, biological, social, and economic – of implementing each of the project alternatives described in Chapters 1 and 2.

Environmental consequences may be either direct or indirect impacts, and direct and indirect impacts may also be described as either permanent or temporary in nature. These terms are defined as follows:

- **Direct impacts:** Any alteration, disturbance, or removal of biological resources that would result directly from project-related activities on the landscape is considered a direct impact. Examples of direct impacts include the removal of vegetation for a new road or other development, and the compaction of soils due to heavy equipment use.
- **Indirect impacts:** Impacts may also occur, not as a direct result of project actions, but indirectly as an unintentional consequence of project-related activities. Examples of indirect effects include elevated noise and dust levels in the vicinity of project actions that would affect wildlife behavior; the reduction of wildlife habitat contiguity due to new development; and the introduction of invasive wildlife and plants.
- **Permanent impacts:** All impacts that result in the irreversible changes are considered permanent. Examples include the loss of vegetation and wildlife habitat due to development. Permanent, direct impacts would be limited to the footprints of the developed area. Examples of permanent, indirect impacts would be ongoing maintenance actions or elevated noise in the project vicinity that would affect wildlife behavior in the project vicinity.
- **Temporary:** Any impacts considered to have reversible effects can be viewed as temporary. Examples of a temporary, direct impact would be the use of a construction equipment storage area that would recover to natural habitat after completion of the project. Examples of



indirect, temporary impacts include the generation of noise and fugitive dust during construction that would affect wildlife behavior in the vicinity.

In this chapter, permanent, temporary, and cumulative impacts are discussed separately for each issue area. Environmental consequences (whether permanent, temporary, or cumulative) are identified and determined to be less than significant, potentially significant, cumulatively significant, or significant and unavoidable. According to CEQA *Guidelines* Section 15382, a significant impact is "... a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project...". For each issue area evaluated, criteria for significance have been developed using the CEQA *Guidelines*, local (Trinity County or Weaverville) standards, or the "significance thresholds" of federal, state, regional, or local agencies. Significance criteria vary for each environmental issue analyzed and are defined at the beginning of each impact analysis section.

Cumulative impacts result when the incremental effects of the project are considerable when viewed in connection with the effects of other past, present, and reasonably foreseeable projects producing similar effects, regardless of what agency, organization, or person undertakes such actions. The estimated cumulative effects from the proposed East Connector Roadway project include the following approved or reasonably foreseeable projects in the area:

- Proposed new Weaverville airport
- Proposed West Connector Roadway project
- Ongoing maintenance and removal of riparian vegetation along a segment of East Weaver Creek from 100 feet upstream of Brown's Ranch Road to 100 feet downstream of the SR 299 bridge that is designated as a local flood protection
- Vegetation removal and grading within a parcel of land at the north end of Weaverville that Trinity County recently acquired to expand its existing road maintenance station
- Caltrans widening project on SR 299 and the bridge over East Weaver Creek for bike lanes and sidewalks. The widening would be from Mill Street to Mountain View Street, along both sides of SR 299. The bridge widening will clear span East Weaver Creek and will not encroach on the creek's floodplain or ordinary high water mark. The project includes bike lanes, but does not include new parking.

Mitigation measures may be: 1) necessary to reduce the identified impact below a level of significance; 2) recommended to reduce the magnitude of a significant impact, but not below a level of significance; and 3) recommended to reduce the magnitude of a less than significant impact. In some cases, implementation of more than one mitigation measure is needed to reduce an impact below a level of significant.

Mitigation follows the strategy of avoid/minimize/rectify/reduce over time/compensation. This strategy includes:

- **Avoiding** the impacts altogether by not taking a certain action or parts of an action.
- **Minimizing** impacts by limiting the degree or magnitude of an action and its implementation.
- **Rectifying** the impact by repairing, rehabilitating, or restoring the impacted environment.
- **Reducing** or eliminating the impact over time by preservation and maintenance operations during the life of an action.
- **Compensating** for the impact by replacing or providing substitute resources or environments.

Where no impact is identified, or where an impact will be less than significant, mitigation is not required. Significant, unavoidable effects that cannot be fully mitigated are addressed in Section 3.22. As noted in Section 3.22, the project is not expected to result in significant unavoidable effects.

Some proposed mitigation measures mitigate for impacts in more than one resource area. In such cases, the mitigation measure is discussed in detail for one resource area (generally the first resource area discussed in the EIR) and then briefly summarized in other resource areas. For example, mitigation measures addressing project impacts to riparian habitat are discussed in detail in Section 3.8, (Vegetation, Invasive Species, Wildlife), but these measures also mitigate impacts to water quality, wetlands, threatened and endangered species, and floodplains and are referred to in the sections discussing these resources (Section 3.2, 3.7, 3.9, and 3.10). In each section, the mitigation measures are identified by the section in which they are discussed in detail. Mitigation measures are also usually identified by the first EIR section in which they appear, but this is not always the case (e.g., Habitat Mitigation-4, which is discussed in detail in Section 3.8 and referred to in Section 3.2, 3.7, 3.9 and 3.10).

## 3.1 GEOLOGY, SEISMICITY, SOILS

This section discusses the geology and soils underlying the project site and discusses known geological hazards, including seismic hazards, in the project area. The section addresses impacts related to project area geology, soils, and seismicity and proposes mitigation measures, as appropriate. Taber Consultants conducted a Geotechnical Review for the project site (Taber Consultants, 1999a; see Appendix C).

### 3.1.1 AFFECTED ENVIRONMENT

#### *GEOLOGY*

The proposed project area is located within the southern portion of the Klamath Mountains Geologic Province. Within Trinity County, the Province is generally mountainous with peaks ranging between 5,000 and 9,000 feet in elevation. The upper elevations show signs of glaciation, although glaciers have retreated in this area. The mountains are generally northwesterly trending (Trinity County Planning Department, 2002b).

The northern 950 meters (3,116 ft) and southern 250 meters (820 ft) of the proposed roadway are underlain by Quaternary alluvial sediments of East Weaver Creek. The remainder of the roadway is underlain by the Weaverville Formation. The Oligocene age non-marine sediments that comprise the Formation are predominantly conglomerates. However, the Formation also includes fine-grained and shaly sandstone, shale, lake bed deposits, lignite and tuff. The U.S. Geological Survey (USGS) 15-minute Weaverville Quadrangle map indicates that most of the alluvial sediments on the east side of East Weaver Creek, at the north end of the project, are tailings from mining operations.

#### *SOILS*

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) has mapped soils in the project area. Soils along East Weaver Creek consist of Atter-dumps/ dredge tailings. The proposed alignment is underlain by soils of the Urban land-Xeralfs complex of disturbed urban soils in developed areas. The adjacent hillside is mapped as the Musserhill-Weaverville complex, consisting of gravelly loam and clay loam (USDA 1998; see **Figure 3.1-1**). Soils observed during site reconnaissance consist primarily of compact to dense, but un-indurated silty clayey sand to sandy silt and locally included gravels and cobbles (Taber Consultants, 1999a).

#### *SEISMICITY AND OTHER GEOLOGIC HAZARDS*

No significant geologic hazards were identified at or in the vicinity of the project site. Review of aerial photographs of the site and published geologic mapping did not indicate any evidence of specific unstable

features, active faulting (e.g., offset drainages or sag ponds), or other geologic hazards. Taber Consultants observed desiccation cracks in soils at a few locations along the project corridors, indicating expansive soil. Leaning trees, soil cracks, and other indications of possible unstable slope conditions were observed in the areas of Weaverville Formation sediments. These indicators do not appear related to deep-seated landsliding, however, and in general slopes appeared to be stable.

Earthquakes can result in damage to structures, fires and loss of life. Ruptured water lines and temporary power losses can be expected, reducing the effectiveness of emergency response services. Other secondary effects of a maximum expected earthquake could include liquefaction, landsliding, differential ground settling, other forms of ground failure, and seiches. The *Safety Element of the Trinity County General Plan* indicates that Trinity County is located in a region of low historical seismicity and little known Quaternary faulting. There are no "active" or "potentially active" faults in the project vicinity. Active faults are those which are considered geologically "recent", with measurable displacement within the last 10,000-11,000 years. Potentially active faults are those with activity in the late Quaternary period, or the last 700,000 years. Irwin (1963) indicates a northwesterly trending fault located about 1.5 km (0.9 mile) to the southwest of the project at its closest approach. This fault and other faults in the Weaverville region are of pre-Quaternary age (1.6 million years or older). However, the region may be subjected to low to moderate levels of ground shaking from nearby potentially significant faults including Likely, Hat Creek, Freshwater, Mendocino, and San Andreas. Surface faulting beneath the County has only a remote probability of occurring because no Quaternary faults have been recognized (Trinity County Planning Department, 2002b).

The Weaverville area is also not subject to seiches, since no large reservoirs or lakes are located in the immediate vicinity. Landsliding presents hazards to homesites and roads developed in unstable areas. There are several inactive and a few active landslides in the Weaverville area, which appear to be associated with fault lines, geologic contacts, steep slopes and inner gorges or streams (Trinity County Planning Department, 2002b).

#### *PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES*

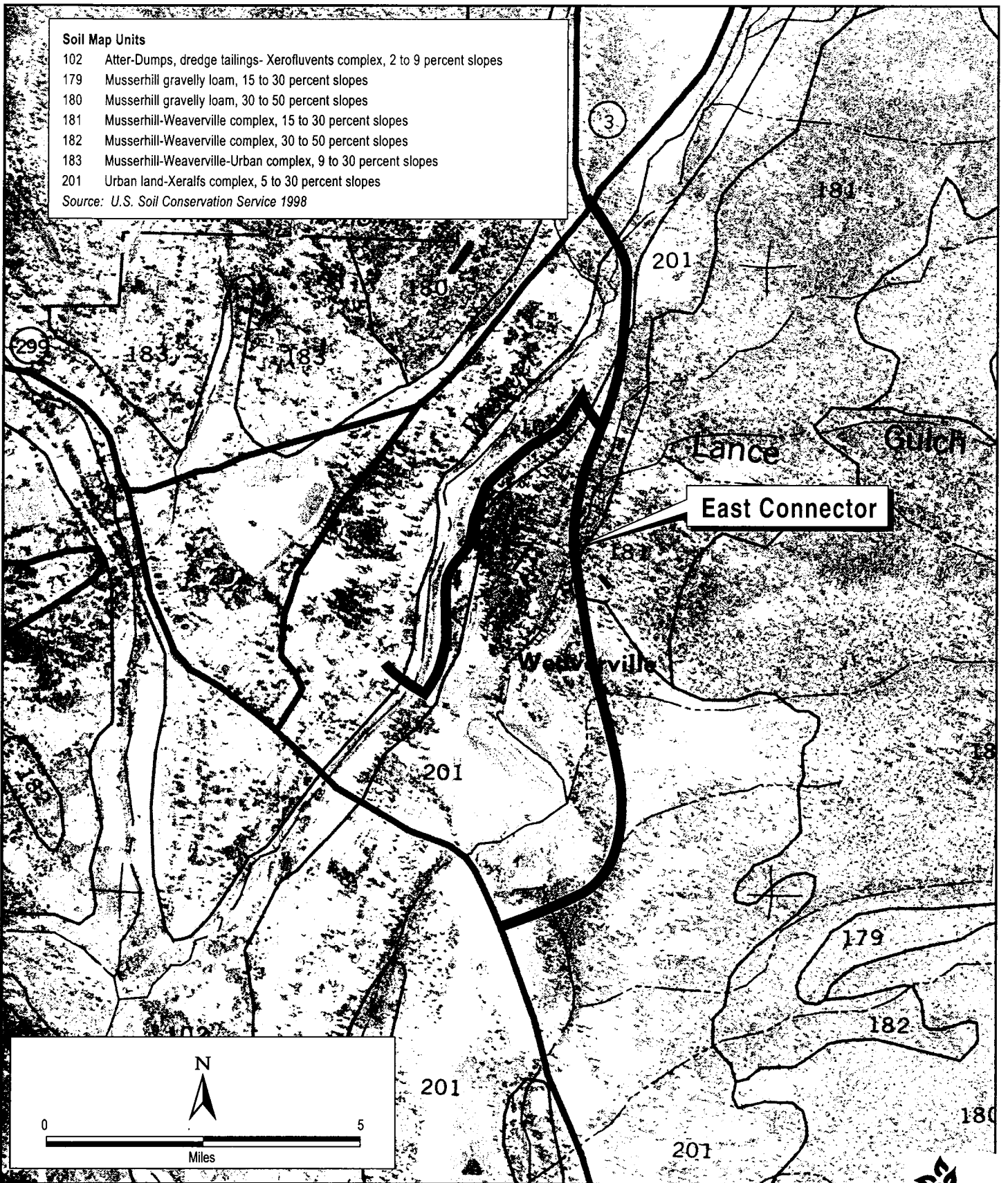
##### *Trinity County General Plan*

The Seismic or Geologic Hazards section of the Safety Element of the Trinity County General Plan (Trinity County Planning Department, 2002b) addresses various hazards related to seismic activities and

**Soil Map Units**

- 102 Atter-Dumps, dredge tailings- Xerofluvents complex, 2 to 9 percent slopes
- 179 Musserhill gravelly loam, 15 to 30 percent slopes
- 180 Musserhill gravelly loam, 30 to 50 percent slopes
- 181 Musserhill-Weaverville complex, 15 to 30 percent slopes
- 182 Musserhill-Weaverville complex, 30 to 50 percent slopes
- 183 Musserhill-Weaverville-Urban complex, 9 to 30 percent slopes
- 201 Urban land-Xeralfs complex, 5 to 30 percent slopes

Source: U.S. Soil Conservation Service 1998



East Connector Roadway/EIR\_Graphics/Figure 03\_01\_01\_Soils.ai 12/20/02 CS

Source: U.S. Department of Agriculture,  
Soil Survey of Trinity County, California Weaverville Area



**Figure 3.1-1**  
Soils Map  
Trinity East Connector Project

landsliding. The stated goal related to seismic safety is to: "reduce the threat to life and property from seismic and geologic hazards." Seismic safety policies that relate to the proposed East Connector Roadway project are as follows:

- S.4.1 (B) Geologic hazards and seismic safety shall be considered in the preparation of environmental documents as required by the California Environmental Quality Act.
- S.4.1 (E) [The County shall] confirm that all construction and grading activities done will not adversely affect the stability of any slope.

### *Weaverville Community Plan*

The Hazard section of the *Weaverville Community Plan* (Trinity County, 1990) contains the following policies regarding geologic hazards, soils and seismicity that relate to the proposed East Connector Roadway project:

- **Goal #2:** To reduce the potential risk of humans from earthquake and associated hazards
- **Goal #3:** To discourage development on unstable slopes or soils
  - **Objective 3.1:** Development proposals on steep slopes, or existing landslide areas should be strongly discouraged.

### 3.1.2 SIGNIFICANCE CRITERIA

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant geological impacts:

Would the project:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
  - Strong seismic ground shaking?

- Seismic-related ground failure, including liquefaction?
- Landslides?
- Result in substantial soil erosion or the loss of topsoil?
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

As discussed below, the East Connector Roadway project site does not contain known deposits of economic mineral resources. The project is not located in an area that is subject to significant geologic hazards. The project is not located on a geological unit or soil that is unstable or would become unstable as a result of the project. The project will not generate wastewater. Some soils of the Weaverville Formation may be expansive or subject to differential settling. The project could cause soil erosion during and immediately after construction. Mitigation measures are proposed to reduce these potential impacts to less than significant.

### 3.1.3 PERMANENT IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Development of the proposed East Connector Roadway project would result in no change in underlying geologic materials or structure. There are no known unique geologic resources located within the project alternatives. While mining has occurred in the vicinity of the project site, the site does not involve known deposits of economic mineral resources. Although development of the new roadway will require grading and ground preparation, it will not result in significant topographic change.

No active or potentially active faults are located on or adjacent the project site and the proposed project is not expected to involve exposure to faulting hazards. The project would be exposed to seismic shaking at levels commonly experienced in Trinity County. Although landslides are an identified risk in the project vicinity, the proposed project does not appear to be subject to significant landslides or other significant geological hazards. Rock material within the project site is considered suitable for construction of the proposed project.

The project will disturb earth by grading, cutting and filling, and therefore would increase erosion potential during and after construction. Short-term, construction-related, erosion control would include sediment barriers, synthetic slope covers, hydroseeding, etc. Long-term erosion control, particularly for embankment slopes, would include establishing vegetation and controlling surface water flow.

A *Geotechnical Review* prepared by Taber Consultants for this project concludes:

“No significant geologic hazards were identified within the site and near vicinity, and the project is considered feasible with respect to geotechnical issues. The primary geotechnical considerations associated with the project are considered to be slope stability in the area of Stations 116+60 to 117+20, foundation parameters for the bridge, construction of a structural pavement section on the coarse tailings material, and the potential for zones of compressible ‘slickens’ within or underlying the tailings. Each of these is expected to be mitigated by typical engineering practice and design.”

Support for the proposed roadway bridge over East Weaver Creek is likely to be available within materials of the Weaverville Formation at a relatively shallow depth below the creek bottom (Taber Consultants, 1999a). The primary geotechnical concerns for the proposed East Connector Roadway project are discussed as impacts below. Impacts are expected to be similar for all project alternatives.

As noted above, leaning trees, soil cracks, and other indications of possible unstable slope conditions were noted during project site reconnaissance (particularly in the area of Stations 116+60 to 117+20). Unstable slope conditions are expected to be treated by removal and recompaction, shear keys, buttress fills, subdrainage, etc. Geotechnical studies will be performed during project design. The road will be designed by registered civil engineers. Project specifications will include specific materials, compaction standards, etc. to prevent slope failure and differential settlement.

The Project Description (Section 1.4.4, *Construction Methodology*) specifies that additional geotechnical investigation shall be performed at the site of bridge foundations, to determine foundation depth and the most suitable foundation design.

The risk of significant damage at the project site from ground rupture or shaking is generally low since there are no active faults in the site vicinity and since the largest historical earthquakes felt in the Weaverville area have had an MMI of IV (roughly equivalent to a magnitude of 5 on the Richter scale). Since the East Connector Roadway project, including the bridges, would be designed to withstand anticipated seismic hazards associated with Seismic Zone 3, the risk of damage from seismic hazards is less than significant. In addition, the project provides an additional through route in Weaverville that will improve emergency response and evacuation times.



During project design, engineers will attempt to balance the amount of cut and fill material for the project. Should imported material be necessary, the material adjacent to the shopping center and CHP building, at the southern terminus of the proposed roadway consists of clean native materials from Oregon Pass, imported from a Caltrans construction project on SR 299. The owner of the shopping center is interested in leveling this area, and would make the material available. This area is within the project study area, and use of this material has been evaluated environmentally as part of this project. No sensitive biological or cultural resources were found in this location. Alternatively, material may be purchased from commercial sources. County policy requires material to be purchased only from sources that appear on the State Department of Conservation's AB 3098 State Mining and Reclamation Act (SMARA) Eligible List, indicating they comply with SMARA.

If excess spoils are generated by the project, they may be used for the County's road maintenance yard expansion project. This area was also evaluated environmentally as Staging Areas 1 and 2. Alternatively, excess spoils may be stockpiled in the County's road maintenance yard for use on future projects.

**Geology Impact-1** The proposed project may result in increased erosion potential after construction, until final landscaping is established.

**Significance:** Potentially significant impact, but mitigated.

**Geology Mitigation-1** Activities that increase the erosion potential shall be restricted to the fullest extent possible to the relatively dry summer and early fall period to minimize the potential for rainfall to mobilize and transport sediment to East Weaver Creek. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures must be in place and operational at the end of each construction day and maintained until disturbed ground surfaces have been successfully revegetated.

**Geology Mitigation-2** Type D erosion control measures (i.e., hydroseeding) shall be implemented during construction of the proposed project in nonriparian upland areas. These measures shall conform to the provisions in Section 20-3 of the Caltrans Standard Specifications and the special provisions included in the contract for the project. Erosion control shall consist of one application of erosion control materials within nonriparian upland areas to embankment slopes, excavation slopes, and other areas designated by the project engineer. These materials shall consist of fiber, seed, commercial fertilizer, and water. These materials shall conform to Section 20-2 of the Caltrans Standard Specifications. Commercial fertilizer used for nonriparian upland areas shall conform to the provisions in Section 20-2.02 of the Caltrans Standard Specifications.

**Post-mitigation Significance:** Less than significant

**Geology Impact-2** Differential ground settling may occur along structural pavement sections built on coarse mine tailings material containing or overlying compressible "slickens", or on expansive soils.

**Significance:** Potentially significant/indirect impact, but mitigated.

**Geology Mitigation-3** A California Registered civil engineer shall design the proposed facility in accordance with the Caltrans Design Manual, AASHTO Design Guide, California Standard Plans and California Standard Specifications, and in accordance with the recommendations of a site-specific Geotechnical Review. Materials exploration and testing shall be conducted during design and construction to determine the suitability of materials encountered and any necessary treatments. Tailings of boulders and cobbles lacking a finer grained matrix will be either removed, mixed with a finer grained material and replaced or overlaid with a soil and geotextile sub-base. Expansive soils or zones of weak, compressible material within on underlying tailings, if encountered, will be either removed and replaced with competent material, or surcharge loaded so that potential for settlement is eliminated.

**Post-mitigation Significance:** Less than significant

**Geology Impact-3** Completion of the proposed East Connector Roadway could expose people or structures to seismic hazards.

**Significance:** Less than significant (no mitigation required).

**Geology Impact-4** Structure, fill and roadway foundation preparation may require fill soils, and/or may produce spoils.

**Significance:** Less than significant with measures included in the Project Description.

### 3.1.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Construction of the new roadway and bike path would involve excavation, grading, and construction zone soil disturbance. Disturbed soils may be subject to erosion. However, permanent erosion control measures shall be incorporated into the project plans and specifications. The project Design Plans and Specifications will include specific methods and locations of both temporary and permanent erosion control structures, materials and Best Management Practices. The Project Description (see Section 1.4.4,

*Construction Methodology*) contains Caltrans Standard Specifications pertaining to erosion control. Additional measures are proposed as mitigation in this section.

**Geology Impact-5** Construction activities associated with the proposed East Connector Roadway project would temporarily expose soils to wind and water erosion within the proposed project area.

**Significance:** Significant, but mitigated.

**Geology Mitigation-5** The following measures will be implemented:

- Soil exposure will be minimized through the use of BMPs, ground cover, and stabilization practices. Exposed dust-producing surfaces will be sprinkled daily until wet while avoiding producing runoff.
- The TCDOT contractor will conduct daily inspections and maintenance of erosion and sediment control measures. Failures will be repaired each work day if they occur.
- All temporary erosion and sediment control measures will be removed after the working area is stabilized or as directed by the project engineer.

**Post-mitigation Significance:** Less than significant

### 3.1.5 CUMULATIVE IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Like the East Connector Project, engineers will attempt to balance cut and fill quantities on the West Connector and new airport projects. If import is required, it will be obtained from sources that comply with SMARA. If excess spoils are generated by these projects, they may be stockpiled in a long-term stockpile site that has been evaluated environmentally, for use on future projects.

Like the East Connector Roadway project, these other projects would be designed by a registered Civil Engineer. Design specifications will include an Erosion Control Plan and Grading Plan, and a Landscaping Plan which would contain temporary and permanent measures to control erosion during and after construction of the projects. In addition, an SWPPP will be prepared by construction of each project.

**Geology Impact-6**      There could be cumulative impacts from the off-site importation of fill soils for this and the proposed West Connector Roadway and new Weaverville Airport projects. All import will be from mine sites or borrow sites that are in compliance with SMARA. Alternatively, stockpiled spoils generated by other projects may be used, if available.

**Significance:**      Less than significant (no mitigation required).

**Geology Impact-7**      There could be cumulative grading and erosion impacts from grading for this and the proposed new Weaverville Airport projects, located within the same watershed.

**Significance:**      Less than significant with mitigation proposed for both projects.

## 3.2 HYDROLOGY, WATER QUALITY, STORMWATER RUNOFF

### 3.2.1 AFFECTED ENVIRONMENT

This section describes the existing hydrological resources within the project area, including the regional hydrology, regional surface water quality, groundwater supply and quality. Floodplain impacts are addressed separately in Section 3.10, *Floodplains*.

#### *REGIONAL HYDROLOGY*

The project area is located within the watershed of the Trinity River, below Trinity and Lewiston Lakes, and is drained by East Weaver Creek, which flows along portions of the proposed road and bike/pedestrian alignments, and Lance Gulch, which flows along the base of the bluff on the east side of the road alignment (see **Figure 1-2**).

East Weaver Creek joins West Weaver Creek at Mill Street in southern Weaverville, and the joined branches of Weaver Creek flow to the Trinity River at Douglas City. The Trinity River is a major tributary of the Klamath River system and has been subject to extensive water development as part of the federal Central Valley Project (CVP). Major features of the Trinity River Division (TRD) of the CVP include Trinity Lake (2.448 million acre-feet), Lewiston Lake (14,700 acre-feet), Whiskeytown Lake, Buckhorn Dam, and the tunnels and penstocks which transport approximately 75 percent of the annual flow of the upper Trinity River to the Sacramento River via Judge Francis Carr powerhouse at Whiskeytown Lake and the Spring Creek Tunnel which discharges to Keswick Reservoir.

Total annual diversions from the TRD to the Sacramento River have averaged slightly less than 1.0 million acre-feet since completion of the TRD in 1964. Current annual Trinity River minimum instream flows at Lewiston Dam are 340,000 acre-feet (af), but may increase up to 815,000 af/year, pending resolution of litigation and preparation of a supplemental environmental impact statement (EIS) for the Trinity River Record of Decision, signed by former Interior Secretary Bruce Babbitt on December 19, 2000. Trinity River flows below Lewiston reflect the high degree of control imposed by upstream facilities. Prior to completion of the TRD dams on the Trinity River, flows at Lewiston exceeded 75,000 cubic feet per second (cfs), and have, at times, exceeded 100,000 cfs. Following completion of the TRD, the highest recorded release below Lewiston Dam was approximately 14,500 cfs in 1974. Currently, the Bureau of Reclamation limits such releases to 6,000 cfs unless an emergency were to occur. With distance downstream, flows are increased by unregulated contributions from side channels and major tributaries, increasing the volume and seasonal variability in river flows.

The USGS maintained a monitoring station on Weaver Creek from 1959 to 1969. Weaver Creek is predominantly uncontrolled, with the exception of Weaverville CSD diversions upstream of the

community of Weaverville on West and East Weaver Creeks. Flows in Weaver Creek vary widely seasonally, with the highest flows generally occurring from January through March. This is typical of snowmelt and rainfall-dominated watersheds. The maximum flow of record on Weaver Creek was 2,570 cfs, recorded in December 1965. Minimum flows on Weaver Creek occur from August through October and range from no flow at all to a few cfs. Similar variations, with adjustments for smaller drainage areas, would apply to the other tributary drainages.

Lance Gulch is a spring-fed intermittent drainage that flows from Shasta Springs on Musser Hill, and crosses Brown's Ranch Road east of the project site. Upstream of Station 109+00, Lance Gulch has a well-defined bed and bank and a fairly well developed riparian corridor. Downstream of this location, where the proposed alignment would cross Lance Gulch, the channel and banks have been disturbed by previous mining and present mill operations. Lance Gulch feeds the mill ponds and then flows into a subsurface drainage system that conveys it beneath the Trinity Plaza Shopping Center and SR 299. Lance Gulch discharges into the industrial park at the south end of Weaverville, where it feeds a series of wetlands that are being protected and restored through a Wetland Reserve Program Easement between Trinity County and the NRCS.

#### *REGIONAL SURFACE WATER QUALITY*

As characterized in the Water Quality Control Plan for the North Coast Region (NCRWQCB, 1996), the Trinity River has been severely impacted by sediment, primarily because of land use practices and water diversions by the TRD. The Trinity River is listed by the California SWRCB, in conjunction with the USEPA, as a Clean Water Act (CWA) Section 303(d) impaired waterbody. The impairment is from sediment, largely a result of "flow depletion" by the TRD. The beneficial uses of the Trinity River include municipal, agricultural and industrial water supply, groundwater recharge, contact and non-contact recreation, commercial fisheries, cold freshwater fish habitat and wildlife habitat. Sediment impairs the use of the river as cold freshwater fish habitat.

As with other north coastal rivers and streams, the Trinity River is renowned for salmon and steelhead fishing. In addition to in-river sport fisheries, the Trinity River also supports tribal fishing for ceremonial, subsistence and sometimes commercial fisheries. The Trinity River also supports ocean sport and commercial fishing. However, major diversions of water from the basin since the 1960s have resulted in significant changes in the river, including changes in temperature regime and disruption of physical cues for migration and spawning. Over the years since dam construction, anadromous fisheries have declined to an estimated 10 percent of their former levels (NCRWQCB, 1996). Trinity River coho (silver) salmon are listed as a threatened species under the federal Endangered Species Act (ESA), and are being considered for listing under the California ESA. Additional detail on fishery concerns is provided in Section 3.9, *Threatened and Endangered Species*.

The Trinity River is included in the inventory of rivers protected by the Wild and Scenic Rivers Act (PL 90-542, as amended). The primary management objective for wild and scenic rivers is enhancement and maintenance of the "outstanding remarkable values" for which the rivers were designated. No portion of the East Connector Roadway project is located within the quarter-mile management area of the wild and scenic portion of the Trinity River.

Primary responsibility for water quality protection rests with the NCRWQCB. In accordance with the federal Clean Water Act, the NCRWQCB prepares and implements the basin Water Quality Control Plan, which is intended to provide "a definitive program of actions designed to preserve and enhance water quality and to protect beneficial uses of water in the north coast region. The plan establishes specific temperature objectives for the Trinity River and references an existing cooperative management program for operation of the TRD of the CVP, a mitigation program designed to protect and restore the river. The basin plan establishes specific objectives for water quality, summarized as follows:

- Free of coloration
- No increase in turbidity exceeding twenty percent above naturally occurring background levels
- No taste or odor-producing substances
- No floating material
- No substances which cause deposition of materials
- No increase in suspended sediment load and suspended sediment discharge
- No toxic substances in concentrations that are harmful
- No biostimulatory substances

As mentioned above, the SWRCB, in conjunction with the USEPA, has listed the Trinity River as an "impaired waterway" for sedimentation. As an impaired waterway, a Total Maximum Daily Load (TMDL) plan was completed by USEPA in December 2001. The intent of the TMDL is to contribute to achievement of adopted water quality standards and restoration/protection of beneficial uses; in this case, the Trinity River salmon and steelhead fishery. TMDLs address point as well as non-point sources and naturally-occurring sources. TMDLs are established measurable indicators of quality and numeric targets for subject pollutants. Subsequently, the NCRWQCB will be required to develop an implementation and monitoring plan that will regulate land uses that may impact water quality.

#### *REGIONAL GROUNDWATER*

There are no major groundwater aquifers in the project area. The porous recent alluvial deposits along the Trinity River, Weaver Creek and other waterways in the vicinity are recharged by surface water flows

in these streams and are frequently tapped for domestic water supplies. The majority of Weaverville is served with a public water system, which draws primarily from surface waters of East and West Weaver Creeks and the Trinity River. Most private wells in the area are established in streamside alluvial deposits.

#### *PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES*

##### *Trinity County General Plan*

The *Open Space/Conservation Elements* of the *Trinity County General Plan* (Trinity County Planning Department, 1973) contains the following objective and recommendation relevant to the proposed East Connector Roadway project:

- Objective: To preserve the quantity and quality of the existing water supply in Trinity County and adequately plan for the expansion and retention of valuable water supplies for future generations.
- Recommendation: Disapprove of any development which may pollute the existing streams and lakes or become the source of silt which washes down into water areas.

##### *Weaverville Community Plan*

The Natural Resources section of the *Weaverville Community Plan* (Trinity County, 1990) contains the general goal “to maintain and protect the high water quality for domestic use, fisheries and wildlife in the basin” and the following specific objectives that are relevant to the proposed East Connector Roadway project:

- **Objective 4.3.** Prevent land uses which result in siltation and pollution of lakes and streams. Such uses should be carefully monitored, and if necessary corrected to assure a clean and productive habitat.
- **Objective 4.4.** Encourage federal and private actions necessary to prevent degradation of water quality in the East and West Weaver watersheds, which are the sources of Weaverville’s domestic water supply.
- **Objective 4.6.** Disapprove of any development which may pollute the existing streams and lakes or become the source of silt which washes down into water areas.

### **3.2.2 SIGNIFICANCE CRITERIA**

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant floodplain impacts:



Would the project:

- Violate any water quality standards or waste discharge requirements?
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
- Otherwise substantially degrade water quality?

As discussed below, the proposed East Connector Roadway project would not cause violations of any water quality standards or waste discharge requirements. The project would not impact groundwater resources or alter existing drainage patterns substantially. The project includes a roadside drainage system and would help solve an existing drainage problem at the Trinity River Lumber mill property. The project would generate additional surface water runoff, and direct additional flows to Lance Gulch, which drains to an existing subsurface drainage system beneath the Trinity Plaza Shopping Center and SR 299. Increased erosion and roadway runoff could potentially degrade water quality in East Weaver Creek. However, with measures incorporated into the Project Description (Section 1.4.4) and proposed as mitigation (below), these impacts are reduced to less than significant.

### **3.2.3 PERMANENT IMPACTS**

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

The project will not generate wastewater subject to waste discharge requirements. Stormwater discharge during construction will be regulated by the North Coast Regional Water Quality Control Board through a water quality certification covering discharge of fill material into waters of the state, and through the General Stormwater Permit for Construction Activities under the NPDES system.

Due to the limited area of impermeable pavement, the East Connector project would not alter groundwater flows or interfere substantially with groundwater recharge. The public water supply source on East Weaver Creek is upstream of the project location, so the project will not impact the public water supply. The project will not alter the course of a river or stream, or divert drainages outside of their original watersheds, but the roadside drainage system would be a minor alteration in drainage patterns.

The East Connector Roadway project would contribute a minor amount of additional stormwater runoff to East Weaver Creek and Lance Gulch due to paving and/or compaction. The East Connector will introduce 6 acres of impermeable surface to the drainage basin. The additional impermeable surface is linear, (40 feet by 1.25 miles), with unpaved areas of permeable alluvium and mine tailings on both sides. The northern end of the project, including the bridge, will drain to East Weaver Creek through vegetated swales. The increase in runoff to East Weaver Creek from this short length of roadway will not be significant. Effects on the capacity of East Weaver Creek to convey flood flows are addressed in Section 3.10, *Floodplains*.

The central and southern portions of the alignment will drain to Lance Gulch. Stormwater from the Pioneer Heights area presently drains onto the mill at this location, interfering with the mill's wastewater and stormwater treatment facilities. The East Connector project would include a roadside drainage system along the east side of the road that would direct this runoff to the existing subsurface drainage system that conveys Lance Gulch beneath the Trinity Plaza Shopping Center and SR 299. This would remove an existing drainage problem from the mill property, resulting in a beneficial project impact. However, it may increase the flows in Lance Gulch through the subsurface system. If it is determined that the additional runoff generated from the road surface, combined with the drainage from Pioneer Heights, will exceed the capacity of the existing subsurface drainage system that conveys Lance Gulch beneath the Trinity Plaza Shopping Center and SR 299, then a detention basin will be constructed on the east side of the East Connector, in the vicinity of the intersection with Pioneer Lane. The detention basin will meter flows and attenuate storm peaks, to reduce peak volumes of discharge to the Lance Gulch system. The basin will also serve as a sedimentation basin, reducing sediment discharge to Lance Gulch from both the East Connector and the Martin Road/Pioneer Heights area.

Minor degradation of water quality could occur due to erosion or stormwater runoff from road surfaces. Roadside areas are of low gradient and high permeability. This will facilitate treatment of roadside runoff in natural, unlined drainage ditches before it is released to surface water bodies. The detention basin mentioned above will serve to settle out solids before they reach the subsurface drainage system of Lance Gulch.

**Hydrology Impact-1** An additional 6 acres of new impermeable surfaces resulting from construction of the East Connector Roadway and concentration of runoff from Pioneer Heights could cause additional loads of surface runoff to the subsurface drainage system of Lance Gulch.

**Significance:** Potentially significant/indirect impact, but mitigated

**Hydrology Mitigation 1** Drainage plans will be completed during project design by a California-registered civil engineer. The drainage system will be adequately sized to handle anticipated flows from a 100-year storm event. If it is determined by

the Rational Formula that the additional runoff generated from the road surface, combined with the drainage from Pioneer Heights, will exceed the capacity of the existing subsurface drainage system that conveys Lance Gulch beneath the Trinity Plaza Shopping Center and SR 299, then a detention basin will be constructed on the east side of the East Connector, in the vicinity of the intersection with Pioneer Lane. The detention basin will meter flows and attenuate storm peaks, to reduce peak volumes of discharge to the Lance Gulch system. The basin will also serve as a sedimentation basin, reducing sediment discharge to Lance Gulch from both the East Connector and the Martin Road/Pioneer Heights area.

**Post-mitigation Significance:** Less than significant

**Hydrology Impact-2** Road surfaces could carry pollutants such as sediments, fuels and oils to surface water bodies such as East Weaver Creek or Lance Gulch.

**Significance:** Potentially significant/indirect impact, but mitigated

**Hydrology Mitigation 2** Road runoff will not be discharged directly to East Weaver Creek or Lance Gulch. It will be conveyed through unlined, vegetated ditches and swales to surface water bodies. Vegetation and soils in the ditches will slow flows, trap solids and absorb liquid pollutants such as fuels and oils.

**Post-mitigation Significance:** Less than significant

### 3.2.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Construction activities will disturb soils and could result in the discharge of sediment, construction materials or chemicals such as fuels, oils, concrete or drilling muds into surface waters. Potential for erosion due to surface water flow would be primarily limited to cut and fill slopes and areas disturbed by grading during construction.

The SWRCB and Federal Law (40 CFR Parts 122-124) require that best available technology economically achievable and best conventional pollutant control technology be used to reduce pollutants. The TCDOT or its construction contractor would be required to prepare a SWPPP, which would include information on runoff, erosion control measures to be employed, and any toxic substances to be used during construction activities. Additional measures to reduce impacts to a less than significant level are included in the Project Description (Chapter 1.0) or as mitigation measures below. The Project Description (see Section 1.4.4, *Construction Methodology*) contains Caltrans Standard Specifications

pertaining to runoff, erosion control, and pollution prevention. All of the measures in the project description, Caltrans Standard Specifications and the mitigation measures listed below will be included in the project plans and specifications. The TCDOT will oversee the contractor to ensure the plans and specifications are followed.

Project construction will involve work in or near East Weaver Creek to install the bridges and roadway approaches and bicycle/pedestrian path. Construction Staging Areas 1 and 2 will be located near the vehicle bridge site on East Weaver Creek. Portions of the construction area will be near Lance Gulch, including Staging Area 4.

**Hydrology Impact-3** Temporary water quality impacts could occur as a result of construction of the East Connector Roadway roadway, bridge and bicycle paths.

**Significance:** Significant, but mitigated.

**Hydrology Mitigation-3** The following measures will be implemented:

- No contact of wet concrete with the live stream will be allowed. Groundwater that comes in contact with wet concrete during construction of the footing excavations will not be allowed to enter the creek but will be pumped to a truck or upland for disposal or treatment, or it may be discharged to a sediment-stilling basin and percolated back into the soil.
- If drilling muds are used to drill holes within the ordinary high-water zone, all drilling muds and fluid within all drilled holes will be pumped through a closed system, contained on-site in tanks, removed from the project area, and disposed of off-site at an appropriate facility.
- The TCDOT contractor will remove all spoils materials from the drilled pier holes and dispose of the material in a manner that will not result in discharge of runoff of sediment into Waters of the United States.
- Heavy equipment will not be operated in the active flow channel of East Weaver Creek.
- No diversion of surface flows will be allowed.
- Maintenance and refueling areas for equipment will be located a minimum of 150 ft away from the active stream channel. If equipment must be washed, washing will occur where the water cannot flow into the creek channel.
- Spill containment booms will be maintained on-site at all times during construction operations and/or staging or fueling of equipment.

Additional measures are also listed in Sections 3.1, 3.3 and 3.7 through 3.9 of this EIR. The

Specifications may include additional conditions resulting from Section 7 consultation with NOAA Fisheries (formerly the National Marine Fisheries Service, or included in the conditions of the following state and federal permits:

- ACOE's Section 404 permit (Nationwide Permit No. 14)
- RWQCB's Section 401 water quality certification
- RWQCB's General Stormwater Permit for Construction Activities
- CDFG's Streambed Alteration Agreement

**Post-mitigation Significance:** Less than significant

**Hydrology Impact-4** Use of staging areas near East Weaver Creek or Lance Gulch could result in discharge of construction materials or chemicals to the water bodies.

**Significance:** Significant, but mitigated.

**Habitat Mitigation-4** The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver Creek. TCDOT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent sediment and pollutant discharges to Lance Gulch and East Weaver Creek. There will be no removal of riparian vegetation for staging purposes.

### 3.2.4 CUMULATIVE IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

The proposed Weaverville Airport project will result in creation of a nearly level airport surface and up to 20 acres of additional paved areas. The west side of the airport will drain to East Weaver Creek. The northwest corner of the airport site may drain to the Lance Gulch system. Other portions of the east side of the airport will drain to existing unnamed drainages that cross beneath SR 299 in culverts before reaching Lance Gulch and/or East Weaver Creek. However, the proposed airport project also includes detention ponds designed to meter flows and prevent increase in peak flows in existing channels and downstream drainage facilities. Therefore, the combined increase in runoff from the East Connector Roadway and Weaverville Airport projects would not be expected exceed the capacity of the existing culverts beneath SR 299.

**Hydrology Impact-5** An additional 26 acres of new impermeable surfaces resulting from construction of the East Connector Roadway and proposed Weaverville Airport could cause additional loads of surface runoff to East Weaver Creek or Lance Gulch.

**Significance:** Significant, but mitigated by **Hydrology Mitigation-1** (see above) and detention ponds proposed to mitigate surface runoff impacts from the airport project.

**Post-mitigation Significance:** Less than significant

### 3.3 HAZARDOUS WASTE/MATERIALS

Taber Consultants conducted an HMA to assess the potential for hazardous materials or petroleum projects to exist within the immediate project site (Taber Consultants, 1999b; see Appendix C). In addition, a Phase I Environmental Site Assessment (ESA) was prepared for the land that Trinity County acquired from BLM that includes the north end of the project alignment and areas where the County plans to grade, log, and extend the existing road maintenance yard. (BLM 2001). The County recently acquired this land and has not used it for any operations that could potentially cause contamination. The HMA was included in the *East Connector Roadway Project Study Report*.

#### 3.3.1 AFFECTED ENVIRONMENT

##### *HAZARDOUS WASTE/HAZARDOUS MATERIALS REGULATIONS*

Hazardous waste is defined as any waste material that is a potential threat to human health and environment, having the capacity to cause serious illness or death. In any urbanized environment, hazardous waste and its safe handling and disposal is an issue that must be addressed. Hazardous materials are materials considered dangerous to people or the environment that are still in use. The use, transport, storage and disposal of hazardous waste and hazardous materials are subject to numerous laws and regulations at all levels of government.

##### *Federal Regulations*

At the federal level, exposure of humans, and in some cases the environment and wildlife, to hazardous chemical agents, is regulated primarily by four regulatory agencies: the USEPA, the Food and Drug Administration (FDA), the Occupational Safety and Health Administration (OSHA), and the Consumer Product Safety Commission (CPSC). The FDA and CPSC play a limited role in regulating hazardous materials as they pertain to the proposed project. In addition to these regulatory agencies, the Department of Transportation (DOT) regulates the interstate transport of hazardous materials.

##### *State Regulations*

At the state level, hazardous materials and hazardous waste are regulated through a number of statutes and regulations. These laws, many similar to their federal counterparts, regulate the use, storage, disposal, and transport of hazardous materials. The primary state regulatory authorities, the California Environmental Protection Agency (CalEPA), State Department of Toxic Substances Control (DTSC), SWRCB, and California Occupational Safety and Health Administration (CalOSHA), administer many of these laws.

The California State Highway Patrol under CCR Section 1150-1194, and the Code of Federal Regulations, Title 49 regulates transport of hazardous materials. When a hazardous material/waste spill originates on a highway, the California Highway Patrol is responsible for direction of cleanup and enforcement (CCR Section 2450-2454b). "Highway" is defined as a way or place of whatever nature, publicly maintained and open to the use of the public for purposes of vehicular travel. Highway includes streets and county maintained roads. A highway does not include a way or place under the jurisdiction of a federal governmental agency, which lies on National Forest or private lands, is open to public use, and for which the cost of maintenance of such way or place is borne or contributed to directly by any users thereof (Trinity County Planning Department, 2002b).

When a hazardous material/waste spill occurs on public land, it is the managing agencies' responsibility to direct cleanup and enforcement. They will initiate all investigations and cleanup, and contact the necessary personnel. When a hazardous material/waste spill occurs on private lands, the property owner is responsible for cleanup. Trinity County Environmental Health is contacted and ensures that proper cleanup and followup is conducted according to federal, state, and local regulations (Trinity County Planning Department, 2002b).

#### *HMA METHODS*

The HMA was based upon a review of the available records, discussion with County personnel, and a field reconnaissance of the site. It did not include subsurface investigation, sampling or testing of air, soils, surface water or groundwater; or assessment for the presence of radon or other naturally-occurring hazardous materials, lead-based paint, lead in drinking water, asbestos, materials containing asbestos or physical hazards (Taber Consultants, 1999b).

#### *Database Searches*

As part of the effort to identify sites with known releases of hazardous materials or petroleum products likely to affect the project corridor, or sites with potential for such releases, databases and site lists maintained by environmental regulatory agencies were searched for listed properties in proximity to the study corridor. Search distances varied for different databases, and ranged from a radius of 400 meters to 1,600 meters. A complete listing of the databases and site lists searched is provided in the HMA report (Taber Consultants, 1999b).

#### *Local Agency Contacts*

Local agencies responsible for hazardous waste management (i.e, Trinity County General Services, Trinity County Environmental Health Department and the NCRWQCB) were contacted to ascertain whether any agency record or personal knowledge of the study area indicated potential contamination sites.



### *Site Reconnaissance*

Taber Consultants conducted a brief reconnaissance of the project corridor and nearby vicinity on July 20, 1999. The traverse consisted of observation made walking approximately along the alignments for proposed Alternatives 1 and 2.

### *HMA RESULTS*

#### *Database Searches*

The potential for a site with an existing hazardous materials or hazardous waste condition to affect the project depends, in part, upon the nature of the proposed construction. For the East Connector Roadway, excavations for road cuts up to 5.5 meters (18 feet) deep are expected. Contaminants that have migrated from their original source might be encountered if the contaminant source is hydrologically up-gradient from the site and if the excavation extends below the depth of historic high groundwater. In general, East Weaver Creek is expected to act as a hydrologic barrier to contaminant transport.

The database search returned a total of 80 records, representing approximately 45 sites with potential contamination within 1,600 meters (1 mile) of the project site. In September 2002, Trinity County updated the information regarding these sites. **Table 3.3-1** summarizes the findings concerning individual sites with existing conditions that are located within or in close proximity to the proposed project area.

The record search conducted by Taber Consultants identified additional sites with environmental concerns within a 1 mile radius of the East Connector Roadway project. After reviewing the remaining sites, Taber Consultants concluded that these sites are too far away to significantly affect the project, or are hydrologically separated from the project by East Weaver Creek and are therefore not likely to have an effect on the project. Information regarding these other sites is available in the HMA report in the *East Connector Project Study Report*. None of the sites reported in the environmental record search for which locations could be identified appears to have a significant potential to affect the project.

**Table 3.3-1.  
Sites with Environmental Conditions Within or in Proximity to the Project**

SITE	Distance from Project	Database Listings	Potential Hazard Assessment
Weaver Landfill Disposal Site 1.5 mile NE Weaverville off SR 3 (City Dump Road)	~0.5 mi N	CALSITES, NFA, SWIS	No groundwater contamination known at this site (B. Rapinak, Trinity County General Services). Groundwater testing is ongoing.
Trinity River Lumber 1121 Main Street	Within project limits	LUST(S), UST	Tanks and dispensers removed. LUST(S) indicates "case closed."
CHP Weaverville 1261 Main Street	60' west	LUST(S), UST, HWIS	LUST(S) indicates "case closed."
Trinity Family Medical Group (listed as "Tronmesh Repac 10") 500 Trinity Lakes Blvd. (SR 3)	~200' S of northern terminus	HWIS	No evidence of contamination release.
Weaver Valley Market SR 299 and Glenn Road	500 meters (1640 ft) SW	UST	Gasoline release confirmed during tank removal in 2000. Investigation and remediation ongoing. Potential low-level soil contamination (C. Tuckey, Trinity Co. Health Dept.).
Weaverville Maintenance Yard (Trinity County Road Maintenance Yard) Trinity Lakes Blvd (SR 3) North Street	~150 meters (500 ft) N	CALSITES UST, HWIS	No evidence of contamination release. USTs replaced, remediation performed, "case closed"

Source: Taber Consultants, 1999b; updated by Trinity County, September 2002.

### **Site Reconnaissance**

Taber Consultants observed no evidence indicating a significant potential for hazardous material or petroleum product contamination that could affect the project. Taber Consultants looked at both alignments. Both roadway alternatives traverse tailing piles from old mining activity, but no evidence of potential hazardous materials or wastes from these activities was observed. Alternative 2 goes through previously undisturbed areas never used for industry. Specific observations made during the project site reconnaissance are presented below (with locations identified by project station number).

**Station 100+00**—Approximately 150 m (500 ft) north of the project alignment is the Trinity County Road Maintenance Yard. Fuel dispensers are located adjacent to SR 3. No evidence of hazardous materials or contamination was observed at this location.

**Station 101+60 to 103+00**—The property east of this location is occupied by trucks and heavy equipment (the Pruett Logging yard). A large tank on concrete supports appears to be used for fuel storage. Otherwise, no evidence of hazardous materials was observed at this location. No evidence of contamination was noted.

**Station 108+60 to 109+60**—A large debris disposal area adjacent to this segment appears to be west of the proposed alignment. Debris is primarily piles of soil, asphalt, and concrete rubble, with some piles of logs and wood. No evidence of hazardous materials or contamination was observed at this location.

**Station 113+20 to 114+00**—This section of the proposed project crosses an area that appears to have been used for equipment maintenance. Debris in the area includes large gears, old tracks, tires, cables, nuts and bolts and other equipment parts. A small shed on or west of the project at approximately Station 113+60 has a sign that reads, “Notice: Do Not Leave Unattended While Pumping Fuel or Chemicals” and “No Smoking Within 50 Feet of Fueling Area.” No evidence of fuel containers or underground fuel storage was noted at this location. Wood at the base of the shed is oily.

**Station 120+00 to 120+80**—The property north of the project is occupied by the CHP. A fuel pump island is located on the back (north side) of the property. Otherwise, no evidence of hazardous materials was observed at this location. No evidence of contamination was noted. There is a fiberglass underground fuel tank at this location; installed in 1996. There is no evidence of contamination from this tank, but it is scheduled to be removed in 2003. (Information updated by Trinity County Environmental Health Division in September 2002.)

**Station 121+00**—The property on the northwest corner of SR 299 and Glen Road is occupied by the Weaver Valley Market. Fuel tanks and pumps were removed in 2000. Trace amounts of gasoline and MBTE were identified in soil and water in the tank excavation. Case closure is pending, but was not finalized at the time of this writing. (Information updated by Trinity County Environmental Health Division in September 2002.)

### ***HMA Conclusions***

There do not appear to be contaminated sites within the project area with the potential to affect the proposed project and proposed construction is not likely to encounter significant hazardous materials or petroleum product contamination that could affect the project. Tailing piles from old mining activities are present along much of the project corridor, but no evidence of potential hazardous materials was observed in these piles. Much of the project corridor traverses Trinity River Lumber Company property; however, the corridor primarily cuts through inactive portions of this property and the operations here do not appear to be a potential contamination threat within the project area.

### ***PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES***

#### ***Trinity County General Plan***

The Hazardous Materials/Waste section of the *Safety Element* of the *Trinity County General Plan* (Trinity County Planning Department, 2002b) contains the following goal related to hazardous materials/waste

safety: "Reduce threats to the public health and the environment caused by the use, storage, and transportation of hazardous materials and hazardous waste." Objectives and policies that relate to the proposed East Connector Roadway project are as follows:

- **Objective S.3.2.** Ensure adequate cleanup of hazardous materials and hazardous waste.
- **Policy S.3.1 (A).** The County should encourage cooperation between all agencies involved in the cleanup and regulation of hazardous materials.

### *Weaverville Community Plan*

The *Weaverville Community Plan* (Trinity County, 1990) does not specifically address hazardous material and hazardous waste management.

### **3.3.2 SIGNIFICANCE CRITERIA**

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant floodplain impacts:

Would the project:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

These significance criteria were used to evaluate impacts of the proposed East Connector Roadway project. As discussed below, the project is not expected to have significant impacts involving hazardous materials or wastes.

### 3.3.3 PERMANENT IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Taber Consultants reviewed the proposed East Connector Roadway design and evaluated potential hazardous materials and public health impacts of the project. No permanent impacts associated with hazardous materials were identified. There does not appear to be an issue of the County acquiring contaminated property, nor an issue of exposing the public to hazardous materials or waste while using the roadway. The finished project will improve emergency response by providing an additional route that could be used by emergency vehicles, for evacuations, or as a detour in the event of a toxic spill or other emergency on SR 299 or SR 3 near downtown Weaverville.

The East Connector is not expected to be a route used for through transport of loads of hazardous waste. Most through trucks will stay on SR 299 and SR 3. There are no industrial facilities on north SR 3 that would attract or generate trucks transporting hazardous materials in large quantities, or acutely hazardous materials or wastes. Trucks hauling solid waste from the transfer station at the previous landfill site to the Anderson Landfill may use the East Connector. However, the transfer station does not accept hazardous waste.

### 3.3.3 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Hazardous waste contamination is not known to be present within the proposed action right-of-way, therefore, construction of the project is not expected to result in the exposure of the public, including construction workers, to contaminated soils or groundwater. Although hazardous contaminants are not expected to be encountered, there is a possibility that excavation may result in exposure of contaminated soils or groundwater.

No major equipment repairs will be done at the construction site, but maintenance and fueling may occur at designated staging areas. This may involve the transfer of fuels, oils, greases and solvents. The contractor must be prepared for the possibility of an accidental release of these materials.

#### *ALTERNATIVE B*

Under Alternative B, one commercial property (shoe store) on the south side of Glen Road at Nugget Lane may be modified or demolished in conjunction with the project. This work may involve exposure or handling of hazardous building materials such as asbestos or lead based paint.

**Haz Mat Impact-1** Construction of the proposed East Connector Roadway could result in the exposure of construction workers to contaminated soils or groundwater.

**Significance** Potentially significant/indirect, but mitigated (**Haz Mat Mitigation-1**)

**Haz Mat Mitigation-1** If obvious signs of contamination in soils or groundwater are encountered during excavation (odors, sheens or discolored soil), work in that excavation will stop immediately. The TCDOT and the Trinity County Division of Environmental Health will be notified. The soils and/or groundwater will be sampled and tested for suspected contaminants. A Workplan and Site Safety Plan will be prepared addressing safety procedures for completing the excavation, and disposal of the spoils and wastewater generated by the excavation. The workplan shall be approved by the Trinity County Division of Environmental Health and/or the NCRWQCB. Only workers with current Hazardous Waste Operations and Emergency Response (HAZWOPER) training shall be permitted to work in this area. Grading and construction on uncontaminated sections of the project may continue. Remediation of the contaminated soil and or groundwater in the surrounding area shall be the responsibility of the party responsible for the contamination.

**Post-mitigation Significance:** Less than significant

**Haz Mat Impact-2** Construction of the proposed East Connector Roadway could result in the exposure of the public, including construction workers, to contamination in demolition debris (Alternative B only).

**Significance** Potentially significant/indirect, but mitigated (**Haz Mat Mitigation-2**)

**Haz Mat Mitigation-2** If any structure is to be demolished as part of this project, the building will be surveyed and tested for lead based paint and asbestos-containing building materials by a qualified consultant. If present, the contractor will be notified of the presence and location of the materials, and will be required to prepare a Health and Safety Plan (HSP) prior to the initiation of building demolition. The HSP would meet OSHA and Cal-OSHA requirements and other state and local regulations for the handling and disposal of lead-based paint and/or asbestos, and other potentially hazardous materials associated with the demolition of structures. If asbestos-containing building materials are present, the North Coast Unified Air Quality Management District (NCUAQMD) will be notified at least 10 working days prior to the start date of the demolition. The Contractor shall follow the recommendations of the NCUAQMD regarding demolition, dust control,

removal and disposal of asbestos-containing building materials.

**Post-mitigation Significance:** Less than significant

**Haz Mat Impact-3** Fuels, oils, greases, solvents, concrete or other materials used in construction or construction equipment could be accidentally released to the environment.

**Significance** Potentially significant, but mitigated (**Haz Mat Mitigation-3 and Hydrology Mitigation-3 and -4**).

**Haz Mat Mitigation-3** The Contractor shall exercise every reasonable precaution to protect streams from pollution with fuels, oils and other harmful materials. The Contractor will be required to have adequate spill containment equipment on hand at all times. All waste petroleum products and empty petroleum product containers will be disposed of properly at a recycling or disposal site legally authorized to accept that type of waste. The Trinity County Environmental Health Department and NCRWQCB must be notified immediately in the event of a release of significant quantities of hazardous materials. In the event of a release into East Weaver Creek, CDFG must also be notified.

**Hydrology Mitigation-3** The following measures will be implemented:

- No contact of wet concrete with the live stream will be allowed. Groundwater that comes in contact with wet concrete during construction of the footing excavations will not be allowed to enter the creek but will be pumped to a truck or upland for disposal or treatment, or it may be discharged to a sediment-stilling basin and percolated back into the soil.
- If drilling muds are used to drill holes within the ordinary high-water zone, all drilling muds and fluid within all drilled holes will be pumped through a closed system, contained on-site in tanks, removed from the project area, and disposed of off-site at an appropriate facility.
- The TCDOT contractor will remove all spoils materials from the drilled pier holes and dispose of the material in a manner that will not result in discharge of runoff of sediment into Waters of the United States.
- Heavy equipment will not be operated in the active flow channel of East Weaver Creek.
- No diversion of surface flows will be allowed.

HAZARDOUS WASTE/MATERIALS

- Maintenance and refueling areas for equipment will be located a minimum of 150 ft away from the active stream channel. If equipment must be washed, washing will occur where the water cannot flow into the creek channel.
- Spill containment booms will be maintained on-site at all times during construction operations and/or staging or fueling of equipment.

**Hydrology Mitigation-4** The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver Creek. TCDOT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent sediment and pollutant discharges to Lance Gulch and East Weaver Creek. There will be no removal of riparian vegetation for staging purposes.

**Post-mitigation Significance:** Less than significant

In addition to the mitigation measures above, potential impacts will be minimized by developing and implementing a SWPPP (as described in the *Project Description*, Chapter 1) and compliance with Caltrans standard specifications and other practices described in the *Project Description*, as well as any additional conditions resulting from Section 7 consultation with NOAA Fisheries (formerly NMFS), or included in the conditions of the following state and federal permits:

- ACOE's Section 404 permit (Nationwide Permit No. 14)
- RWQCB's Section 401 water quality certification
- RWQCB's General Stormwater Permit for Construction Activities
- CDFG's Streambed Alteration Agreement (SAA)



### **3.3.5 CUMULATIVE IMPACTS**

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

No cumulative impacts associated with hazardous materials have been identified. Since the East Connector project will not result in Hazardous Materials impacts, it will not contribute to a cumulative impact.

## 3.4 AIR QUALITY

### 3.4.1 AFFECTED ENVIRONMENT

#### *AIR BASIN CLIMATOLOGY*

The East Connector Roadway Project is located within the North Coast Air Basin and is within the jurisdiction of the NCUAQMD. The North Coast Air Basin encompasses Del Norte, Humboldt and Trinity counties (together comprising the NCUAQMD), and Mendocino and northern Sonoma counties (each of which comprises a separate air district within the basin). The NCUAQMD contains 7,767 square miles, or approximately five percent of the total area of California. It is bordered on the west by the Pacific Ocean and extends from the Oregon Border south approximately 140 miles to the Mendocino County line, and varies between 30 to 100 miles in width inland (NCUAQMD website: [www.northcoast.com/~ncuaqmd](http://www.northcoast.com/~ncuaqmd)).

The terrain features of Trinity County make it possible for various climates to exist within the general area. The pattern of mountains and hills are primarily responsible for the wide variations of rainfall, temperatures, and localized winds that occur throughout the region. Although the climate of Trinity County varies considerably with elevation and the proximity to mountain peaks, in general the county's climate is characterized by warm, dry summers and cold, moderately wet winters. Low temperatures in January average 26° Fahrenheit (F), while high temperatures in August average 93°F.

The Trinity Alps to the north and west act as an effective rain shadow, reducing the moisture content of storms moving over the continent from the Pacific. Annual rainfall averages 37 inches. Most of the precipitation occurs during the winter as snow, with occasional warm rains. Summer precipitation is usually limited to occasional scattered thunderstorms. Prevailing winds in the summertime are north to northwesterly and are frequently strong. In the winter, storms from the south Pacific increase the percentage of days winds are from southerly quadrants (NCUAQMD website: [www.northcoast.com/~ncuaqmd](http://www.northcoast.com/~ncuaqmd)).

Temperature inversions are a common occurrence in the project area. An inversion occurs when warm air overlies cooler air under stable atmospheric conditions. This can prevent the upward dispersion of pollutants. Radiation inversions, which are the most common type of inversion in the project area, occur when the air layer near the ground surface and extending upward as much as several hundred feet is cooled. This takes place at night on an almost daily and year-round basis, although it is more prominent from late fall through early spring when heating from the sun is weaker and hours of sunshine are fewer. In the wintertime, a radiation inversion may persist until near noon and at times is not destroyed during an entire day or for several days (NCUAQMD website: [www.northcoast.com/~ncuaqmd](http://www.northcoast.com/~ncuaqmd)). In addition, since

AIR QUALITY

Weaverville is set in a valley, pollutants tend to settle rather than dissipate. The topography of the area plays a significant role in the degree of impact air pollution sources have.

*AIR QUALITY STANDARDS*

Air pollution is regulated by two types of standards: emission standards and ambient air quality standards. Emission standards are the amounts (by weight) of air pollutants a source is allowed to release into the air, while AAQS are concentrations of air pollutants that should not be exceeded in an area such as a city or county. Under the Federal Clean Air Act and California law (California Health and Safety Code Section 39606), the USEPA and the California Air Resources Board (CARB) are authorized to establish AAQS. Pollutants that have AAQS set for them are known as criteria pollutants.

The AAQS define clean air and are established to protect even the most sensitive individuals within a community, including the elderly, people with certain health conditions, infants, and children. An air quality standard defines the maximum amount of a pollutant that can be present in outdoor air without harm to the public's health (CARB website: [www.arb.ca.gov](http://www.arb.ca.gov)). The federal and state standards were developed independently with differing purposes and methods, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California standards are more stringent (e.g., for particulate matter and ozone) and California has set standards for some pollutants that are not addressed by federal standards (visibility-reducing particles, sulfates, and hydrogen sulfide).

The current federal and state AAQS are summarized in **Table 3.4-1** for each of the criteria pollutants.

*AIR QUALITY MONITORING IN THE NORTH COAST AIR BASIN*

The NCUAQMD maintains a variety of air pollution monitoring equipment at locations around the North Coast to monitor airborne concentrations of ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), respirable particulate matter under 10 microns (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), lead, sulfates and hydrogen sulfide. PM<sub>10</sub> levels are continuously measured in Weaverville. The primary sources of air pollutants in the Weaverville area include wood burning stoves, wind blown dust from dirt roads and agriculture, and open burning from backyard burns and prescribed burns (Trinity County Planning Department, 2002b). Forest fires can also contribute to suspended particulates and other pollutants in the air.

**Table 3.4-1. Federal and State Ambient Air Quality Standards**

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone (O <sub>3</sub> )	8-Hour 1-Hour	0.08 PPM <sup>1</sup> 0.12 PPM	-- 0.09 PPM
Carbon Monoxide (CO)	8-Hour 1-Hour	9.0 PPM 35.0 PPM	9.0 PPM 20.0 PPM
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Average 1-Hour	0.053 PPM --	-- 0.25 PPM
Sulfur Dioxide (SO <sub>2</sub> )	Annual Average 24-Hour 1-Hour	0.03 PPM 0.14 PPM --	-- 0.04 PPM 0.25 PPM
Respirable Particulate Matter under 10 microns (PM <sub>10</sub> )	Annual Average 24-Hour	50 ug/m <sup>3</sup> 150 ug/m <sup>3</sup>	30 ug/m <sup>3</sup> 50 ug/m <sup>3</sup>
Fine Particulate Matter (PM <sub>2.5</sub> )	Annual Average 24-Hour	15 ug/m <sup>3</sup> 65 ug/m <sup>3</sup>	No separate state standard
Lead	30-Day Avg. Calendar Quarter.	-- 1.5 ug/m <sup>3</sup>	1.5 ug/m <sup>3</sup> --
Sulfates	24-hour	--	2.5 ug/m <sup>3</sup>
Hydrogen sulfide	1-hour	--	0.03 PPM
Visibility-reducing particles	8-hour (10am-6pm, PST)	--	In sufficient amount to produce an extinction coefficient of 0.23 per kilometer – visibility of 10 miles or more (0.07 to 30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 percent.

PPM = parts per million

ug/m<sup>3</sup> = micrograms per cubic meter

<sup>1</sup> New federal 8-hour ozone and PM<sub>2.5</sub> standards were promulgated by USEPA on July 18, 1997. The federal 1-hour ozone standard continues to apply in areas that violated the standard.

Source: CARB website: [www.arb.ca.gov/research/aaqs](http://www.arb.ca.gov/research/aaqs) (updated January 25, 1999)

Monitoring indicates that North Coast air is in attainment for most of the criteria pollutants listed in Table 3.4-1. Attainment means that the maximum concentrations the government set for clean healthy air are not exceeded in an area. The nonattainment classification means that the concentration of a pollutant exceeds the standard for healthy air. The only standard currently listed as nonattainment on the North Coast, including Weaverville, is the state standard for PM<sub>10</sub>, a status this region shares with most of

the rest of California. In 1994, the NCUAQMD found Weaverville to have the most severe PM<sub>10</sub> nonattainment problem in the District, and recommended that an attainment plan should be developed for the Weaverville area (NCUAQMD 1994). Weaverville and the rest of the District are, however, currently listed as attainment for the federal PM<sub>10</sub> standard, which is three times the level set by California.

PM<sub>10</sub> is small suspended particulate matter, 10 microns or less in diameter, which can enter the lungs. The major components of PM<sub>10</sub> are dust particles, nitrates, and sulfates. PM<sub>10</sub> is directly emitted to the atmosphere as a by-product of fuel combustion and the wind erosion of soil and unpaved roads. Small particles are also created in the atmosphere through chemical reactions. Particles greater than 10 microns in diameter can cause irritation in the nose, throat, and bronchial tubes. Natural mechanisms remove most of these particles, but particles less than 10 microns in diameter are able to pass through the body's natural defenses and the mucous membranes of the upper respiratory tract and enter into the lungs. The particles can damage the alveoli, tiny air sacs responsible for gas exchange in the lungs. The particles may also carry carcinogens and other toxic compounds, which adhere to the particle surfaces and can enter the lungs (CARB website: [www.arb.ca.gov](http://www.arb.ca.gov)).

Table 3.4-2 shows monthly means of PM<sub>10</sub> measurements in Weaverville for 1997 and 1998. Note the peaks in PM<sub>10</sub> occurring during the winter months for both years (NCUAQMD website: [www.northcoast.com/~ncuaqmd/airstats.html](http://www.northcoast.com/~ncuaqmd/airstats.html)). Although the state annual average AAQS was not exceeded in 1997 and 1998, exceedances of the state 24-hour AAQS may be noted during these years. Such exceedances do not appear in the monthly mean data. Earlier monitoring in 1987 indicated that between January and March of that year, Weaverville exceeded the state 24-hour AAQS of 50 ug/m<sup>3</sup> approximately 30 percent of the time. More recent 24-hour monitoring measurements were not readily available. The elevated wintertime PM<sub>10</sub> levels are principally a measure of dust and wood smoke. Monthly mean PM<sub>10</sub> levels decrease during the remainder of the year as wood stove use decreases (Trinity County Department of Transportation and Planning, 1990). Slash and wildfire smoke, construction activities, and diesel-fueled trucks can also be sources of particulates.

**Table 3.4-2. Monthly Mean PM<sub>10</sub> Measurements in Weaverville, California**

Month	1997 (ug/m <sup>3</sup> )	1998 (ug/m <sup>3</sup> )
January	30.2	21.1
February	22.0	10.5
March	13.1	12.4
April	13.4	13.5
May	10.8	8.6
June	7.5	10.6
July	13.1	17.7
August	13.2	20.3
September	15.2	15.7
October	22.5	15.4
November	15.4	27.7
December	25.7	30.3
Annual Average	15.7	16.0

Source: NCUAQMD website: [www.northcoast.com/~ncuaqmd/airstats.html](http://www.northcoast.com/~ncuaqmd/airstats.html)

## REGIONAL AIR QUALITY PLANNING

### *Federal Program*

The federal Clean Air Act, as amended, requires the state to identify areas not meeting the federal primary standards (non-attainment areas). Trinity County is one of the few attainment areas in California with respect to the federal standards.

### *State Program*

The California Clean Air Act of 1988 requires an air quality attainment plan to be prepared for areas that violate air quality standards for CO, SO<sub>2</sub>, NO<sub>2</sub>, or ozone. Local attainment plans are not required for areas that violate state PM<sub>10</sub> standards. PM<sub>10</sub> attainment issues in the project area are being addressed by CARB.

### *NCUAQMD Program*

As part of its overall strategy to meet the state's health-based standard for PM<sub>10</sub>, the NCUAQMD adopted its *Particulate Matter (PM<sub>10</sub>) Attainment Plan* in May 1995. The Plan includes measures to reduce PM<sub>10</sub> emissions from mobile sources, as well as from wood stoves and other combustion sources. Through review of local development projects under CEQA, the NCUAQMD also ensures that air quality is protected as the North Coast develops its economic and industrial capacity. Funding for mobile source measures included within the Plan and for other innovative measures to reduce mobile source air pollution is provided by NCUAQMD through its Air Quality Partnership (AQP) program, and its Assembly Bill (AB) 2766 Program. The NCUAQMD also participates in efforts such as the Carl Moyer Program to reduce heavy duty diesel emissions, and the Great Stove Changeout, to reduce air pollution

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from woodstoves. On-going air pollution monitoring is used to track progress in PM<sub>10</sub> attainment (NCUAQMD website: [www.northcoast.cm/~ncuaqmd](http://www.northcoast.cm/~ncuaqmd)).

*PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES*

*Trinity County General Plan*

The Trinity County General Plan Safety Element (Trinity County Planning Department, 2002) contains the following goal, objective, and policy regarding air quality:

- **Goal S.6:** Air Quality Goal. Continue to maintain a high standard of air quality in Trinity County.
- **Objective S.6.1** – Ensure burning projects will not diminish air quality.
- **Policy S.6.1(A)** – The burning of any material shall be in compliance with burning permits conditions and/or standards established by the North Coast Air Quality Management District.

The General Plan does not contain specific goals, objectives, or policies pertaining to air quality impacts from vehicular emissions and transportation projects.

*Weaverville Community Plan*

The following specific goal regarding air quality, contained in the Transportation section of the *Weaverville Community Plan*, relates to the proposed East Connector Roadway Project:

- **Goal #7:** To maintain the high air quality in the Weaverville Basin while expanding the transportation network. Expansion of streets and roads and other transportation projects should consider positive and negative impacts to air quality and incorporate mitigation measures as necessary.

Short- and long-term air quality impacts of the project and mitigation measures are identified below. In the long-term, circulation improvements, such as the proposed East Connector Roadway Project, result in improved air quality from reduced traffic congestion.

### 3.4.2 SIGNIFICANCE CRITERIA

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant floodplain impacts:

Would the project:

- Conflict with or obstruct implementation of the applicable air quality plan?
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- Expose sensitive receptors to substantial pollutant concentrations?
- Create objectionable odors affecting a substantial number of people?

As discussed below, the proposed project would not conflict with or obstruct implementation of existing air quality plans. It would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. It would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The project would cause short-term increases in dust emissions and long-term increases in carbon monoxide emissions along the project corridor. Sensitive receptors in proximity to the project include seniors residing at the senior apartments and using the senior center on Brown's Ranch Road. Ambient air quality standards are health-based standards that represent the lowest level of a criteria pollutant that is associated with no ill health effects, taking into account effects to potentially sensitive receptors and providing a margin of safety. Therefore, since the project will not cause any of these standards to be exceeded, the project will not expose sensitive receptors, such as the senior population, to substantial pollutant concentrations, or concentrations that would cause ill health effects. The project would not create objectionable odors.

### 3.4.3 PERMANENT IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

The East Connector Roadway Project is designed to relieve current and projected congestion and delay in Weaverville. To the extent this goal is met, the project would have an overall beneficial impact on air quality as vehicle delay increases emissions. However, while the project would have an overall beneficial effect, areas adjacent to the new roadway corridor would experience higher concentrations of some pollutants. While the new roadway would change air quality along its entire length, it is at intersections where the greatest potential for air quality problems would exist, since intersections are the site of extended idling, acceleration and deceleration.

Specifically, the project would reduce traffic through the western portion of the community and would reduce idling times for automobiles and commercial trucks on side streets. However, there will be an increase in idling times for traffic on SR 299 in eastern Weaverville, due to the new traffic signal at the SR 299/Glen Road/East Connector intersection. Delays at the intersection of SR 3 with the East Connector and Five Cent Gulch Street may also increase over existing conditions (See Section 3.18, *Traffic and Transportation*).



The project corridor contains residential areas and facilities for seniors who may be more susceptible to air pollutants, but these receptors are located away from the location of the proposed traffic signal and intersections with the state highway. The only intersection where emissions from idling vehicles would affect the senior center and apartments would be the East Connector/Brown's Ranch Road intersection, which would be stop-sign controlled. Traffic volumes and delay times are expected to be low at this intersection, in comparison to the signalized intersection with SR 299 and Glen Road or the intersection with SR 3 at Five Cent Gulch. As illustrated below, residents along the project alignment are not expected to experience air quality impacts that would exceed any health-based state or federal standards.

A micro-scale air impact analysis was undertaken to examine worst-case impacts along the new roadway corridor and to determine if the project could result in any violations of state or federal ambient air quality standards. The CALINE-4 computer simulation model was utilized to forecast worst-case concentrations of carbon monoxide adjacent to the following two intersections at either end of the new road:

- State Route 299 at East Connector/Glen Road
- State Route 3 at East Connector/Five Cent Gulch Street

Concentrations at these locations would be expected to be higher than anywhere else along the project corridor.

Traffic inputs to the modeling procedure are contained in Section 3.18 (*Traffic and Transportation*). The needed information on approach volumes, signal timing and intersection geometry were taken from the Level of Service (LOS) calculation sheets for the PM peak hour.

A CALINE-4 model was applied to the selected worst-case intersections. The method outlined in Appendix B of the *Transportation Project-Level Carbon Monoxide Protocol* was utilized (Garza, Granly and Sperling, 1997). This requires that the intersection be broken into numerous links. Links are either free-stream, approach or departure links. For each approach or departure link, an average vehicle speed was obtained from Tables B13 and B14 in Appendix B of the protocol document based upon the traffic volume per lane, an average cruise speed (speed away from the intersection) of 35 MPH and percent red time of the signal cycle.

Caltran's CTEMFAC program was used to generate emissions factors at various speeds. The CTEMFAC runs assumed a 20 °F ambient temperature and 30 percent cold start factor. The default vehicle mix was utilized.

The above approach could not be used for the unsignalized intersection of SR 3 and East Connector/Five Cent Gulch. This intersection was modeled as free-flow links for SR 3 (average speed 35 mph). The

stop-sign controlled East Connector and Five Cent Gulch links were assumed to have an average speed of 10 mph.

The modeling effort was based on several worst-case assumptions:

- A 2005 vehicle mix was used with year 2020 traffic output.
- Summertime peak traffic was assumed to occur during wintertime weather conditions, when carbon monoxide levels are at a maximum.
- A January mean minimum temperature of 20 °F was used for both the calculation of emission factors by CTEMFAC and concentrations by the CALINE-4 model.

The CALINE-4 model was run on worst-case meteorology and used the worst-case wind direction mode to obtain the highest concentration at each receptor. Three receptors were located at each intersection corner: one right at the corner, 3 meters back from the curb, and two 10 meters up each leg of the intersection, also 3 meters back from the curb.

The CALINE-4 model provides a worst-case estimate of 1-hour concentrations of carbon monoxide. These 1-hour concentrations were converted to estimates of 8-hour averaged concentrations using a "persistence factor" (multiplier) of 0.7.

The CALINE-4 model calculates the local contribution of nearby roads to the total concentration. The other contribution is the background level attributed to more distant traffic. Carbon monoxide is not monitored in Weaverville or any other location in Trinity County. The closest carbon monoxide monitoring sites to Weaverville are located in Willits (Mendocino County) and Chico (Butte County). Since Willits is within the same air basin as Weaverville, is similar in size, is located in mountainous terrain, and has a major highway going through it (Highway 101), data from that location were determined to be most representative of conditions at Weaverville. The highest measured concentrations in the period 1999-2001 at Willits provide an estimated background level of 2.6 parts per million for the 1-hour averaging time and 1.8 parts per million for the 8-hour averaging time.

The results of the CALINE-4 modeling are summarized in Table 3.4-3 and CALINE-4 and CTEMFAC output data are provided in Appendix E of this EIR. The highest concentration predicted for the 12 receptors is reported. The concentrations in Table 3.4-3 were compared to the state and federal ambient 1-hour air quality standards of 20 parts per million (ppm) and 35 ppm, respectively, while predicted 8-hour concentrations are to be compared to the state and federal 8-hour standards of 9 ppm. Projected concentrations with the project are well below the state/federal standards. These concentrations are at worst-case locations and under worst-case conditions for traffic and meteorology; therefore, the proposed project is not expected to result in violations of the carbon monoxide air quality standards.

**Table 3.4-3. Estimated Worst-Case Carbon Monoxide Concentrations, in ppm**

	SR299/East Connector/ Glen Road		SR3/East Connector/ Five Cent Gulch Road	
	1-Hour	8-Hour	1-Hour	8-Hour
Modeled Concentration	5.8	4.1	4.6	3.2
Most Stringent Air Quality Standard	20.0	9.0	20.0	9.0

**Air Quality Impact-1:** The project would result in elevated carbon monoxide emissions at intersections where extended idling, acceleration and deceleration occur. However, as demonstrated by air emissions modeling for the SR 299/Glen Road/East Connector and SR 3/Five Cent Gulch/East Connector intersections, the project would not result in violations of federal or state ambient air quality standards.

**Significance:** Less than significant impact (no mitigation required).

### 3.4.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Construction-related emissions would include dust generated from two phases of construction. The first phase of construction would involve the initial site preparation activities such as site grading and excavation. The second phase of construction activities would involve the actual construction of the roadway. On the basis of the potential to cause or contribute to PM<sub>10</sub> ambient air quality standard violations in the project vicinity, and to expose people to relatively high concentrations of dust, fugitive dust emissions from project site preparation would be a significant temporary air quality impact.

A Geotechnical review of the project site was conducted by Taber Consultants (Taber Consultants 1999a). The Taber review determined that the site is underlain by Quaternary alluvial sediments of East Weaver Creek, and Oligocene age sediments (mudstone, sandstone and conglomerate) of the Weaverville Formation. The geotechnical review did not reveal the presence of any ultramafic rock formations that may potentially contain asbestos. Therefore, project grading does not have the potential to result in airborne asbestos or asbestos-containing materials. As mentioned in the project description, any fill material imported for the project will be derived from cuts within the project alignment (i.e. Weaverville

formation or alluvial materials) or from commercial sources, which would be required to disclose the asbestos content of the material. Asbestos-containing material will not be used for road surfacing.

**Air Quality Impact-2:** Project construction activities associated with the East Connector Roadway project would generate short-term emissions from site preparation activities.

**Significance:** Significant, but mitigated (**Air Quality Mitigation-1**).

**Air Quality Mitigation-1:** The County shall require contractors to reduce particulate emissions by complying with these dust suppression measures:

- Enclose, cover, or water all soil piles twice daily or with sufficient frequency to maintain dampness. Water shall be applied in a fine spray that does not result in runoff.
- Water all exposed soil twice daily, or with sufficient frequency to maintain dampness. Water shall be applied in a fine spray that does not result in runoff.
- Surface all haul roads with rock, pavement or chemical stabilizers, or water with sufficient frequency to maintain dampness. Water shall be applied in a fine spray that does not result in runoff.
- Maintain at least 2 feet of freeboard on all haul/dump trucks, or cover loads.

**Post-Mitigation Significance:** Less than significant.

### 3.4.5 CUMULATIVE IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Since the project will have limited access, and adjacent areas are either fully developed or constrained by topography, it is not expected to induce new urban development or growth that could result in additional cumulative air quality impacts. There may be a cumulative increase in CO and other vehicular emissions from an increase in traffic on the east side of Weaverville, following construction of the East Connector and the new Weaverville Airport and access road. However, these emissions will not lead to any exceedances of state or federal standards for criteria air pollutants.

## 3.5 NOISE

This section presents existing noise conditions in the project vicinity, based on a combination of measured and modeled noise levels, and identifies the effects that noise from construction and operation of the East Connector roadway will have on the surrounding community. Noise abatement measures that may be used to reduce the significance of project effects are presented. The section also considers project-related vibration effects and cumulative noise effects of the roadway project and other foreseeable projects in the affected area. The environmental noise analysis was completed by Bollard & Brennan, Inc.

### 3.5.1 AFFECTED ENVIRONMENT

#### *NOISE EXPOSURE AND COMMUNITY NOISE*

Noise is often defined simply as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. Researchers have generally agreed that A-weighted sound pressure levels (sound levels) are very well correlated with community reaction to noise. Throughout this analysis, A-weighted sound pressure levels will be used to describe community noise unless otherwise indicated. The unit of sound level measurement is the decibel (dB), sometimes expressed as dBA. Noise descriptors used to describe the existing noise environment and project noise impacts in the project area are summarized below:

- Leq: The equivalent sound level is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The Leq is the constant sound level that would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).
- CNEL The Community Noise Equivalent Level, or CNEL, is defined as the 24-hour average noise level with noise occurring during evening hours (7:00 p.m. to 10:00 p.m.) weighted by a factor of three times, and nighttime hours (10:00 p.m. to 7:00 a.m.) weighted by a factor of 10 times.
- Ldn: The 24-hour day and night A-weighted noise exposure level accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night ("penalizing" nighttime noises). Noise between 12:00 p.m. and 7:00 a.m. is weighted (penalized) by adding 10 dB to take into account the general annoyance of nighttime noises. The Ldn (Day/Night Level) is similar to the CNEL, but does not have an evening (7:00 p.m. to 10:00 p.m.) weighting factor.

For the most part, the CNEL and Ldn are used interchangeably. Both the CNEL and Ldn descriptors represent a 24-hour average noise level. The Ldn descriptor is generally used for evaluating traffic or

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aircraft noise levels, and is one of the conventional descriptors used throughout the United States. The CNEL descriptor was developed by the State of California Division of Aeronautics, specifically for evaluating aircraft noise levels within the State of California. For traffic noise levels and community noise levels, the CNEL and Ldn generally agree within 0.5 dB to 1 dB.

Table 3.5-1 provides examples of A-weighted maximum sound levels associated with common noise sources.

Table 3.5-1 Typical A-Weighted Maximum Sound Levels of Common Noise Sources	
Decibels	Description
130	Threshold of pain
120	Jet aircraft take-off at 100 feet
110	Riveting machine at operators position
100	Shot-gun at 200 feet
90	Bulldozer at 50 feet
80	Diesel locomotive at 300 feet
70	Commercial jet aircraft interior during flight
60	Normal conversation speech at 5-10 feet
50	Open office background level
40	Background level within a residence
30	soft whisper at 2 feet
20	Interior of recording studio

Source: Bolt, Beranek and Newman 1971.

*EXISTING NOISE CONDITIONS IN THE PROJECT AREA*

Noise levels in the project vicinity are dominated by traffic on SR 299, SR 3, other local roadways, and operations from the lumber mill. Existing land uses adjacent to the proposed connector road are varied. The land uses which are the primary concern with regards to noise generated by the proposed project include single family residential, multifamily residential, recreational parks, and mobile home park.

*MODELED EXISTING TRAFFIC NOISE*

Bollard & Brennan, Inc. used the FHWA model for determining existing traffic noise levels in terms of peak hour Leq and 24-hour Ldn along the existing street system. Bollard & Brennan, Inc. used the Sound-32 Model for evaluating existing noise at 15 receiver locations along the proposed East Connector Roadway. The Sound-32 and FHWA models were developed to predict hourly Leq values for free-

flowing traffic conditions, and are considered to be accurate within 1.5 dB. Traffic volumes were provided by the traffic consultant, and were used as direct inputs to the models. Truck percentages and day/night traffic split information were based on Caltrans data.

Tables 3.5-2 and 3.5-3 show the results of the analysis. Table 3.5-2 shows the modeled existing traffic noise levels along the existing street system. Table 3.5-3 shows the modeled existing traffic noise levels at receiver locations along the East Connector. Figure 3.5-1 shows the locations of affected receivers. These locations include potential noise-sensitive land uses in the project vicinity: single family residences, multi-family residences (the Weaver Creek Senior Apartments), a mobile home park (Two Creeks Mobile Homes), and the Golden Age Senior Center.

It is difficult to summarize the existing (without project) traffic noise levels at each receiver location along the proposed roadway, due to the fact that most of these receivers are located a considerable distance from any major existing roadway. Therefore, existing background and traffic noise levels shown in Table 3.5-3 are based upon a combination of measured and modeled noise levels.

<b>Table 3.5-2</b>				
<b>Predicted Traffic Noise Levels Along the Existing Roadway System (Exterior Levels, in dBA)</b>				
<b>(Based Upon FHWA RD-77-108 Traffic Noise Prediction Model)</b>				
Roadway	Traffic Noise Level at 75'		Distance to Ldn Contour*	
	Peak Hr. Leq	Ldn	60 dB Ldn	65 dB Ldn
<i>STATE ROUTE 3</i>				
SR 299 to Washington Street				
Washington Street to 5 Cent Gulch Rd.	60.4 dB	60.2 dB	77'	36'
	64.7 dB	61.4 dB	93'	43'
North of 5 Cent Gulch Rd.	65.0 dB	61.0 dB	87'	40'
<i>STATE ROUTE 299</i>				
West of SR 3	64.3 dB	58.8 dB	63'	29'
SR 3 to Washington Street	64.0 dB	64.7 dB	155'	72'
Washington Street to Glen Road	66.9 dB	66.2 dB	195'	91'
Glen Road to Martin Road	64.7 dB	64.1 dB	141'	65'
East of Martin Road	64.7 dB	63.8 dB	135'	63'
<i>WASHINGTON STREET</i>				
SR 299 to SR 3	59.7 dB	58.9 dB	63'	29'
* Distance to traffic noise contours is from the roadway centerline.				

<b>Table 3.5-3 Estimated Existing Background and Traffic Noise Levels at Receiver Locations (Exterior Levels, in dBA)</b>				
Receiver #	Land Use	Assessor Parcel No.	Leq	Ldn
R-1	Logging Equipment Yard	024-400-0200	51 dB	48 dB
R-2	Mobile Home Park	024-390-3000	58 dB	58 dB
R-3	Single Family Residence	024-410-0800	49 dB	50 dB
R-4	Senior Center	024-390-2800	49 dB	50 dB
R-5	Senior Apartments	024-390-6200	49 dB	50 dB
R-6	Single Family Residence	024-410-0700	51 dB	48 dB
R-7	Single Family Residence	024-430-0100	51 dB	48 dB
R-8	Single Family Residence	024-430-0500	51 dB	48 dB
R-9	Single Family Residence	024-430-0700	51 dB	48 dB
R-10	Single Family Residence		51 dB	48 dB
R-11	Single Family Residence	024-430-1600	51 dB	48 dB
R-12	Single Family Residence	024-430-1500	51 dB	48 dB
R-13	Single Family Residence	024-430-1400	51 dB	48 dB
R-14	Single Family Residence	024-430-6200	51 dB	48 dB
R-15	Single Family Residence	024-430-1300	51 dB	48 dB

*MEASURED EXISTING TRAFFIC NOISE*

Bollard & Brennan, Inc. conducted short-term traffic noise level measurements adjacent to the project site at four locations and conducted continuous hourly noise level at two locations adjacent to the proposed project site for a 24-hour period on January 3 and 4, 2002. The short-term noise level measurements were conducted to determine typical background noise levels during the morning and evening peak hour periods, and for comparison to future predicted noise levels. The continuous noise level measurements were conducted for comparison to the Sound-32 and FHWA models. In addition, continuous 24-hour noise measurement data collected along Glen Road by Brown-Buntin Associates, Inc., for the *Trinity County General Plan Noise Element Update*, were also used to assist in quantifying background noise levels. Locations of the short-term and continuous traffic measuring sites and results of short-term and continuous noise measurements are shown in **Figures 3.5-2, 3.5-3, 3.5-4, and 3.5-5.**



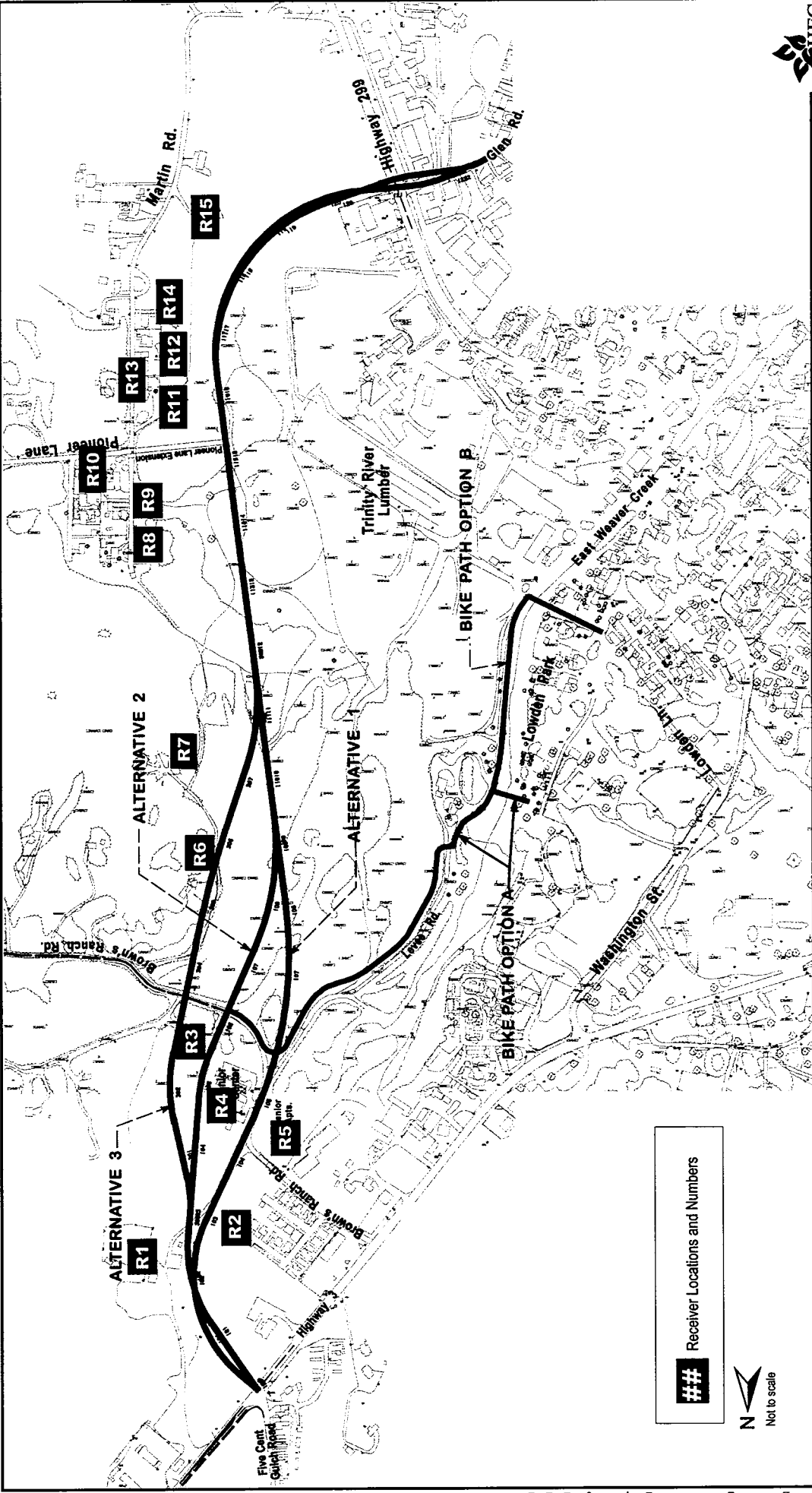
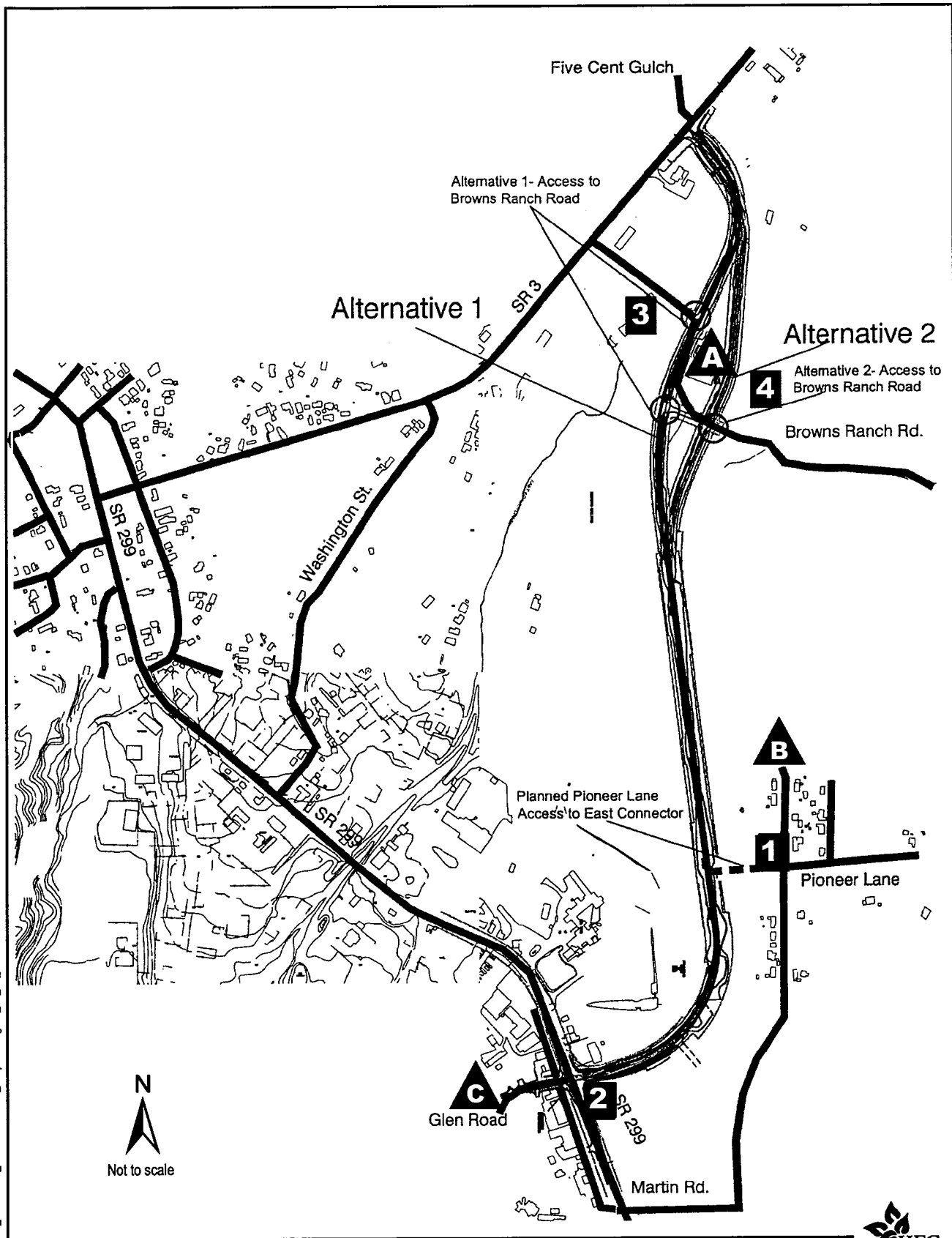


Figure 3.5-1  
 Sound 32 Modeling Receiver Locations  
 East Connector Roadway Project

East\_Connector\_WeavervilleEIR\_Graphics/Figure\_03\_05\_02.ai 12/12/02 CS

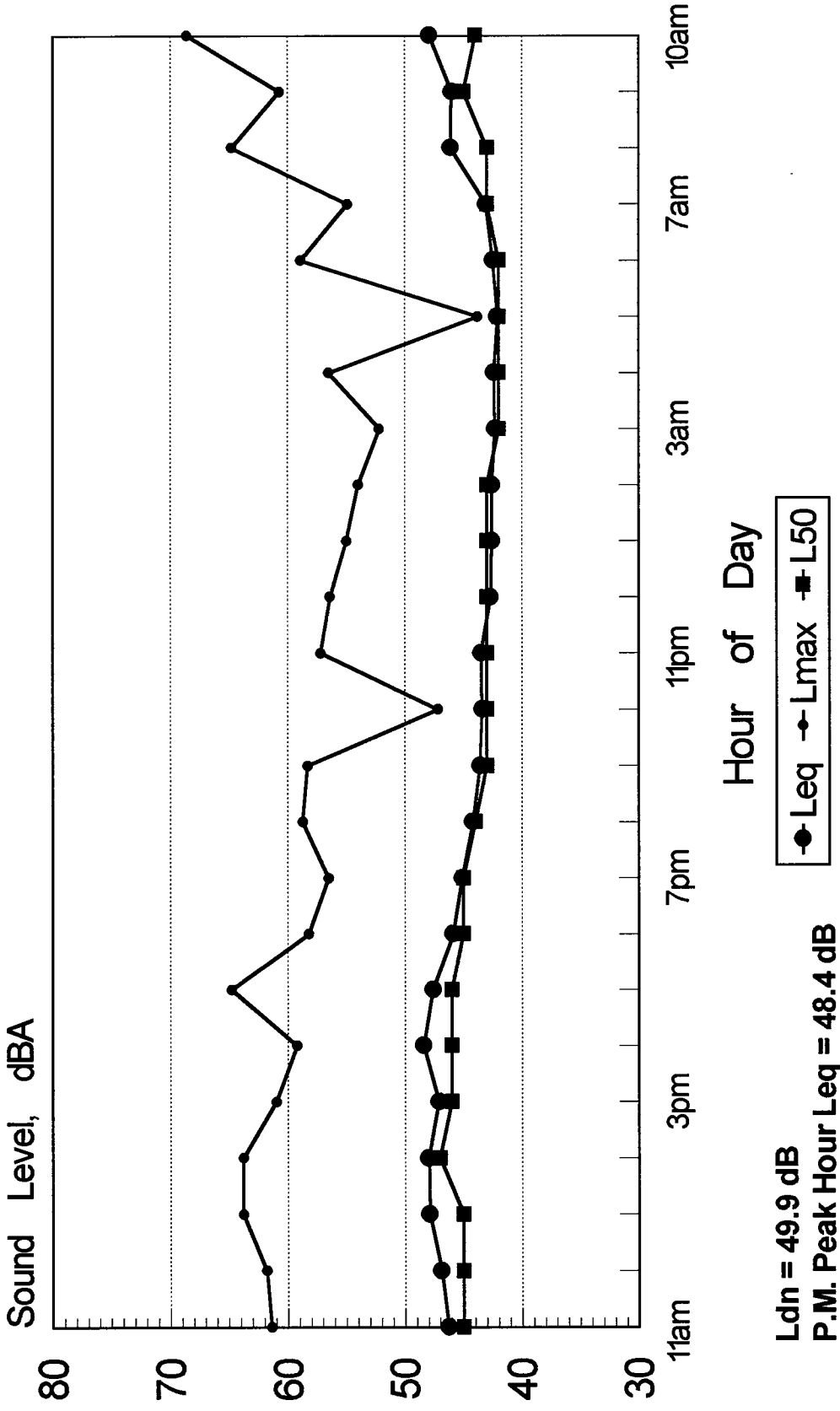


Not to scale

Source: Bollard & Brennan, Inc., 2002



**Figure 3.5-2**  
Noise Measurement Sites  
East Connector Roadway Project

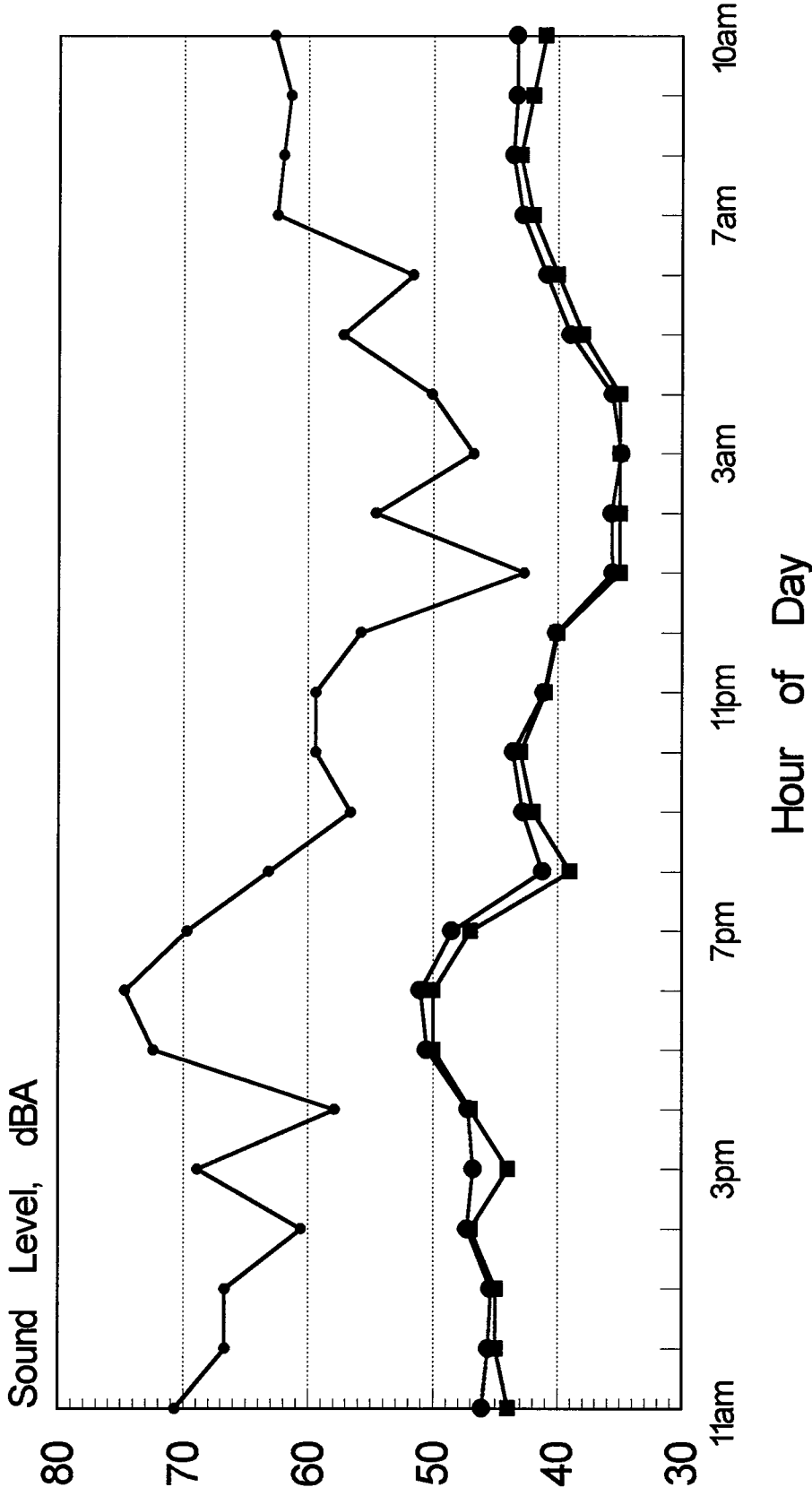


East.Connector.Weaver/IE/ER\_Graphics/Figure\_03\_05\_03.at 12/9/02 CS

Source: Bollard & Brennan, Inc., 2002



**Figure 3.5-3**  
 Continuous Measured Hourly Noise Levels, Site A - Senior Center, January 3-4, 2002  
 East Connector Roadway Project



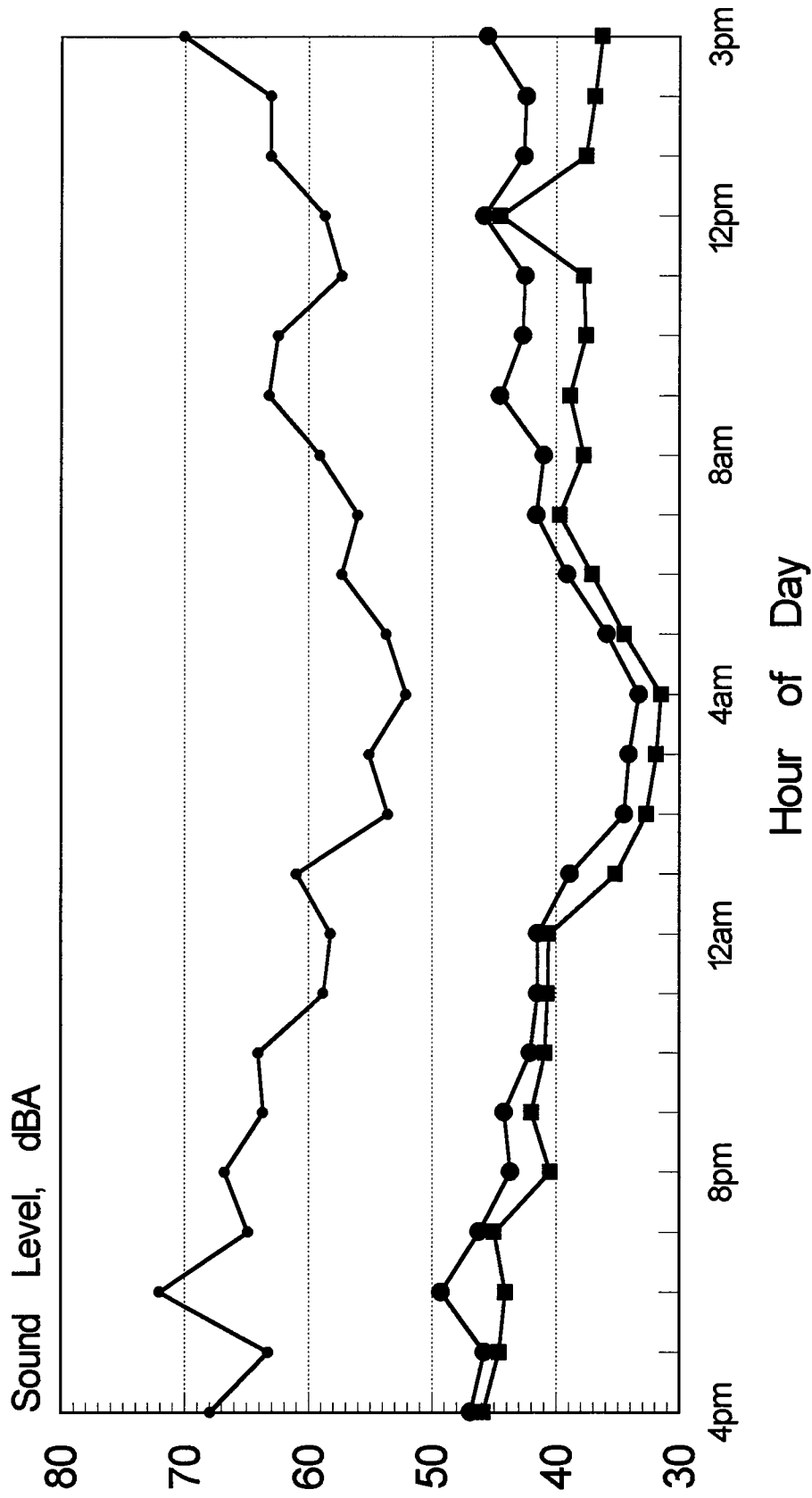
Ldn = 47.9 dB  
P.M. Peak Hour Leq = 51.0 dB

● Leq    ◻ Lmax



Figure 3.5-4  
Continuous Measured Hourly Noise Levels, Site B - Martin Road, January 3-4, 2002  
East Connector Roadway Project

Source: Bollard & Brennan, Inc., 2002



Ldn = 46.9 dB  
 P.M. Peak Hour Leq = 49.3 dB  
 Source: Brown-Buntin Associates

● Lmax    ◻ L50

### *PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES*

#### *Trinity County General Plan*

The purpose of the *Trinity County General Plan Noise Element* (Trinity County, 1974) is to provide mechanisms to mitigate existing noise conflicts and to minimize future noise conflicts by the adoption of policies and implementation measures designed to achieve land use compatibility for the proposed development. The Noise Element expresses the County's intent to minimize the impact of existing noise levels and to prevent adverse noise levels from occurring in the future. Note that Trinity County is currently updating the General Plan Noise Element. The revised Noise Element and corresponding Noise Ordinance are expected to be adopted in January 2003. The following specific recommendations contained in the current Noise Element (Trinity County, 1974) are relevant to the proposed project:

- Where feasible, alternate routes around densely populated areas should be provided for large trucks, thus reducing not only noise exposure but also traffic problems.
- Quiet forms of transportation such as walking and bicycling should be encouraged.
- The Noise Insulation Regulation in the State Administrative Code should be enforced. A special zoning overlay is proposed to encompass all areas in the County within L10 contours of 55 dBA (approximately equal to a CNEL of 60 dBA).

#### *Weaverville Community Plan*

The *Weaverville Community Plan Hazards* section goal and objective regarding noise that relates to the proposed East Connector Roadway project are as follows:

- **Goal #4:** To protect the public from adverse noise impacts.
- **Objective 4.1:** Assess new projects and their noise impacts on individual neighborhoods.

### **3.5.2 SIGNIFICANCE CRITERIA**

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant noise impacts:

Would the project cause:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The following noise standards apply to the proposed project:

*FEDERAL HIGHWAY ADMINISTRATION/CALTRANS CRITERIA*

The criteria for evaluating noise impacts that are used by the FHWA and Caltrans are contained in the Caltrans Traffic Noise Analysis Protocol (The Protocol). Based upon The Protocol, the proposed project is considered a Type 1 project. The project has also been determined to pass the screening procedures for determining the need for a Traffic Noise Impact Analysis, and is therefore required to perform a Traffic Noise Impact Analysis. (Is this all we're keeping in the EIR from the discussion of these criteria?)

The Protocol establishes Noise Abatement Criteria (NAC) for various land uses which have been categorized based upon activity. Land uses in these documents are categorized on the basis of their sensitivity to noise. The Category A criterion applies to lands on which serenity and quiet are of extraordinary significance and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. The Category A criterion is an hourly exterior sound level that approaches (within 1 dB) or exceeds the hourly NAC of 57 dBA, Leq. The Category B criterion applies to residences, hotels, motels, churches, schools, recreation areas, active sport areas, and parks, and is an hourly exterior sound level that approaches (within 1 dB) or exceeds the hourly NAC of 67 dBA, Leq. This criterion is generally applied at the outdoor activity areas where frequent human use occurs. The Category C criterion applies to commercially developed land uses, and is an hourly exterior sound level that approaches or exceeds 72 dB Leq. The Category E criterion applies to residences, motels, hotels, schools, hospitals, and similar uses, and is an hourly interior sound level of 52 dB Leq. The interior sound level criterion only applies in those situations where there are no exterior activities to be affected by the traffic noise. The Protocol also goes on to state that a noise increase is considered substantial when the predicted noise levels with the project exceed existing noise levels by 12 dBA, Leq.

Under The Protocol, a traffic noise impact must be mitigated when the predicted noise levels "approach or exceed" the NAC (Criterion B, or 67 dBA, for this project) or when the predicted noise levels

substantially exceed existing noise levels (an increase of 12 dBA or more) and it is reasonable and feasible to mitigate.

#### *TRINITY COUNTY GENERAL PLAN NOISE LEVEL CRITERIA*

Trinity County is currently updating the General Plan Noise Element. The revised Noise Element and corresponding Noise Ordinance are expected to be adopted in January 2003. The current draft Noise Element contains a policy stating that "Noise created by new transportation noise sources shall be mitigated so that resulting noise levels do not exceed 60 dB Ldn in outdoor activity areas or 45 dB Ldn in interior spaces of noise-sensitive land uses including residences, hotels, hospitals, churches and meeting halls.

Construction of the East Connector Roadway project will generate short-term noise levels in excess of applicable standards; however, proposed mitigation would reduce the impact of these noise levels to sensitive receptors in the project area to less than significant. Ground vibration due to traffic on the proposed East Connector Road will not be detectable at adjacent land uses, and is therefore not considered significant. Noise impacts due to traffic will be below established standards at all receptor locations. Although there will be noticeable increases in noise levels associated with vehicle traffic along the East Connector at some locations adjoining the project, due to attenuation and the fact that most receptors are separated from the road by topography, vegetation and/or East Weaver Creek, these increases are not considered "substantial." Cumulative noise impacts from the proposed roadway and proposed new Weaverville airport would be less than significant.

### **3.5.3 PERMANENT IMPACTS**

#### *PROJECT TRAFFIC NOISE IMPACTS*

Changing traffic patterns will change noise distribution patterns. Noise in the Brown's Ranch Road/Martin Road area will increase. Noise along Washington Street, in the vicinity of the elementary school and Lowden Park will decrease. Table 3.5-4 shows the modeled traffic noise levels along the existing street system for the year 2020 Future No Project and Future Plus Project Conditions. Table 3.5-5 shows the modeled Future (Year 2020) Without Project traffic noise levels at receiver locations along the East Connector. Noise levels shown in Table 3.5-5 are estimated based upon a combination of measured background noise levels and modeled traffic noise levels. This is because, as noted for Table 3.5-3, it is difficult to summarize the without project traffic noise levels at each receiver location along the proposed roadway since most of these receivers are located a considerable distance from any major existing roadway. Table 3.5-6 shows the modeled Future (2020) Plus Project traffic noise levels at receiver locations along the East Connector.



**Table 3.5-4**

**Predicted Future (Year 2020) Traffic Noise Levels (Exterior in dBA)  
(Based Upon FHWA RD-77-108 Traffic Noise Prediction Model)**

Roadway	Future No Project				Future With East Connector			
	Traffic Noise Level at 75'		Distance to Ldn Contour*		Traffic Noise Level at 75'		Distance to Ldn Contour*	
	Leq	Ldn	60 dB	65 dB	Leq	Ldn	60 dB	65 dB
<i>STATE ROUTE 3</i>								
SR 299 to Washington Street	63.6	63.9	137'	63'	63.8	63.4	126'	59'
<i>STATE ROUTE 299</i>								
SR 3 to Washington Street	65.1	65.3	168'	78'	64.7	65.0	162'	75'
Washington Street to Glen Road	68.1	68.1	261'	121'	67.5	67.5	239'	111'
Glen Road to Martin Road	67.6	66.6	206'	96'	66.4	66.3	197'	91'
<i>WASHINGTON STREET</i>								
SR 299 to SR 3	61.9	61.1	89'	41'	56.4	55.6	38'	18'
<i>EAST CONNECTOR ROAD</i>	N/A	N/A	N/A	N/A	63.6	60.2	78'	36'

\* Distance to traffic noise contours is from the roadway centerline.

3.0 Affected Environment, Environmental Consequences,  
and Mitigation Measures

NOISE

<b>Table 3.5-5</b>				
<b>Predicted Future (2020) Traffic Noise Levels at Receiver Locations without East Connector Road Project (Exterior Levels, in dBA)<sup>1</sup></b>				
Receiver #	Land Use	Assessor Parcel No.		
			Leq	Ldn
R-1	Logging Equipment Yard	024-400-0200	52 dB	52 dB
R-2	Mobile Home Park	024-390-3000	50 dB	51 dB
R-3	Single Family Residence	024-410-0800	50 dB	51 dB
R-4	Senior Center	024-390-2800	50 dB	50 dB
R-5	Senior Apartments	024-390-6200	50 dB	51 dB
R-6	Single Family Residence	024-410-0700	47 dB	48 dB
R-7	Single Family Residence	024-430-0100	48 dB	48 dB
R-8	Single Family Residence	024-430-0500	48 dB	48 dB
R-9	Single Family Residence	024-430-0700	48 dB	48 dB
R-10	Single Family Residence		48 dB	48 dB
R-11	Single Family Residence	024-430-1600	48 dB	49 dB
R-12	Single Family Residence	024-430-1500	49 dB	49 dB
R-13	Single Family Residence	024-430-1400	49 dB	49 dB
R-14	Single Family Residence	024-430-6200	49 dB	49 dB
R-15	Single Family Residence	024-430-1300	48 dB	48 dB

<sup>1</sup> Approximate levels in dBA (rounded).

Receiver #	Land Use	Assessor Parcel No.	Alternative 1		Alternative 2	
			Leq	Ldn	Leq	Ldn
R-1	Logging Equipment Yard	024-400-0200	55.8 dB	56.1 dB	56.1 dB	56.4 dB
R-2	Mobile Home Park	024-390-3000	55.4 dB	55.7 dB	53.2 dB	53.5 dB
R-3	Single Family Residence	024-410-0800	51.1 dB	51.4 dB	55.5 dB	55.8 dB
R-4	Senior Center	024-390-2800	55.7 dB	56.0 dB	57.1 dB	57.4 dB
R-5	Senior Apartments	024-390-6200	53.3 dB	53.6 dB	50.3 dB	50.6 dB
R-6	Single Family Residence	024-410-0700	50.7 dB	51.0 dB	51.8 dB	52.1 dB
R-7	Single Family Residence	024-430-0100	50.5 dB	50.8 dB	50.6 dB	50.9 dB
R-8	Single Family Residence	024-430-0500	50.9 dB	51.2 dB	50.8 dB	51.1 dB
R-9	Single Family Residence	024-430-0700	50.7 dB	51.0 dB	50.6 dB	50.9 dB
R-10	Single Family Residence		52.6 dB	52.9 dB	53.1 dB	53.4 dB
R-11	Single Family Residence	024-430-1600	55.3 dB	55.6 dB	55.6 dB	55.9 dB
R-12	Single Family Residence	024-430-1500	55.6 dB	55.9 dB	55.9 dB	56.1 dB
R-13	Single Family Residence	024-430-1400	53.8 dB	54.1 dB	54.1 dB	54.4 dB
R-14	Single Family Residence	024-430-6200	53.8 dB	54.1 dB	54.0 dB	54.3 dB
R-15	Single Family Residence	024-430-1300	54.7 dB	55.0 dB	54.6 dB	54.9 dB

Based upon the results shown in Table 3.5-6, predicted noise levels with the project will not exceed the FHWA/Caltrans Protocol noise level criterion of 67 dB Leq at the representative receiver locations. The noise levels with the project will not exceed the recommended Trinity County noise level criterion of 60 dB CNEL/Ldn.

Table 3.5-7 shows the predicted increases in background noise levels due to the project. The predicted future (2020) noise levels with the project (Table 3.5-6) are compared to the estimated background noise levels shown in Table 3.5-5. Based upon the analyses, the predicted noise levels are expected to increase overall background noise levels at residential uses between 2 dB and 7 dB Leq/Ldn. Increases in noise levels of 5 dB or more will be noticeable. However, this is not considered a significant increase in noise levels based upon the FHWA/Caltrans protocol. Most receptors are separated from the road by topography, vegetation and/or East Weaver Creek. Although noticeable, the increase in noise of up to 7dB does not represent a substantial increase in ambient noise levels. This would not be considered a significant increase in noise levels based upon the FHWA/Caltrans Protocol.

NOISE

Table 3.5-7 Predicted Increases in Exterior Noise Levels at Receiver Locations				
Receiver #	Land Use	Assessor Parcel No.	Increase in Noise Due to Project	
			Alternative 1	Alternative 2
R-1	Logging Equipment Yard	024-400-0200	+4 dB <sup>1</sup>	+4 dB
R-2	Mobile Home Park	024-390-3000	<b>+5 dB</b>	+3 dB
R-3	Single Family Residence	024-410-0800	+1 dB	<b>+5 dB</b>
R-4	Senior Center	024-390-2800	<b>+6 dB</b>	<b>+7 dB</b>
R-5	Senior Apartments	024-390-6200	+3 dB	No change
R-6	Single Family Residence	024-410-0700	+3 dB	+4 dB
R-7	Single Family Residence	024-430-0100	+3 dB	+3 dB
R-8	Single Family Residence	024-430-0500	+3 dB	+3 dB
R-9	Single Family Residence	024-430-0700	+3 dB	+3 dB
R-10	Single Family Residence		<b>+5 dB</b>	<b>+5 dB</b>
R-11	Single Family Residence	024-430-1600	<b>+7 dB</b>	<b>+7 dB</b>
R-12	Single Family Residence	024-430-1500	<b>+7 dB</b>	<b>+7 dB</b>
R-13	Single Family Residence	024-430-1400	<b>+5 dB</b>	<b>+5 dB</b>
R-14	Single Family Residence	024-430-6200	<b>+5 dB</b>	<b>+5 dB</b>
R-15	Single Family Residence	024-430-1300	<b>+7 dB</b>	<b>+7 dB</b>

**1** = Represents a noticeable change in noise.

*PROJECT VIBRATION IMPACTS*

As a means of determining the potential for vibration impacts associated with the project, Bollard & Brennan, Inc. used previous vibration measurement data collected for a roadway widening project in the Sacramento area. Bollard & Brennan, Inc. conducted vibration measurements at the edge of the pavement adjacent to a major roadway. A LDL Model 2900 analyzer was used with a Bruel & Kjaer Type 4382 accelerometer. The sample period was 15 minutes, during which time a large volume of vehicles passed the vibration measurement site, including buses and heavy trucks. During the vibration measurements, peak particle velocity of less than five thousandths (0.005) of an inch per second were measured. Based on research conducted by Caltrans, peak particle velocities of less than 0.005 inches per second are below the threshold of human perception and do not pose a threat to either humans or structures.

It is important to note that the vibration measurements focused on ground-transmitted vibration in order to ascertain if traffic-induced ground vibration could result in structural failure of a residential foundation. As stated previously, the measured vibration levels were well below those identified by Caltrans as being

potentially damaging to structures. Based upon that analysis, it can be assumed that ground vibration due to traffic on the proposed East Connector Roadway will not be detectable at adjacent land uses.

*Impacts Common to All Alternatives*

Although there will be noticeable increases in noise levels associated with the project at some locations adjoining the project, these increases are not considered "substantial." Exterior noise levels will remain below 60 dB at all receptors, within standards proposed in the Trinity County draft noise element. Noise impacts due to traffic are therefore not considered significant. Ground vibration due to traffic on the proposed East Connector Road will not be detectable at adjacent land uses, and is therefore not considered significant.

*Alternative 1*

Operation of the proposed East Connector Roadway would increase overall traffic noise levels at six nearby single-family residences, and at the Two Creeks Mobile Home Park and Golden Age Senior Center by approximately 5 to 7 dB Ldn/Leq.

*Alternative 2*

Operation of the proposed East Connector Roadway would increase overall traffic noise levels at seven single-family residences and the senior center by approximately 5 to 7 dB Ldn/Leq.

*Alternatives A, B, and C*

The effect on noise will be the same for all three SR 299/Glen Road intersection alternatives.

*Bicycle/Pedestrian Trail and Bridge*

This component of the project will have no noticeable effect on ambient noise levels.

**Noise Impact-1**            Operation of the proposed East Connector Roadway would increase overall traffic noise levels at six nearby single-family residences, and at the Two Creeks Mobile Home Park and Golden Age Senior Center (Alternative 1), or at seven single-family residences and the senior center (Alternative 2), by approximately 5 to 7 dB Ldn/Leq.

**Significance:**            Less than significant (no mitigation required).

**Noise Impact-2**            Operation of the proposed East Connector Roadway would generate traffic-induced vibration.

**Significance:**            Less than significant (no mitigation required).

### 3.5.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

#### *Impacts Common to All Alternatives*

During the construction phases of the project, noise from construction activities would dominate the noise environment in the immediate area. Activities involved in construction would generate noise levels, as indicated in Table 3.5-8, ranging from 70 to 90 dB at a distance of 50 feet. Construction activities would be temporary in nature, typically occurring during normal working hours. Construction noise impacts could be significant, as nighttime operations or use of unusually noisy equipment could result in annoyance or sleep disruption for nearby residences outside of the project area.

Type of Equipment	Maximum Level, dBA at 50 feet
Scrapers	88
Bulldozers	90
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85

Source: Environmental Noise Pollution, Patrick R. Cunniff, 1977.

Construction noise is addressed by Caltrans standard specifications Section 7-1.01I "Sound Control Requirements". These requirements specify that noise levels generated during construction shall comply with applicable local, state, and federal regulations, and that all equipment shall be fitted with adequate mufflers according to the manufacturer's specifications. The Caltrans standard specifications will be incorporated by reference into the Specifications for this project.

During construction, traffic noise generated by approaching traffic would be reduced due to a reduction in speed required by working road crews. Conversely, traffic noise levels of vehicles leaving the construction area would be slightly higher than normal due to acceleration. The net effect of the accelerating and decelerating traffic upon noise would not be appreciable, especially since this is a new

road with no existing traffic traveling through the work area, except at the two roadway terminals at SR 3 and SR 299 and where the new road intersects existing Brown's Ranch Road. The most important project-generated noise source would be truck traffic (associated with transport of heavy materials and equipment) and construction equipment (bulldozers, scrapers, etc.). There may be pile driving for the bridge piles (roadway bridge only). This noise increase would be of short duration and limited to daytime hours. Therefore, no significant noise impacts are expected.

**Noise Impact-3** Construction activities associated with the proposed East Connector Roadway project (road and bridge construction) would temporarily increase noise levels in nearby areas.

**Significance:** Potentially significant, but mitigated

**Noise Mitigation-1A** Construction activities producing significant noise sources shall be scheduled for periods of the day when construction noise would have the least impact on the residents of adjacent and nearby homes and businesses, specifically during normal working hours (7:00 a.m. to 6:00 p.m.) on weekdays, and the hours of 8:00 a.m. to 5:00 p.m. on Saturday or Sunday.

**Noise Mitigation 1B** Locate stationary construction equipment, such as compressors and generators, within designated staging areas, as far away as possible from sensitive receptors. Impact tools and intake and exhaust ports on power construction equipment shall be muffled or shielded. Construction activities shall comply with appropriate noise-related ordinances and regulations, including Caltrans standards specifications Section 7-1.01I "Sound Control Requirements."

**Post-mitigation Significance:** Less than significant

### 3.5.5 CUMULATIVE IMPACTS

#### *Impacts Common to All Alternatives*

The cumulative analysis of traffic noise impacts assumes that an access road to a proposed new airport intersects with the East Connector. The traffic report estimates an additional 150 peak hour vehicles. Based upon that increase in traffic, noise levels would increase by less than 0.8 dB Leq/Ldn. An increase in noise of less than 1 dB is considered to be imperceptible. Therefore, the cumulative traffic noise impact is less than significant.

## 3.6 ENERGY

The proposed East Connector Roadway project will be a limited-access roadway that will accommodate existing traffic in the project area. The project would not add additional traffic capacity, in comparison to the baseline (existing) condition and the No Project Alternative. The project is not expected to result in increased energy consumption, including petroleum consumption, or to deplete existing energy reserves. The project alternatives may reduce energy consumption very slightly by improving traffic operations. However, it is not possible to measure this effect, which would be minimal in comparison to long-term energy consumption of existing and future traffic with or without the project. Energy was not determined to be an issue during the initial project scoping and public scoping process. Therefore, this issue is not addressed in detail in this EIR.



## 3.7 WATERS OF THE UNITED STATES (INCLUDING WETLANDS)

### 3.7.1 AFFECTED ENVIRONMENT

This section describes waters of the United States and non-jurisdictional wetlands that may be affected by the proposed East Connector Roadway project. The complete Delineation of Waters of the United States is available for review (J&S, 2002c; see Appendix C). The U.S. Army Corps of Engineers (ACOE) issued a jurisdictional determination in a letter dated September 20, 2002. Information in the delineation and ACOE verification will be used in the preparation of permit applications to comply with the requirements of the ACOE Nationwide Permit (NWP) pursuant to Sec. 404 of the Clean Water Act (33 U.S.C. 1344), and CDFG Streambed Alteration Agreement (SAA) pursuant to Sec. 1601 of the California Fish and Game Code.

The discharge of dredged or fill material into waters of the United States is regulated by ACOE under Sec. 404 of the Clean Water Act. In addition, Executive Order 11990 of May 24, 1977, establishes a national policy "to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands wherever there is a practical alternative" and directs all federal agencies to refrain from assisting in or giving financial support to projects that encroach on public or privately owned wetlands, when there is a practicable alternative. The order further requires that federal projects must support a policy to minimize the destruction, loss, or degradation of wetlands. Such a project may not be undertaken unless the agency has determined that there are no practicable alternatives to such construction, that the proposed action includes all practicable measures to minimize harm to wetlands that will be affected by the project, and that the impact is minor. The Federal Department of Transportation protects, preserves, and enhances wetlands to the extent practicable on projects funded through the Federal-Aid Highway Program.

Waters of the U.S. include tidal and non-tidal, perennial and intermittent watercourses, tributaries to such watercourses, and wetlands adjacent to such waters (33 CFR 328.3(a) ACOE Regulatory Program Regulations). The limit of ACOE jurisdiction for non-tidal watercourses (without adjacent wetlands) is defined in 33 CFR 329.11 (a)(1) as the "ordinary high water mark" (OHWM). The OHWM is the "line on the (watercourse banks) established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas." The bank-to-bank extent of the channel that contains the high water flow during a normal rainfall year generally serves as a good first approximation of the lateral limit of ACOE jurisdiction. The upstream limits of "other waters" is defined as the point where the OHWM is no longer perceptible.

Wetlands are “waters of the U.S.,” and are “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (ACOE, 1987). Wetlands can be permanent or intermittent, and isolated or adjacent to other waters of the U.S. However, on January 9, 2001a court ruling (Solid Waste Agency of Northern Cook County (SWANCC) ruling SWANCC v. United States Army Corps of Engineers [121 S.Ct. 675,2001]) essentially resulted in the determination that non-navigable, isolated waters are not “waters of the U.S.,” and are not subject to ACOE jurisdiction.

The CDFG has authority under Sec. 1600 of the California Fish and Game Code to regulate actions that “divert, obstruct or change the natural flow or bed, channel or bank of any river, stream or lake designated by the CDFG in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit.” The CDFG will use information in the Wetland Delineation Report and this Draft EIR to prepare an SAA pursuant to Sec. 1601.

#### ***Wetland Delineation in the Project Study Area***

Jones & Stokes (J&S) conducted a wetland delineation of the project study area using the *Corps' 1987 Delineation Manual* (Environmental Laboratory 1987) on August 7, 2001. The manual provides technical guidelines and methods for using the three-parameter approach to determine whether areas supporting positive indicators of hydrophytic (water-dependent) vegetation, hydric soils, and wetland hydrology are wetlands.

The botanist/wetland ecologist surveyed the project study area to identify sites that may be wetlands. The botanist then collected data at sample sites that could potentially be considered jurisdictional wetlands. The relative cover of dominant plant species was visually estimated at each sample site and recorded on the data sheet. The percentage of obligate wetland, facultative wetland, and facultative species, as indicated by Reed (1988), was determined in order to investigate whether the site supported a prevalence of hydrophytic vegetation. The hydrology of the sample site was determined by examining indicators of frequent long-term ponding or flooding. At each sample site, soil horizons and textures were recorded on the data sheet, and the soil was evaluated to determine whether the soils exhibited hydric soil indicators. The boundaries of jurisdictional and non-jurisdictional wetlands were mapped according to obvious changes in the vegetation cover, soils, and hydrology.

A preliminary jurisdiction determination on isolated wetlands was conducted as part of the wetland delineation. This determination was based on guidance published January 19, 2001, by Counsel for the USEPA and ACOE in response to the January 9, 2001 ruling (SWANCC vs. United States Army Corps of Engineers [121 S.Ct. 675,2001]). The guidance resulted in the determination that non-navigable, isolated waters may not be regulated by ACOE. As part of the wetland verification process, ACOE has determined that two of the three wetlands, SW-1 and SW-3 are truly isolated and therefore not regulated

under Section 404 of the Clean Water Act (CWA). Wetland SW-2, however, has a surface drainage connection to Lance Gulch, and is therefore adjacent to Lance Gulch and in ACOE jurisdiction. Correspondence from the ACOE is included in Appendix B.

Other waters of the United States consist of East Weaver Creek, Lance Gulch, Five Cent Gulch and unnamed tributary drainages. These streams were delineated based on the presence of an OHWM, which indicates frequent inundation.

### *RESULTS*

Figures 3.7-1 and 3.7-2 show the location of waters of the United States and jurisdictional and non-jurisdictional seasonal wetlands identified in the project study area. East Weaver Creek, Lance Gulch, Five Cent Gulch and two tributary ephemeral drainages that total 0.3 hectare (0.74 acre) would qualify as waters of the United States. Adjacent wetland SW-2 is also a water of the United States, approximately 0.02 acres in size. These waterways are described briefly below.

Stream habitat is present in the project study area in the form of the channel of East Weaver Creek, Lance Gulch, Five Cent Gulch, and two unnamed ephemeral drainages. East Weaver Creek is characterized by open, perennially flowing water and an OHWM, qualifying it as waters of the United States and subject to ACOE jurisdiction under Section 404 of the CWA. Five Cent Gulch and the two unnamed ephemeral drainages are characterized by a defined bed and bank, and flow only periodically after storm events and during the rainy season. Lance Gulch is an intermittent, spring-fed drainage.

Three small, seasonal wetlands totaling 0.023 acre were delineated during the field surveys (see Figures 3.7-1 and 3.7-2). These wetlands are located near Lance Gulch. They appear to have been created by excavation in the area. They are likely receiving runoff from the surrounding land and pond for a very short duration during the rainy season. Two of the seasonal wetlands, SW-1 and SW-3 are isolated from Lance Gulch and other surface waters by the topography in the area. Wetland SW-2, however, does have a connection to Lance Gulch, and the ACOE has determined that SW-2 is under their jurisdiction, as a water of the U.S.

### *PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES*

#### *Trinity County General Plan*

The *Land Use Element* of the *Trinity County General Plan* (Trinity County, 1988) contains the following general policy that relates to the proposed East Connector Roadway project:

- To strive to conserve those resources of the county that are important to its character and economic well-being.

- By protecting not only rare and endangered species, but also required habitat for the more plentiful species.

The *Open Space and Conservation Elements* of the *Trinity County General Plan* (Trinity County, 1973) contain the following objectives and recommendations that relate to the proposed East Connector Roadway project:

- Objective: To preserve and maintain open space as a means of providing natural habitat for all species of wildlife is the prime objective.
- Recommendation 1. To maintain all species of fish and wildlife for their intrinsic and ecological values as well as for their direct benefit to mankind.
- Recommendation 4. Any plans to alter the present environment should be considered on the basis of protecting fish and wildlife and their habitat.
- Recommendation 7. Outstanding wildlife habitats that have an unusually high value for fish and wildlife should be carefully considered before any development altering this environment is permitted.

#### *Weaverville Community Plan*

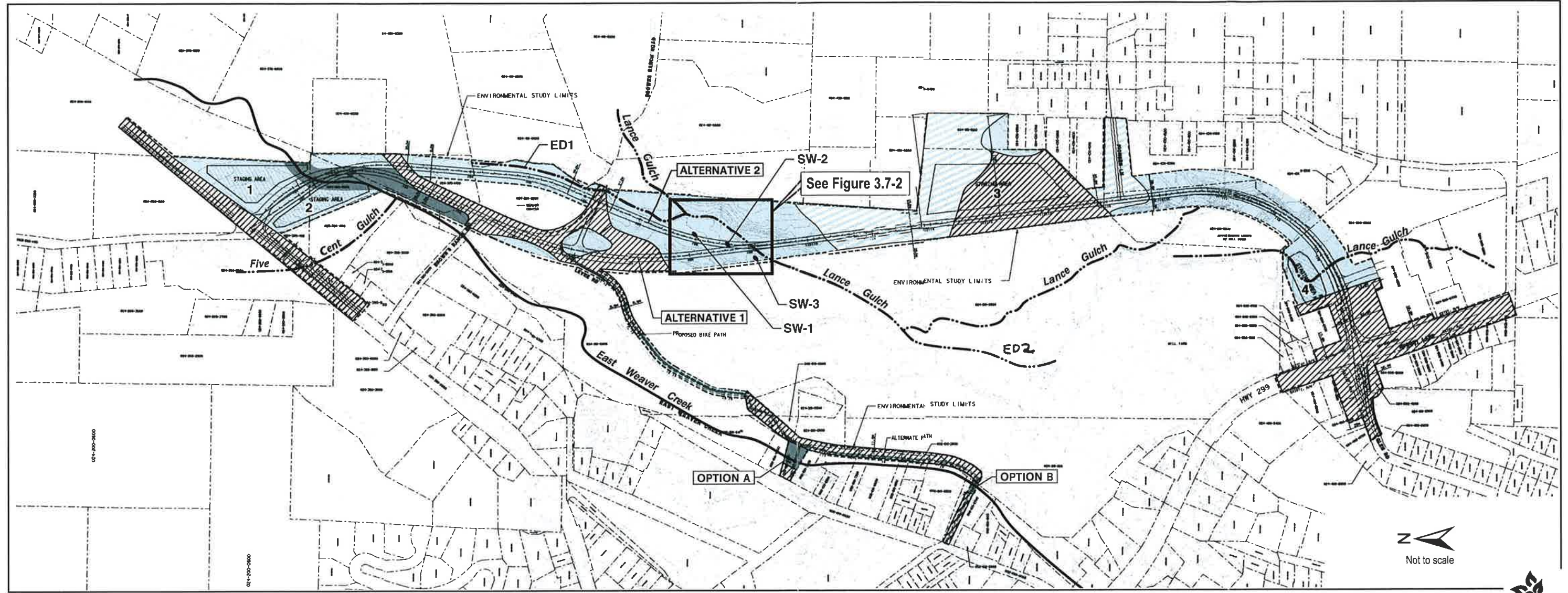
The Natural Resources section of the *Weaverville Community Plan* (Trinity County, 1997) contains the following goals and objectives that relate to the proposed East Connector Roadway project:

- Goal #2: To conserve and maintain streams and forest open space as a means of providing natural habitat for all species of wildlife.
- Objective 2.4: Retain wetlands in accordance with Army Corps of Engineers and U.S. Fish and Wildlife directives.

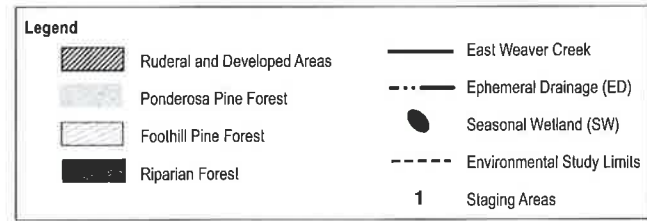
### 3.7.2 SIGNIFICANCE CRITERIA

Appendix G of the *CEQA Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant impacts to waters of the U.S. (including wetlands):

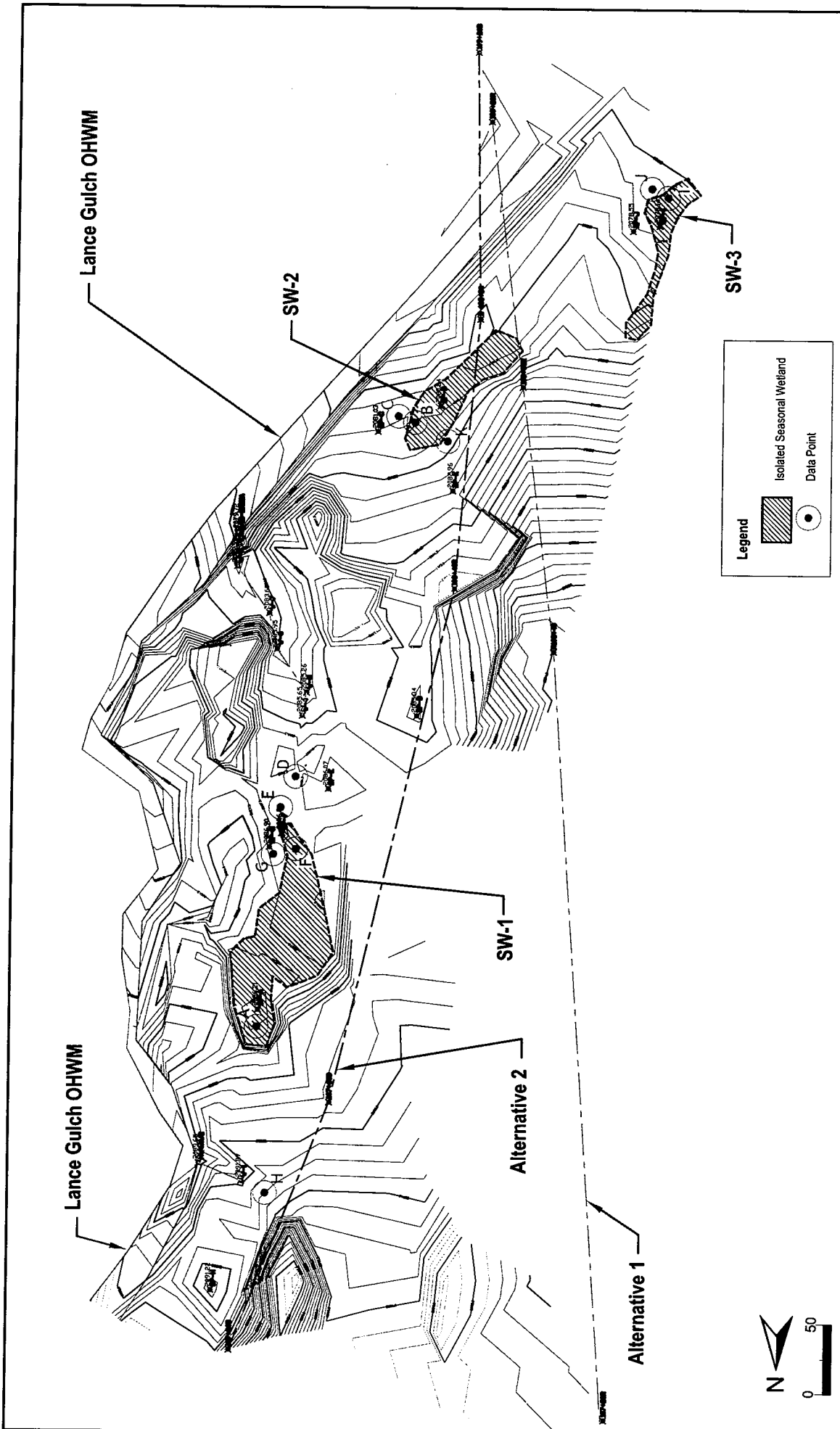
East\_Connector\_WeavervilleEIR\_Graphics\Figure\_03\_07\_01.ai 12/9/02 CS



Source: Psomas, 2002



**Figure 3.7-1**  
 Location of Wetlands and Other Waters of the United States  
 East Connector Roadway Project



East Connector Weaverville/ER Graphics/Figure\_03\_07\_02.dwg 12/9/02 CS

Source: Psomas, 2002



**Figure 3.7-2**  
 Surveyed Locations of Lance Gulch and Three Seasonal Wetlands  
 East Connector Roadway Project

Would the project:

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, Coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The original design of the proposed East Connector Roadway and bridge project would cause filling or disturbance of jurisdictional and non-jurisdictional wetlands and other waters of the U.S.; however, mitigation, including construction of compensatory replacement wetlands and a retaining wall, and selection of the pier wall bridge foundation option (if feasible), which results in less fill within waters of the U.S. than the column option would mitigate impacts to less than significant. The project will not conflict with any local policies or ordinances protecting biological resources. The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, since no such plans exist for the project area at the present time.

### 3.7.3 PERMANENT IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

The fill slope for the eastern East Weaver Creek vehicle bridge approach encroaches into the ordinary high water mark (OHWM) for each of the alternatives, as discussed below. Bridge supports, either pier walls or columns, will also be placed within the OHWM of East Weaver Creek. The filling or disturbance of streams that are considered waters of the United States is considered a significant impact because these waterways provide important local biological habitat and water quality functions. All other fill material, bridge abutments and approaches for the proposed roadway structure will be placed above the ordinary high water mark. No elements of the bicycle/pedestrian bridge will be placed within the OHWM, for either bicycle/pedestrian bridge option.

The project will result in the filling or disturbance of jurisdictional and non-jurisdictional seasonal wetlands, as discussed for each of the alternatives, below. Seasonal Wetland SW-3 will not be affected by the proposed project. All or part of SW-2, the jurisdictional wetland, will be filled if either alternative alignment is selected. All or part of SW-1 will be filled only if Alternative 2 is selected (see below). The two seasonal wetlands appear to have been created by disturbance and excavation activities in the area

and now function as seasonal wetlands. Because they have been artificially created and continue to receive some level of disturbance, the wetlands have a relatively low species richness. No wildlife species were observed using the seasonal wetlands during any of the surveys, and the wetlands likely would be considered low-quality habitat for most wildlife species.

Implementation of the proposed project will include County acquisition of the severed piece of the Trinity River Lumber Mill property between the selected alignment and Lance Gulch. This area will be retained as open space and the Weaverville Basin Trails Committee will be allowed to construct a Class I bicycle/pedestrian trail through this area. This area could provide a vegetated buffer of 100 feet or more between the roadway and Lance Gulch, and could also be used to construct compensatory wetlands. Additional information on this mitigation measure is supplied below.

#### *ALTERNATIVE 1*

The fill slope for the eastern East Weaver Creek bridge approach encroaches into the ordinary high water mark (OHWM). For Alternative 1, the proposed 2:1 fill slope encroaches into OHWM at Station 102+20. If pier walls are used to support the East Connector bridge, there will be a very minor amount of fill within ordinary high water (less than 1 square m) for Alternative 1. If columns are used, Alternative 1 will result in permanent fill of 10.8 square m within the ordinary high water. These impacts would consist of placement of portions of the concrete pier walls or columns, as well as temporary impacts from excavation for construction of the pier wall or column foundations.

Implementation of Alternative 1 would result in the filling of 0.006 acres of Wetland SW-2. Alternative 1 would result in less impact to seasonal wetlands, but more impact to other waters of the United States. Implementation of Alternative 1 and associated staging areas (1, 2, and 4) could result in the potential placement of fill material and/or disturbance of up to 0.087 acre of East Weaver Creek and Lance Gulch.

#### *ALTERNATIVE 2*

The fill slope for the eastern East Weaver Creek bridge approach encroaches into the OHWM. For Alternative 2, the proposed 2:1 fill slope encroaches into OHWM at two locations at Stations 101 +60 to 101+80 and Station 102+20. If pier walls are used to support the East Connector bridge, there will be 4.62 square m of fill within ordinary high water for Alternative 2. If columns are used, Alternative 2 would result in 6.9 square m of temporary and/or permanent impacts within the limits of the ordinary high water mark. These impacts would consist of placement of portions of the concrete pier walls or columns, as well as temporary impacts from excavation for construction of the pier wall or column foundations.

If Alternative 2 is selected, all or part of the non-jurisdictional, isolated SW-1 will be filled or disturbed during construction of the two-lane arterial road and associated bicycle lanes. Alternative 2 would result



in the filling or disturbance of 0.006 acres of Wetland SW-1 and 0.013 acre of Wetland SW-2. Alternative 2 would result in more impact to seasonal wetlands and slightly more (0.004 acres) overall impact to waters of the United States (including wetlands) than Alternative 1. Implementation of Alternative 2 and associated staging areas (1, 2, and 4) could result in the potential placement of fill material and disturbance of up to 0.077 acre of East Weaver Creek and Lance Gulch.

### *NO PROJECT ALTERNATIVE*

The No Project Alternative would have no effect on wetlands or on streams that are considered waters of the U.S.

**Waters Impact-1**      The project will result in the filling or disturbance of jurisdictional and non-jurisdictional seasonal wetlands.

**Significance:**      Significant, but mitigated.

**Waters Mitigation-1**      The County will acquire the portion of the Trinity River Lumber Company property between the East Connector and Lance Gulch, and preserve the area as a vegetated buffer zone. The open space will provide a vegetated buffer of 100 feet or more, between the roadway and the Gulch. Seasonal wetlands will be created in this area, adjacent to, and hydrologically connected with, Lance Gulch. The area of the created seasonal wetlands shall be, at a minimum, equal to the area of seasonal wetlands (both jurisdictional and non-jurisdictional) that is filled or destroyed as a result of this project, in accordance with a "no net loss" of wetlands performance standard.

The compensatory replacement wetlands will be designed by a qualified wetland scientist during the design phase of this project and the mitigation plan will be submitted to the ACOE with the application for a Section 404 permit.

The wetlands shall be constructed during construction of the East Connector, and vegetated during revegetation and landscaping of the East Connector and bicycle/pedestrian paths. The design of the compensatory wetlands shall consider the future construction of the proposed Class 1 bicycle/pedestrian path by the Weaverville Basin Trails Committee, so that construction of the trail will not result in placing fill in the compensatory wetlands.

**Post-mitigation Significance:** Less than significant. Isolated wetlands will be replaced with wetlands adjacent to Lance Gulch, with improved habitat value and water quality

protection function. Therefore, no net loss of wetland functions and values is expected to result from the proposed project. Based on these factors, as well as the limited extent and overall habitat quality of these wetlands, the impact, after mitigation, is considered minor.

**Waters Impact-2** Columns and pier walls for the vehicle bridge over East Weaver Creek would cause a small area of disturbance to waters of the U.S from discharging fill materials (bridge pier walls or columns and eastern approach fill) to waters of the U.S.

**Significance:** Significant, but mitigated.

**Waters Mitigation-2** Encroachment of approach fill slopes into OHWM will be completely eliminated, as follows: If Alternative 1 is constructed, the eastern approach will include a retaining wall at Station 102+00 to Station 102+60. If Alternative 2 is constructed, the eastern approach will include a retaining wall at Station 102+00 to 102+40 and either a retaining wall or a 1.5:1 fill slope at Station 101+60 to 101+80. The pier wall bridge foundation option, which results in less fill within waters of the U.S. than the column option, will be the preferred bridge design. Pier walls will be selected over column supports, unless structural, geotechnical or hydrologic constraints make this option infeasible.

**Post-mitigation Significance:** Less than significant. This minimizes the area of fill to waters of the U.S. to the maximum extent practicable, to an area of less than 10 square meters.

In addition to the mitigation measures described above, TCDOT will obtain in the following state and federal authorizations and implement any additional conditions required by these authorizations:

- ACOE's Section 404 permit (Nationwide Permit No. 14)
- RWQCB's Section 401 water quality certification
- RWQCB's General Stormwater Permit for Construction Activities
- CDFG's Section 1601 Streambed Alteration Agreement (SAA)
- NOAA Fisheries' (formerly NMFS) Biological Opinion for the Southern Oregon/Northern California Coast coho salmon and Essential Fish Habitat Conservation Recommendations for the Southern Oregon/Northern California Coast coho salmon and Upper Klamath and Trinity Rivers chinook salmon

### 3.7.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

A temporary crossing may be placed in East Weaver Creek during bridge construction. The crossing will be a temporary bridge. Temporary approach fills to access the bridge may be placed within the OHWM of East Weaver Creek. However, as stated in the project description, all temporary fills, and the temporary bridge will be removed entirely from the OHWM by October 15 of any construction year, and upon completion of construction. The temporary crossing and associated fill material will therefore not cause the loss of waters of the U.S.

As mentioned above, implementation of Alternative 1 and associated staging areas (1, 2, and 4) could result in the potential placement of fill material and/or disturbance of up to 0.087 acre of East Weaver Creek and Lance Gulch. Implementation of Alternative 2 and associated staging areas (1, 2, and 4) could result in the potential placement of fill material and disturbance of up to 0.077 acre of East Weaver Creek and Lance Gulch. Implementation of Habitat Mitigation 4, previously mentioned, will prevent any loss of waters of the U.S. due to staging, and reduce this impact to less than significant.

**Waters Impact-3** A temporary bridge crossing and associated approach fills may be placed in East Weaver Creek during construction of the vehicle bridge. All such fills will be removed in their entirety on October 15 of any construction year, and upon completion of bridge construction.

**Significance:** Less than significant, due to measures included in the project description (see Section 1.4.4).

**Waters Impact-4** Use of staging areas (1, 2, and 4) adjacent to East Weaver Creek and Lance Gulch could result in the potential placement of fill material and disturbance of up to 0.087 acre of waters of the U.S.

**Significance:** Significant, but mitigated (**Hydrology Mitigation-4**)

**Hydrology Mitigation-4** The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver Creek. TCDOT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent

sediment and pollutant discharges to Lance Gulch and East Weaver Creek.  
There will be no removal of riparian vegetation for staging purposes.

**Post-mitigation Significance:** Less than significant.

### 3.7.5 CUMULATIVE IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Construction of the new Weaverville Airport will result in the loss of some headwaters of ephemeral drainages, and possible wetland losses. Delineations are not yet complete for the West Connector, but that project will involve one or more crossings of Weaver Creek/West Weaver Creek and tributary drainages. Possible impacts to wetlands may also result. Any losses of waters of the United States resulting from these projects will be mitigated by avoiding and minimizing losses to the extent possible, and then mitigating by replacing or restoring lost waters at a ratio of at least one to one. Cumulative impacts are possible, regardless of the alignment alternative selected for the East Connector Roadway, but the combined projects will not result in a net loss of waters of the United States.

**Waters Impact-5** Construction of other projects in the Weaverville area, including the proposed West Connector Roadway and new Weaverville Airport could result in cumulative impacts from the disturbance and placement of fill material into streams and/or wetlands that are considered waters of the United States and regulated under Section 404 of the CWA.

**Significance:** Significant, but mitigated (see **Waters Mitigation-1** and **-2**).

**Waters Mitigation-1** Avoid or minimize disturbance of riparian areas from construction staging. (See details of **Waters Mitigation-1** above.)

**Waters Mitigation-2** Avoid or minimize disturbance of riparian areas from construction staging. (See details of **Waters Mitigation-2** above.)

**Post-mitigation Significance:** Less than significant.

## 3.8 VEGETATION, INVASIVE SPECIES, WILDLIFE

### 3.8.1 AFFECTED ENVIRONMENT

This section describes the biological communities known to occur in the project area and the wildlife that may inhabit each of these communities. The section also discusses invasive plant species. Jones & Stokes (J&S) biologists conducted biological surveys of the project study area between March and August 2001. The complete Natural Environment Study Report (NES) for the East Connector Roadway project is available for review (J&S 2002g; see Appendix C).

#### *BIOLOGICAL COMMUNITIES*

The project study area encompasses a range of biological communities, including ponderosa pine forest, foothill pine forest, riparian forest, stream habitat, seasonal wetland, and ruderal and developed areas (Figure 3.8-1 shows the location of these communities). Table 3.8-1 summarizes the hectares (acres) of each biological community in the project study area.

**Table 3.8-1. Total Hectares (Acres) of Biological Communities  
in the Project Study Area**

<b>Biological Community</b>	<b>Hectares (Acres)</b>
Ponderosa pine forest	11.04 (27.27)
Foothill pine forest	3.89 (9.62)
Riparian forest	0.80 (1.97)
Stream habitat (East Weaver Creek, Lance Gulch, and three unnamed ephemeral drainages)	0.30 (0.74)
Seasonal wetland	0.0008 (0.023)
Ruderal and developed areas	8.70 (21.49)
<b>Totals</b>	<b>24.74 (61.11)</b>

As shown above, approximately 60 percent of the project study area is occupied by upland pine forest (ponderosa and foothill pine forest); approximately 35 percent of the project study area is occupied by ruderal and developed areas; and the remaining 5 percent is occupied by stream habitat, riparian forest, and seasonal wetlands. Each of these biological communities is described below.

#### *Ponderosa Pine Forest*

Ponderosa pine forest is the dominant biological community in the project study area and occupies approximately 11.04 hectares (27.27 acres). In the project study area, it is characterized by a relatively

open canopy dominated by ponderosa pine, with scattered foothill pine, Douglas fir, Oregon oak, and black oak mixed in the canopy. Shrub cover is variable; but commonly encountered shrubs include manzanita, deerbrush, and redbud. Herbaceous understory species include yarrow, goat's beard, lotus, Kentucky bluegrass, and cheat grass.

Representative wildlife species observed in this habitat during the field surveys include Steller's jay, hairy woodpecker, spotted towhee, purple finch, and pine siskin.

#### ***Foothill Pine Forest***

Foothill pine forest is present in a small portion of the project study area, approximately 3.89 hectares (9.62 acres). Within the project study area, it is characterized by a dense shrubby understory of manzanita and deerbush. The tree canopy is dominated by foothill pine with other scattered trees, such as Oregon and black oaks. Herbaceous understory species include yarrow, cat's ear, pussy ears, wild oats, and medusa head.

Representative wildlife species observed in this habitat during the field surveys include hairy woodpecker, northern flicker, Steller's jay, and blue-gray gnatcatcher.

#### ***Riparian Forest***

A total of 0.80 hectare (1.97 acres) of riparian forest habitat occupies the banks and floodplain of East Weaver Creek in the project study area. The riparian forest community is variable in the project study area, from an open canopy dominated by willows to a dense canopy dominated by alders and cottonwoods. The community is characterized by little herbaceous cover and a dense shrubby understory. Common shrubs include blackberries, California grape, Oregon ash, and American dogwood.

The riparian forest habitat in the project study area provides food, water, migration, and dispersal corridors, as well as escape, nesting, and thermal cover for many wildlife species (Mayer and Laudenslayer 1988). Representative wildlife species observed in this habitat during the field surveys include black-tailed deer; downy woodpecker; tree swallow; winter wren; American robin; yellow-breasted chat; orange-crowned, yellow, MacGillvray's and Wilson's warblers; and song sparrow.

#### ***Stream Habitat***

A total of 0.30 hectare (0.74 acre) stream habitat is present in the project study area in the form of East Weaver Creek, Lance Gulch (an intermittent stream), Five Cent Gulch and two other unnamed ephemeral drainages. East Weaver Creek is a perennial drainage. Lance Gulch is an intermittent, spring-fed stream. Five Cent Gulch and the two other ephemeral drainages are characterized by a defined bed and bank, and flow only periodically after storm events and during the rainy season..

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As shown above, approximately 60 percent of the project study area is occupied by upland pine forest (ponderosa and foothill pine forest); approximately 35 percent of the project study area is occupied by ruderal and developed areas; and the remaining 5 percent is occupied by stream habitat, riparian forest, and seasonal wetlands. Each of these biological communities is described below.

#### ***Ponderosa Pine Forest***

Ponderosa pine forest is the dominant biological community in the project study area and occupies approximately 11.04 hectares (27.27 acres). In the project study area, it is characterized by a relatively open canopy dominated by ponderosa pine, with scattered foothill pine, Douglas fir, Oregon oak, and black oak mixed in the canopy. Shrub cover is variable; but commonly encountered shrubs include

manzanita, deerbrush, and redbud. Herbaceous understory species include yarrow, goat's beard, lotus, Kentucky bluegrass, and cheat grass.

Representative wildlife species observed in this habitat during the field surveys include Steller's jay, hairy woodpecker, spotted towhee, purple finch, and pine siskin.

#### ***Foothill Pine Forest***

Foothill pine forest is present in a small portion of the project study area, approximately 3.89 hectares (9.62 acres). Within the project study area, it is characterized by a dense shrubby understory of manzanita and deerbrush. The tree canopy is dominated by foothill pine with other scattered trees, such as Oregon and black oaks. Herbaceous understory species include yarrow, cat's ear, pussy ears, wild oats, and medusa head.

Representative wildlife species observed in this habitat during the field surveys include hairy woodpecker, northern flicker, Steller's jay, and blue-gray gnatcatcher.

#### ***Riparian Forest***

A total of 0.80 hectare (1.97 acres) of riparian forest habitat occupies the banks and floodplain of East Weaver Creek in the project study area. The riparian forest community is variable in the project study area, from an open canopy dominated by willows to a dense canopy dominated by alders and cottonwoods. The community is characterized by little herbaceous cover and a dense shrubby understory. Common shrubs include blackberries, California grape, Oregon ash, and American dogwood.

The riparian forest habitat in the project study area provides food, water, migration, and dispersal corridors, as well as escape, nesting, and thermal cover for many wildlife species (Mayer and Laudenslayer 1988). Representative wildlife species observed in this habitat during the field surveys include black-tailed deer; downy woodpecker; tree swallow; winter wren; American robin; yellow-breasted chat; orange-crowned, yellow, MacGillivray's and Wilson's warblers; and song sparrow.

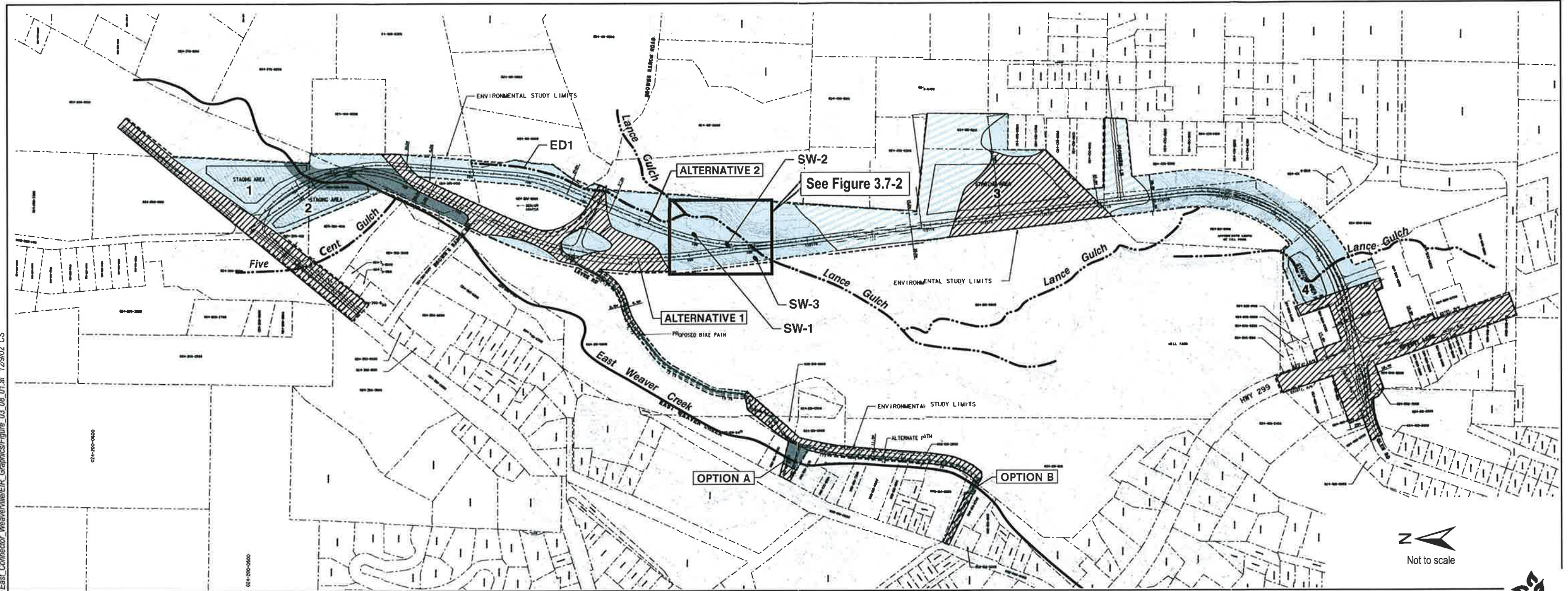
#### ***Stream Habitat***

A total of 0.30 hectare (0.74 acre) stream habitat is present in the project study area in the form of East Weaver Creek, Lance Gulch (an intermittent stream), Five Cent Gulch and two other unnamed ephemeral drainages. East Weaver Creek is a perennial drainage. Lance Gulch is an intermittent, spring-fed stream. Five Cent Gulch and the two other ephemeral drainages are characterized by a defined bed and bank, and flow only periodically after storm events and during the rainy season..

The open water habitat of streams provides habitat, prey, and drinking water for a variety of wildlife species. Representative wildlife species observed in this habitat during the field surveys include black-



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Source: Psomas, 2002

Legend	
	Ruderal and Developed Areas
	Ponderosa Pine Forest
	Foothill Pine Forest
	Riparian Forest
	East Weaver Creek
	Ephemeral Drainage (ED)
	Seasonal Wetland (SW)
	Environmental Study Limits
	Staging Areas



**Figure 3.8-1**  
 Location of Biological Communities within the Project Area  
 East Connector Roadway Project

tailed deer, green heron, and belted kingfisher. East Weaver Creek is a tributary Weaver Creek, which is a tributary to the Trinity River. It provides habitat for coho and chinook salmon, and steelhead as well as numerous non-game species. East Weaver Creek is a perennial creek characterized in the project study area by low gradients and primarily cobble and gravel substrate.

It should be noted that East Weaver Creek from 100 feet upstream (north) of Brown's Ranch Road to 100 feet downstream (south) of the SR 299 bridge is designated as a local flood protection project and was constructed by ACOE in 1963. The flood control facility consists of a graded trapezoidal channel with levees on both banks. Trinity County is responsible for maintaining the channel, including keeping it "clear of debris, weeds, and wild growth," according to the terms of an agreement with the ACOE Readiness Branch (ACOE 1966). Irregular maintenance has allowed a dense riparian habitat to develop. The County now has a 5-year routine maintenance agreement with CDFG, which was recently renewed (November 2001). The program consists of hand crews trimming all vegetation from alternating 100-foot-long sections of banks between October and December of each year. In the following year, the alternate bank is trimmed. Trees over 6 inches diameter at breast height (dbh) are left. All trees along the center of the channel are cut. No roots are dug out, and no sediment is removed under the existing Section 1601 agreement. No vegetation can be planted in this section. The proposed bicycle path and bridge (either option) is located within this section of East Weaver Creek. Maintenance requirements of the flood protection project may limit mitigation options and habitat value at this location. Upstream and downstream of the flood control section, dense riparian forest and shade cover occurs along the banks of the creek, providing essential fish habitat.

CDFG regulates activities that would interfere with the natural flow of, or substantially alter the channel, bed, or bank of a lake, river, or stream. These activities are regulated under California Fish and Game code Section 1601 for public agencies and Section 1603 for private individuals. Requirements to protect the integrity of biological resources and water quality are often conditions of streambed alteration agreements. Conditions that may be required by CDFG include avoidance or minimization of vegetation removal, use of standard erosion control measures, limitations on the use of heavy equipment, limitations on work periods to avoid impacts on fisheries and wildlife resources, and requirements to restore degraded sites or compensate for permanent habitat losses.

The U.S. Army Corps of Engineers (ACOE) regulates the discharge of dredge or fill material to "Waters of the U.S." under Section 404 of the Clean Water Act. East Weaver Creek, Lance Gulch, Five Cent Gulch and the two unnamed ephemeral drainages have defined beds and banks, and a defined "ordinary high water mark". The portions of these streams within the ordinary high water marks are considered "Waters of the U.S." Any discharge of fill material within the ordinary high water marks of these streams will require a permit from the ACOE (see also Section 3.7, *Wetlands and Other Waters of the U.S.*).

The open water habitat of streams provides habitat, prey, and drinking water for a variety of wildlife species. Representative wildlife species observed in this habitat during the field surveys include black-tailed deer, green heron, and belted kingfisher. East Weaver Creek is a tributary Weaver Creek, which is a tributary to the Trinity River. It provides habitat for coho and chinook salmon, and steelhead as well as numerous non-game species. East Weaver Creek is a perennial creek characterized in the project study area by low gradients and primarily cobble and gravel substrate.

It should be noted that East Weaver Creek from 100 feet upstream (north) of Brown's Ranch Road to 100 feet downstream (south) of the SR 299 bridge is designated as a local flood protection project and was constructed by ACOE in 1963. The flood control facility consists of a graded trapezoidal channel with levees on both banks. Trinity County is responsible for maintaining the channel, including keeping it "clear of debris, weeds, and wild growth," according to the terms of an agreement with the ACOE Readiness Branch (ACOE 1966). Irregular maintenance has allowed a dense riparian habitat to develop. The County now has a 5-year routine maintenance agreement with CDFG, which was recently renewed (November 2001). The program consists of hand crews trimming all vegetation from alternating 100-foot-long sections of banks between October and December of each year. In the following year, the alternate bank is trimmed. Trees over 6 inches diameter at breast height (dbh) are left. All trees along the center of the channel are cut. No roots are dug out, and no sediment is removed under the existing Section 1601 agreement. No vegetation can be planted in this section. The proposed bicycle path and bridge (either option) is located within this section of East Weaver Creek. Maintenance requirements of the flood protection project may limit mitigation options and habitat value at this location. Upstream and downstream of the flood control section, dense riparian forest and shade cover occurs along the banks of the creek, providing essential fish habitat.

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“Waters of the U.S.” Any discharge of fill material within the ordinary high water marks of these streams will require a permit from the ACOE (see also Section 3.7, *Wetlands and Other Waters of the U.S.*).

### *Seasonal Wetland*

Waters of the U.S. (including wetlands) are also addressed in Section 3.7. Three small seasonal wetlands totaling 0.008 hectare (0.023 acre) were delineated in the project study area. Although the seasonal wetlands are located near Lance Gulch, they appear to have been created by excavation in the area. Two are isolated from Lance Gulch by the topography in the area. One wetland, SW-2 is connected by a small drainage channel, and is considered to be adjacent to Lance Gulch. The wetlands were ponded to a depth of approximately 7.6 centimeters (3.0 inches) on May 3, 2001 and were dry during a subsequent field visit on June 6, 2001. The following year, they were ponded to a depth of 12.7 centimeters (5 inches) on May 2, 2002. The seasonal wetlands likely are receiving runoff from the surrounding land and pond for a very short duration during the rainy season. The seasonal wetlands are dominated by typical seasonal wetland species found in the region, including Pacific rush, spikerush, and bird's-foot-trefoil.

The open water habitat created by ponding in the seasonal wetlands during the rainy season can provide drinking water for a variety of wildlife species. The wetlands appear to pond for a very short duration. Although no wildlife species were observed using the seasonal wetlands, representative species expected include black-tailed deer and small migratory birds.

Seasonal wetlands adjacent to other waters of the U.S. are considered waters of the U.S., and are regulated by the ACOE under section 404 of the Clean Water Act (CWA). Discharge of fill to SW-2, the seasonal wetland considered to be adjacent to Lance Gulch, will require a permit from the ACOE. The isolated wetlands are not considered waters of the U.S. under the jurisdiction of the ACOE since the January 9, 2001 SWANCC ruling (SWANCC v. United States Army Corps of Engineers [121 S.Ct. 675, 2001]), which resulted in the determination that non-navigable, isolated waters may not be regulated by ACOE. The ACOE has reviewed the wetlands delineation and visited the site. On September 20, 2002, they issued a formal determination that wetlands SW-1 and SW-3 are isolated and non-jurisdictional, but wetland SW-2 is a jurisdictional water of the U.S. and will be regulated under Section 404 of the CWA.

### *Ruderal and Developed Areas*

Approximately 8.70 hectares (21.49 acres) of the project study area is occupied by ruderal and developed areas. These areas include existing roads; residential areas; vacant lots; and cleared areas resulting from activities at the Trinity River Lumber Mill, Yingling Construction Company yard on Levee Road, Pruitt Logging equipment yard at the north end of the project study area, Trinity County road maintenance yard at the north end of the project study area, and the Trinity Plaza Shopping Center at the south end of the project area. Vegetation in this habitat type is variable, but typically is dominated by introduced weedy vegetation, including lotus, woolly mullein, Kentucky bluegrass, and medusa head.

Ruderal habitats at the edges of natural communities can provide foraging habitat for wildlife species. Representative wildlife species observed in this habitat during the field surveys include black-tailed deer, American robin, white-crowned and golden-crowned sparrows, and Brewer's blackbird.

#### *EXISTING LEVEL OF DISTURBANCE*

The project study area is located in the town of Weaverville and is bordered on the south by SR 299 and on the north by SR 3. The proposed project will cross some disturbed and native areas. Portions of the area have been logged in the past. Current land use in the area includes commercial uses, such as a lumber mill, a shopping center, a County corporation yard, a construction company equipment yard, a logging equipment yard, a senior citizens activity center, and residential dwellings. A portion of the area is vegetated by native vegetation and has not been recently disturbed. East Weaver Creek from 100 feet above (north of) Brown's Ranch Road, to 100 feet below (south of) SR 299 is a local flood protection facility. The graded trapezoidal channel has levees on both banks, and vegetation is routinely removed from the channel.

#### *INVASIVE PLANT SPECIES*

The following sources of information were reviewed to develop a list of invasive species that could occur in the project study area:

- Information on noxious weed species of concern to the Trinity County Agricultural Commissioner,
- The California Department of Food and Agriculture's (CDFA's) list of noxious weeds, and
- The California Exotic Pest Plant Council's (CEPPC's) list of pest plants of ecological concern.

Field surveys documented the presence of 10 species that are included on one or more of these lists (Table 3.8-2). These plants occur in scattered locations throughout the project study area. The Trinity County Resource Conservation District (TCRCD) conducts a program of education and eradication of these noxious weeds. The TCRCD and Shasta-Trinity National Forest are implementing a Weed Management Program, with cooperation from Trinity County.

Table 3.8-2. Invasive Plant Species Identified in the Project Study Area

Common Name	Scientific Name	CDFA Rating <sup>a</sup>	CA Exotic Pest Plant Council Rating <sup>b</sup>
Poison hemlock	<i>Conium maculatum</i>	None	None
Scotch broom	<i>Cytisus scoparius</i>	List C	List A-1
Dalmatian toadflax	<i>Linaria genistifolia</i> ssp. <i>Dalmatia</i>	List A	None
Himalayan blackberry	<i>Rubus discolor</i>	None	List A-1
Medusa head	<i>Taeniatherum caput-medusae</i>	List C	List A-1
Yellow star-thistle	<i>Centaurea solstitialis</i>	List C	List A-1
Bull thistle	<i>Cirsium vulgare</i>	None	List B
Black mustard	<i>Brassica nigra</i>	None	List B
Klamath weed	<i>Hypericum perforatum</i>	List C	List B
Black locust	<i>Robinia pseudoacacia</i>	None	List B

<sup>a</sup> California Department of Food and Agriculture pest ratings:

List A= An organism of known economic importance subject to state- (or commissioner when acting as a state agent) enforced action, involving eradication, quarantine, containment, rejection, or other holding action.

List C=State-endorsed holding action and eradication only when found in a nursery; action to retard spread outside nurseries at the discretion of the commissioner.

<sup>b</sup> California Exotic Pest Plant Council pest ratings:

List A-1=Most invasive wildland pest plants; widespread.

List B= Wildland pest plants of lesser invasiveness.

#### PLANT AND WILDLIFE SPECIES OBSERVED IN THE PROJECT STUDY AREA

J&S conducted biological surveys of the project study area between March and August 2001. J&S completed floristic field surveys, conducted during the appropriate times of year (May and August) when special-status plants that could occur in the project study area would be evident and identifiable. Appendix F contains a list of plant species observed during the surveys.

J&S biologists qualified to identify all wildlife to the species level conducted wildlife surveys. These surveys varied according to the natural histories of each special-status species. Surveys for northwestern pond turtle, tailed frog, and other amphibians followed methods developed by Dr. Hartwell Welsh of the Redwood Sciences Laboratory, U.S. Forest Service (Welsh pers. comm.). Surveys for birds followed a modification (not limiting to three 20-minute periods) of the complete area search method (Ralph et al. 1993), with one or two biologists recording all species seen or heard while slowly walking throughout the entire project study area. Surveys for raptor nests included areas within 0.5 mile line-of-sight of the

project study area. Raptor nest surveys included listening and looking for raptors, especially those exhibiting territorial behaviors, and searching large trees that could support nest structures.

A reconnaissance-level site visit was conducted on March 23, 2001. A biologist surveyed for migrating birds and nesting raptors during April 19-20, 2001. Two biologists surveyed for turtles, amphibians, and little willow flycatcher and other breeding birds on June 26 and 30, 2001. **Appendix F** contains a list of wildlife species observed during the surveys.

#### *MIGRATORY BIRDS*

Several species of migratory birds were detected in the project study area during the spring and summer field surveys (see list in **Appendix F**). The territorial behaviors of these birds indicated that they were nesting in the project study area. Suitable habitat for nesting migratory birds is present within riparian habitats and upland forest habitats in the project study area.

#### *PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES*

##### *Trinity County General Plan*

The *Land Use Element* of the *Trinity County General Plan* (Trinity County, 1988) contains the following general policy regarding wildlife habitat that relates to the proposed East Connector Roadway project:

- To strive to conserve those resources of the county that are important to its character and economic well-being.
- By protecting not only rare and endangered species, but also required habitat for the more plentiful species.

The *Open Space and Conservation Elements* of the *Trinity County General Plan* (Trinity County, 1973) contain the following objectives and recommendations regarding wildlife habitat that relate to the proposed East Connector Roadway project:

- Objective: To preserve and maintain open space as a means of providing natural habitat for all species of wildlife is the prime objective.
- Recommendation 1. To maintain all species of fish and wildlife for their intrinsic and ecological values as well as for their direct benefit to mankind.
- Recommendation 4. Any plans to alter the present environment should be considered on the basis of protecting fish and wildlife and their habitat.
- Recommendation 7. Outstanding wildlife habitats that have an unusually high value for fish and wildlife should be carefully considered before any development altering this environment is permitted.

### ***Weaverville Community Plan***

The Natural Resources section of the *Weaverville Community Plan* (Trinity County, 1997) addresses the value of plants and wildlife in the Weaverville Basin, emphasizing the importance of riparian corridors and deer winter range for the Weaverville herd of black-tailed deer. Portions of the basin below 3,500 feet in elevation are considered Critical Deer Winter Range. Because 17,000 acres of deer winter range were inundated with construction of the Trinity and Lewiston reservoirs, maintenance of existing deer winter range has become more important for the herd's survival. The Community Plan contains the following goals and objectives regarding vegetation, invasive species, and wildlife (including deer winter range) that relate to the proposed East Connector Roadway project:

- Goal #2: To conserve and maintain streams and forest open space as a means of providing natural habitat for all species of wildlife.
  - Objective 2.1: Retain riparian corridors along West Weaver, Sidney Gulch, East Weaver and Weaver Creeks.
  - Objective 2.2: Plans to alter the present environment should be considered on the basis of protecting fish and wildlife and their habitat.
  - Objective 2.4: Retain wetlands in accordance with Army Corps of Engineers and U.S. Fish and Wildlife directives.

### **3.8.2 SIGNIFICANCE CRITERIA**

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant floodplain impacts:

Would the project:

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game (DFG) or US Fish and Wildlife Service (USFWS)?
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, Coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?



- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

As discussed below, the East Connector Roadway would have a significant adverse effect upon riparian habitat along East Weaver Creek. Mitigation is proposed to avoid or minimize this effect. Mitigation was developed through consultation with CDFG, USFWS, and NOAA Fisheries (formerly NMFS). The project would also impact two seasonal wetlands. This impact and proposed mitigation are discussed in Section 3.7, *Waters of the U.S. (Including Wetlands)*. The project would create a linear barrier to the movement of deer from the Musser Hill area to East Weaver Creek. Winter range for the Weaverville Deer Herd is considered by CDFG to be highly valuable, because of habitat losses originating from construction of Trinity and Lewiston lakes. Impacts to deer and other wildlife migration patterns are discussed below. The County is currently developing policies to minimize impacts on listed anadromous fish species from County Road maintenance activities. The County is also participating with the Shasta-Trinity National Forest and the Trinity County Resource Management District in an noxious weed management program. Since measures are proposed to mitigate these and other impacts to less than significant, the project will not conflict with any local policies or ordinances regarding vegetation, invasive species or wildlife. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans in affect in the project area.

### 3.8.3 PERMANENT IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Impacts on biological communities were determined using field data, an environmental study limit map, and layout and profile maps for each project alternative. The impact acreages presented in this section include the acreage amounts for potential direct impacts within the project footprint and the acreage amounts for indirect impacts outside the project footprint, but within the environmental study limits.

Some forest vegetation will only be trimmed and topped to allow construction access and will then be allowed to grow back. These impacts may be considered temporary. Impacts to pine forest vegetation within the construction staging areas are considered permanent, because the trees will grow back slowly, and may be out-competed by shrub species in the near-term. Riparian vegetation at or near the bridge locations will be permanently removed and not allowed to grow back.

A change in the diversity of animal species is unlikely due to the small project footprint and the proposed mitigation for loss of riparian habitat. However, vegetation removal may result in the loss of some birds' territories or reduction in their size and suitability. The subsequent population declines will be small and will not affect the viability of the local populations.

The small area of the project will not remove a significant amount of wildlife habitat from the basin. However, it will create a linear barrier between habitat and a reliable source of water in East Weaver Creek. This will affect migration of deer and other terrestrial wildlife. Proposed fencing between the East Connector and the mill, and the bicycle/pedestrian trail and the mill and construction yard will also impede migration to and from East Weaver Creek. The most suitable wildlife habitat is along the northern half-mile of the proposed alignment. During the winter and spring, water is available in Lance Gulch and the seasonal wetlands. When these sources dry up in the late summer and fall, most wildlife species would simply cross the road. However, this potentially hazardous behavior will be discouraged by the proposed fencing around the mill. Wildlife will most likely alter their routes to approach the creek upstream from the new bridge. Wildlife crossing roads in their daily migration routes is a common occurrence in Trinity County, especially in the more developed areas, such as Weaverville. Because of this, and the short increase in migration distance to reach the upstream end of the project, this impact would not have a significant effect on deer and other wildlife populations.

Because of the numerous habitat values provided by riparian habitat and because of the statewide losses that have occurred in riparian habitats, it is considered a sensitive resource locally, regionally, and statewide. Substantial statewide decline of riparian communities in recent years has increased concerns about dependent plant and wildlife species, leading state and federal agencies to adopt policies to arrest further loss. Riparian vegetation provides a variety of functions, such as bank stabilization, erosion control, and wildlife habitat. The CDFG has adopted a no-net-loss policy for riparian habitat value. In addition, the USFWS mitigation policy identifies California's riparian habitats in Resource Category 2, for which no net loss of existing habitat value is recommended (46 FR 7644, January 23, 1981).

Soil-disturbing activities during construction and maintenance of the project could promote the introduction of plant species not currently found in the project study area, including exotic pest plant species. Exotic pest plants include noxious weeds designated as federal noxious weeds by the U.S. Department of Agriculture and listed by the CDFA, as well as other exotic pest plants designated by the CEPPC (California Exotic Pest Plant Council 2000), and the County Agricultural Commissioner. Roads, highways, and related construction projects are some of the principal dispersal vectors for exotic pest plants. The introduction and spread of exotic pest plants adversely affect natural plant communities by displacing native plant species that provide shelter and forage for wildlife species. This impact is considered potentially significant, and mitigation is proposed below.

Because of the proximity of the ponderosa and foothill pine forest communities to the town of Weaverville, they have been disturbed previously and do not provide high-quality habitat for local wildlife. In addition, these communities are common both locally and regionally, and are not considered sensitive natural communities by the CDFG. Based on these factors and the relatively small size of the habitats affected compared to their extent in the region, the impact is considered less than significant.

Ruderal and developed areas do not contain sensitive biological resources or provide important habitat for local wildlife. In addition, these areas are common both locally and regionally, and are not considered sensitive natural communities by the CDFG. Based on these factors and the relatively small size of the habitats affected compared to their extent in the local area, the impact to this type of habitat is not considered significant.

Differences in the impacts between the various alternatives are discussed below. The impact acreages listed under Alternatives 1 and 2, below, assume all four construction staging areas shown on Figure 1-3 are entirely occupied. Impacts to wetlands, streams and creeks are addressed in Section 3.7, *Waters of the U.S (Including Wetlands)*. Impacts to threatened and endangered species and nesting raptors are addressed in Section 3.9, *Threatened and Endangered Species*.

#### *ALTERNATIVE 1*

Under Alternative 1, approximately 0.53 hectare (1.3 acres) of riparian forest habitat consisting of 89 mature alder and cottonwood trees would be removed or disturbed. Approximately 4.69 hectares (11.59 acres) of ponderosa pine forest and 2.45 hectares (6.05 acres) of foothill pine forest would be removed or disturbed. Approximately 3.49 hectares (8.63 acres) of ruderal and developed areas would be removed or disturbed.

#### *ALTERNATIVE 2*

Under Alternative 2, approximately 0.38 hectare (0.95 acre) of riparian forest habitat consisting of 49 mature alder and cottonwood trees would be removed or disturbed. Approximately 6.24 hectares (15.42 acre) of ponderosa pine forest and 2.45 hectares (6.05 acres) of foothill pine forest would be removed or disturbed. Approximately 2.14 hectares (5.29 acres) of ruderal and developed areas would be removed or disturbed.

#### *BICYCLE TRAIL/BRIDGE OPTIONS*

The proposed bicycle/pedestrian bridge could result in the loss or disturbance of 0.06 hectare (0.15 acre) of riparian habitat (Option A), or 0.01 hectare (0.03 acre) of riparian habitat (Option B), consisting of riparian shrubs but no large trees. Both Options A and B could result in the loss or disturbance of

0.18 hectare (0.45 acre) of ponderosa pine forest, but would not disturb foothill pine forest. The proposed bicycle/pedestrian path along Levee Road could result in the loss or disturbance of 0.46 hectare (1.13 acres) of ruderal or developed areas (Option A), or 0.87 hectare (2.15 acres) of ruderal or developed areas (Option B).

*NO PROJECT ALTERNATIVE*

The No Project Alternative would have no impact on riparian forest habitat, ponderosa/foothill pine forest habitat, or ruderal and developed areas.

**Habitat Impact-1** Implementation of the proposed project may result in a barrier to movement of turtles, amphibians, and mammals, such as deer and raccoon, to East Weaver Creek from the surrounding upland and wetland habitats.

**Significance:** Less than significant (no mitigation required).

**Habitat Impact-2** Riparian forest vegetation along East Weaver Creek would be removed or disturbed during construction of the two-lane arterial road and associated bicycle lanes, roadway bridge, and bicycle/pedestrian bridge over East Weaver Creek.

**Significance:** Significant, but mitigated

**Habitat Mitigation-1** Minimize removal and disturbance of riparian habitat along East Weaver Creek. The County will ensure that the removal or disturbance of riparian habitat that is not required for construction or access to the project site will be prohibited by installing orange construction barrier fencing (and sedimentation fencing in some cases) between the construction site and the riparian/creek area. The protected area will be designated as an "environmentally sensitive area."

The fencing will be installed before construction activities begin and will be maintained throughout the construction period. The following paragraphs will be provided in the construction specifications for environmentally sensitive areas:

"The Contractor's attention is directed to the areas designated as Environmentally Sensitive Areas. These areas are protected, and no entry by the Contractor for any purpose will be allowed. The Contractor shall take measures to ensure that Contractor's forces do not enter or disturb these areas, including giving written notice to his employees and subcontractors.

Temporary fences around the Environmentally Sensitive Areas

shall be installed as the first order of work. Temporary fences shall be furnished and constructed, maintained, and later removed as shown on the plans, as specified in the special provisions, and as directed by the Project Engineer. Fabric for temporary fences shall be commercial-quality polypropylene, orange in color, a minimum of 48 inches high, and approved by the County.”

**Habitat Mitigation-2** Avoid long-term impacts on woody riparian vegetation and associated habitat by trimming trees and shrubs rather than removing the entire woody species, where possible when creating temporary access to the construction site. Where possible, shrubs and trees shall be cut at least 1 foot above the ground level to leave the root systems intact and allow for more rapid regeneration following construction.

**Habitat Mitigation-3** Woody riparian vegetation (tree and shrub species) that will be removed entirely (including their root systems) for construction of the bridge, road or trail will be replaced at a minimum of a 2:1 ratio (two trees/shrubs planted for every one tree/shrub removed). The replacement trees and shrubs will be planted along a 1,000 foot long section of the west bank of East Weaver Creek behind the County maintenance yard. Native riparian plants will be replaced in kind at a 2:1 ratio. Non-native plants will be replaced with native plants at a 2:1 ratio. A detailed Riparian Revegetation Plan will be developed during the design phase of this project, in coordination with CDFG, ACOE and/or NOAA Fisheries. The plan will include planting specifications, an implementation plan and schedule, success standards, maintenance requirements, and a monitoring program. Minimum success standard shall be two surviving, healthy plants per one removed at the end of two years. Monitoring will be conducted for a minimum 2-year period, or until established success/survival standards are met. Remedial actions will be implemented if success standards are not achieved in two years. Annual monitoring reports will be submitted to CDFG, ACOE and NOAA Fisheries, if requested in support of the Section 7 consultation process, until success standards have been achieved.

**Hydrology Mitigation-4** The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver Creek. TCDOT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used

for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent sediment and pollutant discharges to Lance Gulch and East Weaver Creek. There will be no removal of riparian vegetation for staging purposes.

**Post-mitigation Significance:** Less than significant

In addition to the mitigation measures above, long-term impacts on riparian habitat will be minimized by any additional conditions resulting from Section 7 consultation with NOAA Fisheries (formerly NMFS), or included in the conditions of the following state and federal permits:

- ACOE's Section 404 permit (Nationwide Permit No. 14)
- RWQCB's Section 401 water quality certification
- RWQCB's General Stormwater Permit for Construction Activities
- CDFG's Streambed Alteration Agreement (SAA)

All of the measures in the Project Description, Caltrans Standard Specifications and the mitigation measures listed above will be included in the Project Plans and Specifications. The TCDOT will oversee the contractor to ensure the plans and specifications are followed.

**Habitat Impact-3** The project could result in the introduction or spread of noxious weed species, which could displace native species, changing the diversity of species or number of species of plants.

**Significance:** Significant, but mitigated (**Habitat Mitigation-4**)

**Habitat Mitigation-4** Avoid the introduction or spread of noxious weeds into previously uninfested areas or the spread of existing noxious weeds.

The County will implement the following measures:

1. Educate construction supervisors and managers on weed identification and the importance of controlling and preventing the spread of noxious weed infestations.
2. Clean construction equipment immediately prior to transporting into Trinity County.

3. Seed all disturbed areas with certified weed-free native mixes. Mulch with certified weed-free mulch. Rice straw may be used to mulch upland areas.
4. Conduct a follow-up inventory of the construction area to verify that construction activities have not resulted in the introduction of new noxious weed infestations. If new noxious weed infestations are located during the follow-up inventory, the TCRCDC will be contacted to determine the appropriate species-specific treatment methods, which will not include chemical (herbicide) spraying, to be performed by Trinity County or the TCRCDC.

**Post-mitigation Significance:** Less than significant

**Habitat Impact-4** Construction of the two-lane arterial road, bicycle lanes along this road, bicycle/pedestrian path along Levee Road, bridges across East Weaver Creek, and residential development on the 2 acre parcel belonging to Trinity River Lumber mill, could result in the loss or disturbance of ponderosa pine and foothill pine forest communities.

**Significance:** Less than significant (no mitigation required).

**Habitat Impact-5** Construction of the two-lane arterial road, bicycle lanes, and bicycle path would result in the loss or disturbance of ruderal and developed areas.

**Significance:** Less than significant (no mitigation required).

### 3.8.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

#### *IMPACTS COMMON TO ALL PROJECT ALTERNATIVES*

As noted above, some riparian vegetation will only be trimmed and topped to allow construction access and will then be allowed to grow back. These impacts may be considered temporary. Temporary impacts to riparian vegetation within Staging Areas will be avoided by Hydrology Mitigation-4, stated above.

Removal of nearby trees could impact migratory bird nursery sites by causing nest abandonment and death of young or loss of reproductive potential at active nests located nearby. Removal of a tree containing an active nest could result in direct mortality to eggs or chicks. Although no active nests were located during the surveys, several species of migratory birds were detected exhibiting territorial behaviors that indicated that they were nesting in the project study area. Potential nesting habitat for various migratory birds was identified within the riparian and upland forests.

### NO PROJECT ALTERNATIVE

The No Project Alternative would have no temporary impact on riparian forest habitat.

**Habitat Impact-6** Riparian forest vegetation along East Weaver Creek would be removed or disturbed during construction of the road and pathway alignments or use of staging areas.

**Significance:** Significant, but mitigated (see **Habitat Mitigation-1, -2, -3, and Hydrology Mitigation-4**).

**Habitat Mitigation-1** Minimize removal and disturbance of riparian habitat along East Weaver Creek.

**Habitat Mitigation-2** Avoid long-term impacts on woody riparian vegetation and associated habitat by trimming trees and shrubs rather than removing the entire woody species.

**Habitat Mitigation-3** Develop and implement a Riparian Revegetation Plan to compensate for the removal of riparian vegetation along East Weaver Creek.

See discussions of **Habitat Mitigation-1, -2, and -3** in Section 3.8.3

**Hydrology Mitigation-4** The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver Creek. TCDOT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent sediment and pollutant discharges to Lance Gulch and East Weaver Creek. There will be no removal of riparian vegetation for staging purposes.

**Post-mitigation Significance:** Less than significant.

**Habitat Impact-7** Tree removal associated with the project could result in the disturbance of nesting migratory birds or the removal of occupied nests if construction occurs during the breeding season (generally between March 15 and August 1).

**Significance:** Potentially significant/indirect, but mitigated (**Habitat Mitigation-5**)

**Habitat Mitigation-5** To prevent the take of eggs or nestlings of migratory birds, the cutting of woody



vegetation will be limited, to the extent possible, to the nonbreeding season (August 1–March 15). Root removal or other ground-disturbing clearing activities would not be conducted until after June 15. If woody vegetation must be removed during the breeding season, a wildlife biologist will survey the area to ensure that no migratory bird would be affected by the vegetation removal. If nests are present, the vegetation will not be removed until the nests are abandoned.

**Post-mitigation Significance:** Less than significant. Removing woody vegetation during the non-breeding season will ensure that active nests will not be disturbed or destroyed by removal of trees supporting or adjacent to nests.

### 3.8.5 CUMULATIVE IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

In addition to the East Connector Roadway, two other projects also will affect the riparian habitat along East Weaver Creek: Caltrans' proposed SR 299 bridge widening project over East Weaver Creek and Trinity County's ongoing maintenance activities associated with its local flood control project on East Weaver Creek. For the bridge widening project, approximately 30 square feet of riparian vegetation would have to be removed at each corner of the bridge. Riparian vegetation on the upstream side of the bridge is already cleared in conjunction with flood control efforts. The downstream side of the bridge is not cleared for flood control, but would have to be cleared for the bridge widening project.

The County's flood control project maintenance project involves removing riparian vegetation from 100-foot sections of alternating banks of East Weaver Creek between Brown's Ranch Road and SR 299, annually between October 1 and December 31.

In addition to the East Connector Roadway, several other projects in the local area have the potential to affect upland trees: The County is preparing a timber harvest plan to log the area directly south of its existing road maintenance station on SR 3, in the area of proposed project Staging Area 1. After logging, the County will grade and fill the area and use it to to expand the County maintenance yard. Upland ponderosa and foothill pine forest communities may also be impacted by the proposed Weaverville Airport project and West Connector Roadway project. However, the disturbance to these forest communities from these projects would be relatively small compared to their overall extent in the local area. Furthermore, as noted above, the disturbed upland communities are locally and regionally common, and are not considered sensitive natural communities by the CDFG. Therefore, significant cumulative impacts are not expected.

**Habitat Impact-8** The proposed project would result in cumulative impacts on riparian habitat along East Weaver Creek.

**Significance:** Significant, but mitigated (**Habitat Mitigation-1, -2, -3, Hydrology-4, and Habitat Mitigation-6**).

**Habitat Mitigation-1** Minimize removal and disturbance of riparian habitat along East Weaver Creek.

**Habitat Mitigation-2** Avoid long-term impacts on woody riparian vegetation and associated habitat by trimming trees and shrubs rather than removing the entire woody species.

**Habitat Mitigation-3** Develop and implement a Riparian Revegetation Plan to compensate for the removal of riparian vegetation along East Weaver Creek.

See discussions of **Habitat Mitigation-1, -2, and -3** above.

**Hydrology Mitigation-4** The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver Creek. TCDOT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent sediment and pollutant discharges to Lance Gulch and East Weaver Creek. There will be no removal of riparian vegetation for staging purposes.

**Habitat Mitigation-6** The cumulative effects of vegetation removal will be minimized by timing vegetation removal for the proposed East Connector project to coincide with vegetation removal for flood control maintenance along East Weaver Creek. This will minimize the amount of vegetation that is removed and the duration of the disturbance and will help avoid tree removal during the nesting season. In the year the bicycle/pedestrian bridge is constructed, the vegetation removal for flood control will be adjusted to compensate for loss of vegetation from both sides of the creek for bridge construction, by leaving vegetation on both sides of the creek in the 100-foot sections upstream and downstream of the bicycle/pedestrian bridge.

**Post-mitigation Significance:** Less than significant

**Habitat Impact-9**      The proposed project would result in cumulative impacts on upland trees.

**Significance:**      Less than significant (no mitigation required).

## 3.9 THREATENED AND ENDANGERED SPECIES

### 3.9.1 AFFECTED ENVIRONMENT

This section describes the sensitive species that area likely to occur in the project area. The complete BA and NES are available for review at the TCDOT (J&S 2002b, g).

J&S conducted biological surveys of the project study area between March and August 2001. The purpose of the surveys was to document biological resources in the project study area and to determine the potential for special-status species to be affected by the proposed project. J&S completed floristic field surveys, conducted during the appropriate times of year (May and August) when special-status plants that could occur in the project study area would be evident and identifiable; a habitat assessment of East Weaver Creek to evaluate fish habitat conditions; and wildlife habitat assessments and species-focused surveys. All plant and wildlife species encountered were identified to the level necessary to determine whether they qualified as special-status species.

Sensitive species with potential to be affected by the proposed project were identified based on information gathered during field surveys, coordination with federal and state agencies, and a review of pertinent literature. A records search of CDFG's California Natural Diversity Data Base (CNDDDB) (2001) was conducted for the Weaverville 7.5-minute U.S. Geological Survey quadrangle to determine whether any special-status species have been previously reported or documented in the project study area. Lists of special-status species with potential to occur in the project study area were compiled using the CNDDDB records, California Native Plant Society's (CNPS') Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik [6th edition–July 6th, 2000]), sensitive species lists provided by the USFWS and NOAA Fisheries (formerly NMFS), and potential occurrence information provided by the USFWS. Complete data from the records search are included in the project NES report (J&S, 2002g).

**Table 3.9-1** contains a list of special-status plant species with potential to occur in the project's geographical region, according to the sources described above. **Table 3.9-2** contains a list of special-status wildlife species with potential to occur in the project's geographical region. The potential of these species to occur in the project study area is indicated in each table.

#### *SPECIAL STATUS PLANT SPECIES*

**Table 3.9-1** contains a list of special-status plant species with potential to occur in the project's geographical region, according to the sources described above. For each species, **Table 3.9-1** summarizes the species' listing status and occurrence within the project area.

Twenty-four special-status plants were identified during the pre-field survey investigation as having the potential to occur in the project study area. No state- or federally-listed plant species were previously

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documented in the project study area, and none were located during the field surveys. A historical occurrence of Dudley’s rush (*Juncus dudleyi*) was known from an occurrence in Weaverville, but has not been seen since 1879. No occurrences of Dudley’s rush were located during botanical surveys. No other special-status plants were known to occur near the project study area, and none were located during botanical surveys. The project will not affect special-status plants and no further surveys are required.

**Table 3.9-1. Special-Status Plants Identified as Potentially Occurring in the Trinity County East Connector Roadway Project Study Area.**

Common Name	Scientific Name	Legal Status <sup>a/</sup> : Federal/State/CNPS	Occurrence in Project Study Area
Bottlebrush sedge	<i>Carex hystericina</i>	--/--/2	None located during surveys
Flaccid sedge	<i>Carex leptalea</i>	--/--/2	None located during surveys
Shasta chaenactis	<i>Chaenactis suffrutescens</i>	--/--/1B	None located during surveys
Oregon fireweed	<i>Epilobium oreganum</i>	--/--/1B	None located during surveys
Scott Mtn. fawn lily	<i>Erythronium citrinum</i> var. <i>roderickii</i>	--/--/1B	None located during surveys
Scott Mtn. bedstraw	<i>Galium serpticum</i>	--/--/1B	None located during surveys
Pickering’s ivesia	<i>Ivesia pickeringii</i>	--/--/1B	None located during surveys
Dudley’s rush	<i>Juncu dudleyi</i>	--/--/2	None located during surveys
Regel’s rush	<i>Juncus regelii</i>	--/--/2	None located during surveys
Heckner’s lewisia	<i>Lewisia cotyledon</i> var <i>heckneri</i>	--/--/1B	None located during surveys
Stebbin’s lewisia	<i>Lewisia stebbinsii</i>	--/--/1B	None located during surveys
Anthony Peak lupine	<i>Lupinus antoninus</i>	--/--/1B	None located during surveys
Niles’s madia	<i>Madia doris-silesiae</i>	--/--/1B	None located during surveys
Howell’s montia	<i>Montia howellii</i>	--/--/2	None located during surveys
Thread-leaved beardtongue	<i>Penstemon filiformis</i>	--/--/1B	None located during surveys

**Table 3.9-1.** Special-Status Plants Identified as Potentially Occurring in the Trinity County East Connector Roadway Project Study Area.

Common Name	Scientific Name	Legal Status <sup>al</sup> : Federal/State/CNPS	Occurrence in Project Study Area
Siskiyou phacelia	<i>Phacelia leonis</i>	--/--/1B	None located during surveys
Crested pentstemon	<i>Pentstemon cristae</i>	--/--/1B	None located during surveys
Showy raillardella	<i>Raillardella pringlei</i>	--/--/1B	None located during surveys
Tracy's sanicle	<i>Sanicula tracyi</i>	--/--/4	None located during surveys
Pale yellow stonecrop	<i>Sedum laxum</i> ssp. <i>Flavidum</i>	--/--/4	None located during surveys
Canyon Creek stonecrop	<i>Sedum paradisum</i>	--/--/1B	None located during surveys
Coast checkerbloom	<i>Sidalcea oregano</i> spp. <i>Eximia</i>	--/--/1B	None located during surveys
English Peak greenbriar	<i>Smilax jamesii</i>	--/--/1B	None located during surveys

**Notes:**

**Federal Listings:**

E = Listed as endangered under the federal Endangered Species Act.

SSC = Species of concern; species for which existing information indicates it may warrant listing, but for which substantial biological information to support a proposed ruling is lacking.

-- = No listing.

**State Listings:**

E = Listed as endangered under the California Endangered Species Act.

-- = No listing.

**California Native Plant Society:**

1B = List 1B species: rare, threatened or endangered in California and elsewhere.

2 = List 2 species: rare, threatened or endangered in California, but more common elsewhere.

4 = List 4 species: plants of limited distribution.

-- = No listing.

\* = Known populations believed extirpated from the County indicated in the table.

? = Population location within County uncertain.

*SPECIAL-STATUS WILDLIFE SPECIES*

Special-status wildlife species that could potentially occur in the project's geographic area were identified using the CNDDDB (2001), the Trinity County Bird List (Hunter et al. 1996), and information provided by the USFWS. Fourteen special-status wildlife species were identified during the pre-field survey investigation as having the potential to occur in the project study area. **Table 3.9-2** contains a list of special-status wildlife species with potential to occur in the project's geographical region. For each

species, **Table 3.9-2** summarizes the species' listing status and confirmed or possible occurrences within the project area.

J&S biologists qualified to identify all wildlife to the species level conducted wildlife surveys. These surveys varied according to the natural histories of each special-status species. Surveys for northwestern pond turtle, tailed frog, and other amphibians followed methods developed by Dr. Hartwell Welsh of the Redwood Sciences Laboratory, USFS (Welsh pers. comm.). Surveys for birds followed a modification (not limiting to three 20-minute periods) of the complete area search method (Ralph et al. 1993), with one or two biologists recording all species seen or heard while slowly walking throughout the entire project study area. Surveys for raptor nests included areas within 0.5 mile line-of-sight of the project study area. Raptor nest surveys included listening and looking for raptors, especially those exhibiting territorial behaviors, and searching large trees that could support nest structures.

A reconnaissance-level site visit was conducted on March 23, 2001, with a J&S biologist and a biologist from the USFWS. A biologist surveyed for migrating birds and nesting raptors during April 19-20, 2001. Two biologists surveyed for turtles, amphibians, and little willow flycatcher and other breeding birds on June 26, 2001. Due to rain and an escaped convict (police closed the project site during the search/chase) that cut the bird surveys short, a single biologist conducted a follow-up survey for breeding birds, including nesting raptors, on June 30, 2001.

The USFWS biologist determined that habitat within 1/4 mile of the study area was not suitable for northern spotted owl or bald eagle nesting or roosting, and was unlikely to function as foraging habitat for these species. The following six special-status animals, or their potential habitats, were documented during field surveys in the project study area:

- Northwestern pond turtle (*Clemmys marmorata marmorata*)
- Foothill yellow-legged frog (*Rana boylei*)
- Osprey (*Pandion haliaetus*)
- Cooper's hawk (*Accipiter cooperii*)
- Little willow flycatcher (*Empidonax traillii brewsteri*)
- Yellow-breasted chat (*Icteria virens*)

Of these, four male yellow-breasted chat were identified during the field surveys. Potential habitat for the remaining five species was identified in the field, but no individuals from the species were positively identified. Additional information on each of the six species listed is provided in the NES (J&S, 2002g).

THREATENED AND ENDANGERED SPECIES

<b>Table 3.9-2. Special-Status Wildlife Identified as Potentially Occurring in the Trinity County East Connector Roadway Project Study Area</b>			
<b>Common Name</b>	<b>Scientific Name</b>	<b>Legal Status<sup>al</sup>: Federal/State</b>	<b>Occurrence in Project Study Area</b>
Southern torrent (seep) salamander	<i>Rhyacotriton variegates (=olympicus)</i>	SC/SSC	Not found during searches along springs.
Tailed frog	<i>Asaphus truei</i>	SC/SSC, P	Not found during survey in East Fork Weaver Creek.
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	SC/SSC	Not found during survey in East Fork Weaver Creek. Known from nearby Trinity River.
Osprey	<i>Pandion haliaetus</i>	--/SSC	Not found during bird surveys or during raptor nest search. Unlikely to nest within 0.5 mile of project study area.
Bald eagle	<i>Haliaeetus leucocephalus</i>	T/E	Not found during bird surveys or during raptor nest search. Unlikely to nest within 0.5 mile of project study area.
Cooper's hawk	<i>Accipiter cooperii</i>	--/SSC	Not found during bird surveys or during raptor nest search.
Northern goshawk (North American pop.)	<i>Accipiter gentiles</i>	SC/SSC	Not found during bird surveys or during raptor nest search. Unlikely to nest within 0.5 mile of project study area.
Merlin	<i>Falco columbarius</i>	--/SSC	Not found during bird surveys.
American peregrine falcon	<i>Falco peregrinus anatum</i>	--/E	Not found during bird surveys or during raptor nest search. Unlikely to nest within 0.5 mile of project study area.
Northern spotted owl	<i>Strix occidentalis caurina</i>	T/SSC	Not found during bird surveys or during raptor nest search. Unlikely to nest within 0.5 mile of project study area.
Vaux's swift	<i>Chaetura vauxi</i>	--/SSC	Not found during bird surveys.



**Table 3.9-2.** Special-Status Wildlife Identified as Potentially Occurring in the Trinity County East Connector Roadway Project Study Area

Common Name	Scientific Name	Legal Status <sup>al</sup> : Federal/State	Occurrence in Project Study Area
Little willow flycatcher	<i>Empidonax traillii brewsteri</i>	SC/E	Not found during bird surveys.
Yellow-breasted chat	<i>Icteria virens</i>	--/SSC	Up to four singing males were found during bird surveys along East Weaver Creek.
Pacific fisher	<i>Martes pennanti pacifica</i>	SC/SSC	Not found during bird surveys nor were tracks found. Unlikely to nest within 0.5 mile of project study area.

**Notes:**

**Federal Listings:**

T = Listed threatened under the federal Endangered Species Act.

SSC = Species of concern; species for which existing information indicates it may warrant listing, but for which substantial biological information to support a proposed ruling is lacking.

-- = No listing.

**State Listings:**

SSC = Species of special concern in California.

P = Protected under the California Fish and Game Code.

E = Listed as endangered under the California Endangered Species Act.

FP = Fully protected under the California Fish and Game Code.

*SPECIAL-STATUS FISH SPECIES*

From initial research using lists of sensitive species provided by the USFWS and NOAA Fisheries, and information provided by Trinity County Natural Resources Division, one listed fish species was identified as having the potential to occur in the project study area: Southern Oregon/Northern California Coast coho salmon. The proposed project also falls within critical habitat for this species. The final ruling on critical habitat for this species was established by NOAA Fisheries on May 5, 1999 (64 FR 24049). This species has a high possibility of occurring in the project study area, and is currently listed by both the state and federal Endangered Species Acts as Threatened. This determination was made using information about the habitat requirements and distribution of the species.

The Klamath Mountains Province steelhead that are present in the project study area were determined in April 2001 to not warrant listing and therefore are not discussed below. The Upper Klamath and Trinity Rivers chinook salmon have not been listed as a special-status species but, like the Southern Oregon/Northern California Coast coho salmon, they are commercially valuable, thus receiving protection from NOAA Fisheries under the Magnuson-Stevens Fishery Management and Conservation

Act, which requires federal project proponents to address potential impacts to Essential Fish Habitat for species listed as commercially valuable under the Pacific Coast Salmon Plan.

A BA has been prepared for Southern Oregon/Northern California Coast coho salmon, in compliance with Section 7 of the U.S. Endangered Species Act of 1973 (16 USC 1536). The BA also addresses potential effects on Essential Fish Habitat for the coho salmon and the Upper Klamath and Trinity Rivers chinook salmon. Formal consultation between FHWA and NOAA Fisheries is ongoing. Additional information regarding Southern Oregon/Northern California Coast coho salmon and the Upper Klamath and Trinity Rivers chinook salmon is provided in the BA and NES (J&S, 2002b, g).

### 3.9.2 SIGNIFICANCE CRITERIA

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant impacts to special status species:

Would the project:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

In addition to the criteria listed above, CEQA Guidelines Section 15065 contains the following relevant mandatory significance threshold, which should also be considered in determining whether the project would cause significant impacts to special status species:

Would the project:

- Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, [or] reduce the number or restrict the range of a rare or endangered plant or animal?

As discussed below, the project could result in the loss or destruction of aquatic and riparian habitat, resulting in impacts on special status wildlife. Temporary construction phase impacts to fish are expected to result from water disturbance, erosion, and potential for pollutants. Construction activities in or near the water in East Weaver Creek or Lance Gulch could result in disturbance or direct mortality of foothill yellow-legged frogs or northwestern pond turtles. Project construction could result in the disturbance of nesting raptors, or other special status birds, and the removal of occupied nests. Mitigation is proposed to avoid or reduce these impacts to less than significant. Therefore, the project will not substantially affect or result in the reduction of the number or range of rare or endangered species, or conflict with any local policies or ordinances protecting biological resources. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans in effect in the project area.

### **3.9.3 PERMANENT IMPACTS**

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

##### ***Special Status Plants***

The proposed project would not result in the disturbance of any unique, rare, or endangered species of plants. J&S botanists conducted botanical surveys at the appropriate time of year when special-status plants were expected to be evident and identifiable. Based on these surveys, no special-status plants occur in the project study area. No further studies or mitigation are required.

##### ***Special Status Wildlife and Fish***

Disturbance within the East Weaver Creek system could result in impacts on the foothill yellow-legged frog, northwestern pond turtle, little willow flycatcher, yellow-breasted chat, and nesting raptors protected under the Fish and Game Code.

Riparian vegetation provides cover for juvenile rearing, shade to reduce water temperatures, and food input (i.e., terrestrial invertebrates). Removal of the riparian vegetation could weaken the stream bank by loosening the soil, thus increasing the bank's susceptibility to erosion. Alteration of fish habitat would occur if the channel bed and banks were disturbed, or if sites that have been disturbed mechanically were further disturbed by high-flow events before they are stabilized. The removal of woody riparian vegetation may therefore also affect coho and chinook salmon.

#### *ALTERNATIVE 1*

Under Alternative 1, approximately 0.53 hectare (1.3 acres) of riparian forest habitat consisting of 89 mature alder and cottonwood trees would be removed or disturbed.

*ALTERNATIVE 2*

Under Alternative 2, approximately 0.38 hectare (0.95 acre) of riparian forest habitat consisting of 49 mature alder and cottonwood trees would be removed or disturbed.

*BICYCLE TRAIL/BRIDGE OPTIONS*

The proposed bicycle/pedestrian bridge could result in the loss or disturbance of 0.06 hectare (0.15 acre) of riparian habitat (Option A) or 0.01 hectare (0.03 acre) of riparian habitat (Option B), consisting of riparian shrubs but no large trees.

**T&E Species Impact-1** Construction could result in the loss or destruction of riparian habitat, resulting in impacts on special status wildlife.

**Significance:** Potentially significant/indirect, but mitigated (**Habitat Mitigation-1, -2, -3, and Hydrology Mitigation-4**).

**Habitat Mitigation-1** Minimize removal and disturbance of riparian habitat along East Weaver Creek. The County will ensure that the removal or disturbance of riparian habitat that is not required for construction or access to the project site will be prohibited by installing orange construction barrier fencing (and sedimentation fencing in some cases) between the construction site and the riparian/creek area. The protected area will be designated as an “environmentally sensitive area.”

The fencing will be installed before construction activities begin and will be maintained throughout the construction period. The following paragraphs will be provided in the construction specifications for environmentally sensitive areas:

“The Contractor’s attention is directed to the areas designated as Environmentally Sensitive Areas. These areas are protected, and no entry by the Contractor for any purpose will be allowed. The Contractor shall take measures to ensure that Contractor’s forces do not enter or disturb these areas, including giving written notice to his employees and subcontractors.

Temporary fences around the Environmentally Sensitive Areas shall be installed as the first order of work. Temporary fences shall be furnished and constructed, maintained, and later removed as shown on the plans, as specified in the special provisions, and as directed by the Project Engineer. Fabric for temporary fences shall be commercial-quality polypropylene, orange in color, a minimum of 48 inches high, and approved by the County.”

**Habitat Mitigation-2** Avoid long-term impacts on woody riparian vegetation and associated habitat by trimming trees and shrubs rather than removing the entire woody species, where possible when creating temporary access to the construction site. Where possible, shrubs and trees shall be cut at least 1 foot above the ground level to leave the root systems intact and allow for more rapid regeneration following construction.

**Habitat Mitigation-3** Woody riparian vegetation (tree and shrub species) that will be removed entirely (including their root systems) for construction of the bridge, road or trail will be replaced at a minimum of a 2:1 ratio (two trees/shrubs planted for every one tree/shrub removed). The replacement trees and shrubs will be planted along a 1,000 foot long section of the west bank of East Weaver Creek behind the County maintenance yard. Native riparian plants will be replaced in kind at a 2:1 ratio. Non-native plants will be replaced with native plants at a 2:1 ratio. A detailed Riparian Revegetation Plan will be developed during the design phase of this project, in coordination with CDFG, ACOE and/or NOAA Fisheries. The plan will include planting specifications, an implementation plan and schedule, success standards, maintenance requirements, and a monitoring program. Minimum success standard shall be two surviving, healthy plants per one removed at the end of two years. Monitoring will be conducted for a minimum 2-year period, or until established success/survival standards are met. Remedial actions will be implemented if success standards are not achieved in two years. Annual monitoring reports will be submitted to CDFG, ACOE and NOAA Fisheries, if requested in support of the Section 7 consultation process, until success standards have been achieved.

**Hydrology Mitigation-4** The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver Creek. TCDOT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent sediment and pollutant discharges to Lance Gulch and East Weaver Creek. There will be no removal of riparian vegetation for staging purposes.

**Post-mitigation Significance:** Less than significant

Indirect effects on coho salmon may be caused by degraded water quality resulting from runoff from the roadway into East Weaver Creek. As fuels and sediment build up on the roadway, they eventually are washed into the creek during storm events. Most runoff from the road will flow to Lance Gulch, which drains through a culvert beneath the shopping center and SR 299 to a wetland project designed by the Natural Resources Conservation Service (NRCS) to enhance water quality before discharge to Weaver Creek. In addition, Hydrology Mitigation-1 in Section 3.2, *Hydrology, Water Quality, Stormwater Runoff*, includes a detention basin in Lance Gulch upstream of the culvert beneath the shopping center. Since Lance Gulch is outside of the range of coho salmon, and because the water is treated before it reaches Weaver Creek, the impact on threatened and endangered species from road runoff to Lance Gulch will not be significant.

The vehicle bridge crossing East Weaver Creek, and the approaches to the bridge, would drain to East Weaver Creek. Untreated runoff from the road into East Weaver Creek could have a significant effect on aquatic wildlife in East Weaver Creek. Roadside areas are of low gradient and high permeability. This will facilitate treatment of roadside runoff in natural, unlined drainage ditches before it is released to surface water bodies. Water quality impacts are discussed further in Section 3.2, *Hydrology, Water Quality, Stormwater Runoff*, which includes the following mitigation for water quality impacts from road runoff.

**T&E Species Impact-2** Water pollution from roadway runoff could adversely affect aquatic wildlife.

**Significance:** Potentially significant/indirect impact, but mitigated (**Hydrology Mitigation-2**)

**Hydrology Mitigation-2** Road runoff will not be discharged directly to East Weaver Creek or Lance Gulch. It will be conveyed through unlined, vegetated ditches and swales to surface water bodies. Vegetation and soils in the ditches will slow flows, trap solids and absorb liquid pollutants such as fuels and oils.

**Post-mitigation Significance:** Less than significant

### 3.9.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

#### *Aquatic Species*

Potential construction impacts on fish may include:

- Avoidance by adults or juveniles of active construction areas and areas affected by increased turbidity during in-water construction activities

- Localized disturbance and sedimentation of food-producing areas (e.g., streambeds) affecting juvenile and adult
- Direct mortality of juveniles from spills of toxic materials used or stored at the project site
- Increased water temperatures due to the removal of riparian vegetation affecting juvenile and adults
- Possibility of stranding juveniles if any depressions or holes are created in the active stream channel as a result of construction activities
- Concussion effects from pile-driving affecting juveniles

Periods of localized, high suspended sediment concentrations and turbidity owing to channel disturbance can result in avoidance of the area, as well as a reduction of feeding opportunities for sight-feeding fish, and clogging and abrasion of gill filaments. Increased sediment loading also can degrade food-producing habitat downstream of the project area, interfering with photosynthesis of aquatic flora and resulting in the displacement of aquatic fauna.

Sedimentation of instream gravels could significantly change the composition of aquatic invertebrate populations and/or reduce invertebrate biomass, thus impacting food availability for salmonids. Sedimentation of fines in cobbles and gravel substrates would also reduce the amount of interstitial spacing between bed materials that provide a source of cover for fry and juvenile salmonids. Potential sedimentation of river gravels may reduce the quality of rearing and spawning habitat.

Although no foothill yellow frog adults or tadpoles, and no western pond turtles were found during the surveys, potential habitat exists along East Weaver Creek and possibly Lance Gulch. Work in areas occupied by foothill yellow-legged frog eggs, tadpoles or adults could impact normal behavior patterns such as feeding and breeding. Direct impacts could cause injury or death of individuals.

The project has been designed to avoid placement of the piers inside the low-flow channel. All structure construction required for the bridge foundation, piers and temporary crossing structure will be outside of the low flow channel limits. This will eliminate the need for construction activities to occur within flowing water. No equipment will need to be operated in the live stream, and no stream diversions will be required. Excavations for bridge piers will be separated from the live stream which will prevent stranding of fish in excavations. Concrete, drilling fluids and sediment-laden water in pier excavations will be isolated from the creek. In addition, pile driving will not be done in the water. Concussion effects from pile driving that occurs outside the water has no direct coupling between the pile and the water, so the amplitude of the concussion is reduced, and so are the effects on fish.

The potential exists for fuel and concrete spills into East Weaver Creek and dispersal to downstream areas (Weaver Creek and Trinity River) during construction. Various contaminants, such as concrete, fuel oils, grease, and other petroleum products used in construction activities, could be introduced into the system either directly or through surface runoff. Contaminants may be immediately toxic to aquatic life or cause altered oxygen diffusion rates, and acute and chronic toxicity to aquatic organisms, thereby reducing growth and survival.

Potential significant direct adverse effects to aquatic species could result from construction in or near East Weaver Creek and Lance Gulch. To minimize this potential, these activities should be conducted when flows are at their lowest. In addition, the breeding seasons should be avoided, to avoid impacts to more sensitive, and less mobile life stages such as eggs and juveniles.

**T&E Species Impact-3** Temporary construction phase impacts to aquatic species could result from construction activities in or near streams, due to water disturbance, sedimentation and potential for pollutants.

**Significance:** Significant, but mitigated (**T&E Species Mitigation-1 and -2, Hydrology Mitigation-3 and -4, and Haz Mat Mitigation-3**).

**T&E Species Mitigation-1** Construction activities will be scheduled so that they do not interfere with the reproductive cycles of fish species or the foothill yellow-legged frog. Work within the ordinary high water zone and riparian zone of East Weaver Creek or Lance Gulch will take place from June 15 to October 15, except for tree trimming and cutting, which will take place as described in **T&E Species Mitigation-4**. This time frame will avoid the majority of the adult and juvenile migration, spawning, and incubation of anadromous fish species and will avoid the breeding season of the foothill yellow-legged frog.

**T&E Species Mitigation-2** If the County determines that in-water work in Lance Gulch is necessary, the County will retain a qualified wildlife biologist to conduct a pre-construction survey for foothill yellow-legged frog and northwestern pond turtle. The survey would be conducted within 24 hours of the start of construction activities in the creek. If a foothill yellow-legged frog or northwestern pond turtle is located in or adjacent to the construction zone, the biologist will try to passively move the species out of the area by creating a disturbance in the water. The biologist will attempt to capture and move the yellow-legged frog downstream, out of the construction zone. If a turtle becomes trapped in the construction zone, a



biologist will remove the turtle from the area and place it downstream of the construction zone.

**Hydrology Mitigation-3**      The following measures will be implemented:

No contact of wet concrete with the live stream will be allowed. Groundwater that comes in contact with wet concrete during construction of the footing excavations will not be allowed to enter the creek but will be pumped to a truck or upland for disposal or treatment, or it may be discharged to a sediment-stilling basin and percolated back into the soil.

If drilling muds are used to drill holes within the ordinary high-water zone, all drilling muds and fluid within all drilled holes will be pumped through a closed system, contained on-site in tanks, removed from the project area, and disposed of off-site at an appropriate facility.

The TCDOT contractor will remove all spoils materials from the drilled pier holes and dispose of the material in a manner that will not result in discharge of runoff of sediment into Waters of the United States.

Heavy equipment will not be operated in the active flow channel of East Weaver Creek.

No diversion of surface flows will be allowed.

Maintenance and refueling areas for equipment will be located a minimum of 150 ft away from the active stream channel. If equipment must be washed, washing will occur where the water cannot flow into the creek channel.

Spill containment booms will be maintained on-site at all times during construction operations and/or staging or fueling of equipment.

**Hydrology Mitigation-4**      The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver Creek. TCDOT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent

sediment and pollutant discharges to Lance Gulch and East Weaver Creek. There will be no removal of riparian vegetation for staging purposes.

**Haz Mat Mitigation-3** The Contractor shall exercise every reasonable precaution to protect streams from pollution with fuels, oils and other harmful materials. The Contractor will be required to have adequate spill containment equipment on hand at all times. All waste petroleum products and empty petroleum product containers will be disposed of properly at a recycling or disposal site legally authorized to accept that type of waste. The Trinity County Environmental Health Department and NCRWQCB must be notified immediately in the event of a release of significant quantities of hazardous materials. In the event of a release into East Weaver Creek, CDFG must also be notified.

**Post-mitigation Significance:** Less than significant

In addition to these mitigation measures, impacts on special status aquatic species and their habitat will be minimized by developing and implementing a SWPPP (as described in the *Project Description*, Chapter 1) and compliance with Caltrans standard specifications and other practices described in the Project Description, as well as any additional conditions resulting from Section 7 consultation with NOAA Fisheries (formerly NMFS), or included in the conditions of the following state and federal permits:

- ACOE's Section 404 permit (Nationwide Permit No. 14)
- RWQCB's Section 401 water quality certification
- RWQCB's General Stormwater Permit for Construction Activities
- CDFG's Streambed Alteration Agreement (SAA)

#### *Terrestrial Species*

Disturbance of nesting raptors or the removal of occupied nests if construction occurs during the breeding season (generally between February 1 and August 1) could cause nest abandonment and death of young or loss of reproductive potential at active nests located near the project site. Although no active raptor nests were located during the surveys, potential nesting habitat within the riparian forest along East Weaver Creek was identified during 2001 field surveys for one species of special concern, Cooper's hawk, and two non-sensitive raptors (red-shouldered and red-tailed hawks).

Cooper's hawk is the only raptor that could nest in the project study area because of its greater tolerance of human disturbance and because more sensitive raptors are not likely to nest in the urbanized and

industrial area. Cooper's hawks frequently nest around urban and suburban areas (Boal and Mannan 1999; Rosenfield and Bielefeldt 1993). Cooper's hawks occur in low density in Trinity County and therefore the destruction of an active nest or the death of young could affect the local breeding population. Depending on the magnitude of this impact, it may be considered an adverse affect on the species. In addition, raptor nests are protected under Section 3503.5 of the California Fish and Game Code.

Although no active nests were located during the surveys, four territorial male yellow-breasted chats and potential nesting habitat for little willow flycatcher were found within the riparian forest along East Weaver Creek during 2001 field surveys. Tree removal near active nests could cause nest abandonment and death of young or loss of reproductive potential at active nests located near the project site. Removal of a nesting tree would result in loss of the nest and death of the young or eggs. Avoiding tree removal during the nesting season will prevent disturbance or destruction of active nests.

**T&E Impact-4** Construction activities associated with the project could result in the disturbance of nesting raptors or the removal of occupied nests if construction occurs during the breeding season (generally between February 1 and August 1).

**Significance:** Potentially significant, but mitigated (**T&E Mitigation-3**)

**T&E Mitigation-3** Remove upland woody vegetation during the raptor non-breeding season (August 1 to February 1) and begin construction in upland areas prior to the raptor breeding season. If construction prior to the raptor breeding season is not practical, a wildlife biologist will conduct a pre-construction survey for raptor nests. If an active raptor nest is found within the construction zone, a 500-foot buffer zone will be maintained around the active nest until young have fledged.

**Post-mitigation Significance:** Less than significant

Removing woody vegetation in upland areas during the non-breeding season will ensure that active nests will not be destroyed by removal of trees supporting or adjacent to raptor nests. Beginning construction in upland areas prior to the raptor breeding season will establish a level of noise disturbance that will dissuade noise-sensitive raptors from attempting to nest within or near the project study area. If a construction survey is performed and raptor nests are not found, no further mitigation is required.

**T&E Impact-5** Tree removal associated with the project could result in the disturbance of nesting little willow flycatchers or yellow-breasted chat or the removal of occupied nests if construction occurs during the breeding season (generally between May 1 and August 1).

**Significance:** Potentially significant, but mitigated (**T&E Mitigation-4**)

**T&E Mitigation-4** To prevent the take of eggs or nestlings of little willow flycatcher and yellow-breasted chat, the cutting of woody riparian vegetation will be limited, to the extent possible, to the nonbreeding season (August 1–May 1). Root removal or other ground-disturbing clearing activities would not be conducted until after June 15. If woody vegetation must be removed from riparian areas during the breeding season, a wildlife biologist will survey the area to ensure that no Little Willow Flycatcher or Yellow-breasted Chat nests would be affected by the vegetation removal. If nests are present, the vegetation will not be removed until the nests are abandoned.

**Post-mitigation Significance:** Less than significant

### 3.9.5 CUMULATIVE IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

The proposed new Weaverville Airport would probably be located on Musser Hill, a ridge drained by Lance Gulch on the west and Brown's Creek on the east. The proposal will involve grading 5.7 cubic yards of earth to level a 215-acre site at the top of this ridge. The four-year construction period may commence at approximately the same time as construction of the East Connector. Therefore, there is potential for cumulative effects on water quality of Lance Gulch and Weaver Creek, and on critical habitat for coho salmon. A detailed erosion and sedimentation plan is being prepared for both the construction phase and long-term operation of the airport facility. Detention ponds will be placed downslope of the area to be graded, and runoff will be treated before it reaches Lance Gulch. In the long term, runoff from the airport site would be metered to approximate existing peak flows and distributed to Lance Gulch and Brown's Creek in proportions similar to the existing drainage patterns. The project is funded by the Federal Aviation Administration (FAA), and Section 7 consultation between the FAA and NOAA Fisheries and USFWS is currently under way.

Another proposed project in the Weaverville Basin is the West Connector Roadway. The West Connector would drain to West Weaver Creek, which is also critical habitat for coho salmon. Construction will probably not be concurrent with construction of the East Connector or the Airport. This project is funded by FHWA, through the same program as this proposed East Connector project. Environmental studies are under way, including preparation of an EIS/EIR, and consultation between FHWA and NOAA Fisheries and USFWS. Erosion and sedimentation controls, similar to those proposed for the East Connector, would be implemented during construction of the West Connector. The finished project would include methods to either prevent or treat direct discharge of roadway runoff to West

Weaver Creek or its tributaries.

With the mitigation measures described above, the East Connector project will not have a significant adverse effect on threatened or endangered species, therefore it will not contribute to any cumulative effect on those species. Other County projects with federal funding (the Airport and West Connector) will be similarly mitigated. The temporary disturbance to biological resources incurred from this project is extremely small compared to other actions affecting statewide biological resources.

The proposed SR 299 bridge widening project and flood control maintenance activities will result in cumulative impacts on riparian habitat along East Weaver Creek, which is critical habitat for coho salmon

**T&E Impact-6** The proposed project would result in cumulative impacts on critical habitat for coho salmon along East Weaver Creek.

**Significance:** Significant, but mitigated (**Habitat Mitigation-6**).

**Habitat Mitigation-6** The cumulative effects of vegetation removal will be minimized by timing vegetation removal for the proposed East Connector project to coincide with vegetation removal for flood control maintenance along East Weaver Creek. This will minimize the amount of vegetation that is removed and the duration of the disturbance and will help avoid tree removal during the nesting season. In the year the bicycle/pedestrian bridge is constructed, the vegetation removal for flood control will be adjusted to compensate for loss of vegetation from both sides of the creek for bridge construction, by leaving vegetation on both sides of the creek in the 100-foot sections upstream and downstream of the bicycle/pedestrian bridge.

**Post-mitigation Significance:** Less than significant

## 3.10 FLOODPLAINS

This section summarizes the impacts of project alternatives on the 100-year floodplain, including encroachments in the 100-year floodplain areas, the potential flood related risks, and the potential for incompatible floodplain development attributable to the proposed project.

### 3.10.1 AFFECTED ENVIRONMENT

Floods pose a potential risk to communities located in low-lying areas, near water, or downstream from a dam. Trinity County participates in the National Flood Insurance Program (NFIP), created in 1968 by the National Flood Insurance Act. The County adopted its first floodplain ordinance in 1988 and amended the ordinance in 1993 and 2000. According to the Trinity County Zoning Ordinance Sec. 29.4, Flood Hazard, "The flood hazard areas of Trinity County are subject to periodic inundation, which can result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare."

East Weaver Creek is a medium-size stream with an average slope of approximately 2.5 percent. The stream channel is small compared to the magnitude of infrequent floods. It is poorly defined and capable of mobilizing a modest bedload and significant volumes of small to medium-sized debris (branches to small tree trunks). East Weaver Creek from 100 feet upstream (north) of Brown's Ranch Road to 100 feet downstream (south) of the SR 299 bridge is designated as a local flood protection project, constructed by ACOE in 1963. The flood control facility consists of a graded trapezoidal channel with levees on both banks. Trinity County is responsible for maintaining the channel, including keeping it "clear of debris, weeds, and wild growth," according to the terms of an agreement with the ACOE Readiness Branch (ACOE 1966). The proposed bicycle/pedestrian bridge over East Weaver Creek would span the flood protection project.

The proposed vehicle bridge over East Weaver Creek and associated bridge approaches are located in a reach of floodplain mapped by the Federal Emergency Management Agency (FEMA) as 100-year floodplain by approximate study methods. *The East Connector Preliminary Bridge Hydraulic Analysis* (Pacific Hydrologic Incorporated, 2002) prepared a more precise HEC-RAS backwater model to represent site-specific flood conditions, using recently surveyed cross-sections and topographic survey data. The proposed East Connector vehicle bridge will cross East Weaver Creek at a skew and over a distance of stream for which the fall of the stream is significant. Using the data from the HEC-RAS model, the *Preliminary Bridge Hydraulic Analysis* determined the design requirements for the proposed vehicle bridge, with consideration to floodplain impacts. The analysis used flood peak flows of 3,800 cubic feet per second (cfs) for the most probable 50-year flood and 4,500 cfs for the most probable 100-year flood.

These “design” flood flows are consistent with the original ACOE design flood flows for the flood protection project.

### *PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES*

#### *Federal Requirements*

The reach of East Weaver Creek has been mapped by FEMA using only approximate study methods. Therefore, there are no FEMA regulatory flood flows which the bridge design must consider. However, FEMA regulations require that the project not increase the risk of damage to structures during any flood up to and including the most probably 100-year flood (base flood). If no structures are at risk of receiving flood damage, the water surface elevations of the base flood may not be increased by more than 1.0 foot.

Caltrans and FHWA recommend that the proposed bridge be designed to convey the base flood or provide appropriate clearance for debris above the most probably 50-year flood, whichever is greater. A minimum clearance for debris of 3.0 feet is recommended for a stream the size of East Weaver Creek.

Both of the bicycle/pedestrian bridge alternatives cross East Weaver Creek within the ACOE flood control project. In addition to the design requirements of Caltrans and FHWA, the bicycle/pedestrian bridge must meet the requirements of the ACOE. The ACOE has established a “Standard Project Flood” (SPF) of 6,000 cubic feet per second (cfs) with an estimated recurrence of 500 years. Projects within this reach must pass the Standard Project Flood, and must not result in an increase to the base flood elevation that would cause the levees to overtop in a Standard Project Flood.

For federal actions, including federally financed construction and improvements, Federal Executive Order 11988, Floodplain Management, requires the responsible federal agency to avoid, to the extent possible, the long- and short-term adverse effects associated with the modification of floodplains and to avoid direct or indirect support of incompatible floodplain development whenever there is a practicable alternative. Before taking an action, each federal agency shall:

- Determine whether a proposed action will occur in a floodplain
- Consider alternatives to avoid adverse effects and incompatible floodplain development
- Prepare a notice explaining why the action is proposed to be located in a floodplain
- Provide opportunity for early public review of an action in a floodplain
- Minimize potential harm to or within the floodplain

### *Local Requirements*

The Trinity County Floodplain Management Ordinance requires proposed development in areas identified as 100-year flood plains to obtain a Flood Development Permit from the County Floodplain Administrator. Development, including construction of bridges, culverts and roadways, is allowed, provided a certification by a registered professional engineer is provided demonstrating that the net effect of the project, in conjunction with all other projects developed on the affected stream reach since the effective date of the Flood Insurance Rate Map (FIRM), will not cumulatively raise the floodplain elevation more than one foot.

### *Trinity County General Plan*

The Flood Hazard section of the *Safety Element* of the *Trinity County General Plan* (Trinity County Planning Department, 2002) contains the following goal related to flood hazards: "Reduce hazards within Trinity County resulting from floods." Objectives and policies that relate to the proposed East Connector Roadway project are as follows:

- **Objective S.2.1.** Reduce loss of life and property by establishing development standards for areas subject to flooding.
- **Policy S.3.1 (A).** Require all development to meet federal, state and local regulations for floodplain management protection; including the encouragement of upgrading existing structures to meet adopted standards.
- **Policy S.3.1 (B).** Require all development to meet the development standards of the National Flood Insurance Act regulations in Title 44 of the Code of Federal Regulations, Section 60.3, as implemented through the County Zoning Ordinance section 29.4.

### *Weaverville Community Plan*

The *Weaverville Community Plan* (Trinity County, 1990) contains the following goal and objective pertaining to flood hazards:

- **Goal #5:** To protect public and private development from flood hazards.
  - **Objective 5.1:** Zone perennial streams within the Plan Area Flood Hazard to restrict alteration of streambeds.



### 3.10.2 SIGNIFICANCE CRITERIA

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant floodplain impacts:

Would the project:

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site?
- Place housing within a 100-year flood hazard area?
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- Inundation by seiche, tsunami or mudflow?

### 3.10.3 PERMANENT IMPACTS

#### ROADWAY IMPACTS

Drainage and hydrology impacts of the roadway, including the roadside drainage system and the two culvert crossings of Lance Gulch are discussed in Section 3.2, *Hydrology, Water Quality and Stormwater Runoff*. This section deals with impacts to the FEMA-designated 100-year floodplain of East Weaver Creek, and the ACOE flood control facility.

#### IMPACTS OF VEHICLE BRIDGE

The proposed structure consists of a 3-span cast in place pre-stressed box girder (CIP PS Box Girder) bridge. The structure proposed for the Alternative 1 alignment is 48.8 m (158 ft) long with a 19.2 m (approx. 63 ft) center span and 14.4 m (approx. 47 ft) end spans. The structure is at an approximate 18 degree skew, relative to the East Weaver Creek channel. The structure proposed for the Alternative 2 alignment, will have no skew and is 48.8 m (approx. 158 ft) long with a 19.2 m (approx. 63 ft) center span and 14.4 m (approx. 47 ft) end spans. The proposed bridge for both alternative alignments will use reinforced concrete abutments at each end, placed outside of the Ordinary High Water of East Weaver Creek. Approach fills will be placed up to each abutment wall at a slope of 1 (vertical) to 1.5 (horizontal). Rock slope protection will be placed on the fill slopes. The superstructure will be supported

by either pier walls or standard column supports. If pier walls are selected, the pier wall will be approximately 0.6 m (2 ft) thick. If columns are selected, a single column approximately 1.2 m (4 ft) in diameter is proposed at the center of each pier location. The pier wall and single column alternatives are proposed as the viable alternatives because both options would minimize debris build up at the structure.

*Vehicle Bridge - Flood Passage*

The relationship between the bridge opening and upstream water surface was used to identify a bridge length necessary to meet the requirements of FEMA (maximum increase in base flood elevation of 1.0 foot) and the recommended minimum design standards of Caltrans and FHWA. (to pass the most probable 100-year flood and also the most probable 50-year flood plus an additional 3-foot clearance for debris). The structure profile was based on Caltrans and FHWA hydraulics requirements. The soffit elevation of the bridge was set for 3.0 feet above the 50-year flood water surface elevation. As shown on Table 3.10-1, all candidate bridge configurations analyzed were found to pass the 100-year flood and the 50-year flood with 3.0 feet of additional clearance for debris. The bridge will therefore not impede flood flows.

Table 3.10-1. Candidate bridge configurations and clearance.

Candidate Bridge Alt		E <sub>50</sub> <sup>1</sup> (ft)	Min Soffit (ft)	Bridge Soffit (ft)	Clearance <sup>2</sup> (ft)
Alt 1, Pier Walls:	Upstream	2149.14	2152.14	2152.20	3.06
	Downstream	2145.08	2148.08	2150.66	5.58
Alt 1, Columns	Upstream	2149.34	2152.34	2152.40	3.06
	Downstream	2145.08	2148.08	2150.86	5.78
Alt 2, pier walls:	Upstream	2146.52	2149.52	2149.90	3.38
	Downstream	2144.50	2147.50	2148.07	3.57
Alt 2, Columns	Upstream	2146.66	2149.66	2149.90	3.24
	Downstream	2144.50	2147.80	2148.07	3.57

Source: Pacific Hydrologic Incorporated, 2002

1) Alternative 1 upstream elevation at cross section 639.5, downstream elevations at cross-section 537. Alternative 2 upstream elevations at cross-section 571.5, downstream elevations at cross sections 481.

2) Bridge soffit minus E<sub>50</sub>.

*Vehicle Bridge - Floodplain Encroachment*

A floodplain encroachment may be classified as longitudinal or transverse. A longitudinal encroachment occurs when a structure crosses a 100-year floodplain in an area beyond the “normal channel boundaries.” A transverse encroachment occurs when a structure crosses an area of the floodplain within the “normal channel boundaries.” Both Alternatives 1 and 2 result in a longitudinal encroachment of East Weaver Creek in the vicinity of Station 102 on the eastern bridge approach. Piers or columns and abutments for

the three-span bridge will be located outside the low flow channel of the creek, but within the 100-year floodplain causing a transverse encroachment. The combined encroachments for either Alternative alignment will cause the floodplain elevation to increase by approximately 0.67-foot if pier walls are used, or 0.83-foot (Alternative 2) to 0.89-foot (Alternative 1) if columns are used (Table 3.10-2).

**Table 3.10-2. Impact of vehicle bridge floodplain encroachment**

Candidate Bridge Alt	E <sub>100</sub> <sup>1</sup> (ft)	Allowable (ft)	Increase <sup>2</sup> (ft)
Existing @ 639.5	2149.01	2150.01	
Alt 1, Pier Walls	2149.68	2150.01	0.67
Alt 1, Columns	2149.90	2150.01	0.89
Existing @ 571.5	2146.38	2147.38	
Alt 2, Pier Walls	2147.05	2147.38	0.67
Alt 2, Columns	2147.21	2147.38	0.83

Source: Pacific Hydrologic Incorporated, 2002

- 1) Alternative 1 upstream elevation at cross section 639.5. Alternative 2 upstream elevations at cross-section 571.5.
- 2) Elevation for alternative minus appropriate existing condition elevation.

Although the project will not raise the base flood elevation by 1.0 foot or more, the analysis and topographic survey shows that the increase in base flood elevation could result in shallow overflow over an existing ridge along the west bank of East Weaver Creek and into Five Cent Gulch. There is a structure (Trinity Medical Building) located in the path of this potential overflow with a foundation elevation that is lower than the 100 year flood elevation. In addition, there are increased flood risks along Five Cent Gulch near its outlet to East Weaver Creek, due to additional water in Five Cent Gulch from the overflow. Therefore, although the project does not increase the base flood elevation by a foot or more, potential redirection of flood flows is a significant impact, due to the increased risk to structures.

Impacts to structures further downstream, such as the Brown's Ranch Road bridge, are not anticipated, because the hydrologic analysis demonstrates that impacts to the 100-year flood elevation dissipate within 600 feet downstream of the proposed vehicle bridge.

#### *Vehicle Bridge - Scour*

High flow and scour may occur at the proposed bridge location and bridge pile foundations will be designed to accommodate scour demands. During project final design, the County will conduct additional hydraulic and geotechnical studies to determine scour depth and the type of pile foundation system most suitable for the site. A hardpan layer is known to exist at shallow depth, and this is expected to limit scour below the bridge. Scour effects are expected to dissipate upstream of the Brown's Ranch Road bridge.

### *Roadway and Bridge - Exposure to Hazards*

The proposed project does not involve or encourage placing housing with the 100-year flood plain by creating a new access to currently inaccessible properties in the floodplain. Construction of the new roadway will not expose people or structures to risk involving flooding. In the unlikely event of bridge failure due to flooding, there would be no significant interruption of traffic or emergency access. Residents on Brown's Ranch Road would still be able to access their properties via Brown's Ranch Road or SR 299. The East Connector would provide an alternate route to access this area, or to evacuate Weaverville. (Levee Road may not be available to traffic in the event of a flood, if the levee was at risk of breaching.) The East Connector would also provide an alternate route for emergency response vehicles to reach destinations within and outside Weaverville. The bridge would provide an additional access route, and loss of the bridge would not block any important emergency evacuation routes.

### *IMPACTS OF THE PEDESTRIAN/BICYCLE BRIDGE*

The proposed Class I bicycle path would parallel Levee Road (east side) and would be 2.4-m wide with a concrete surface. Keeping the path on the east side of Levee Road for most of its length will avoid a longitudinal encroachment into the floodplain within the flood protection project. The structure type proposed for both pedestrian/bicycle bridge options/ is a single-span prefabricated bridge.

### *Pedestrian/Bicycle Bridge - Flood Passage*

The pedestrian/bicycle bridge was designed considering the most probable 50-year flood peak flow of 3800 cfs and the most probable 100-year flood peak flow of 4500 cfs. These "design" flood flows are consistent with the original ACOE design flood flows for the flood protection project. In addition, ACOE has established a "Standard Project Flood" (SPF) of 6000 cfs with an estimated recurrence of 500-years.

A HEC-RAS backwater model was prepared to represent existing flood conditions and flood conditions that would be present if each of the candidate pedestrian bridge alternatives were to be built. The backwater models were prepared using recently surveyed cross-sections and cross sections derived from a recent detailed site topographic survey. A roughness coefficient of 0.040 was used to represent the low flow channel and of 0.060 was used to represent the banks. The hydraulic analysis (Pacific Hydrologic Incorporated 2002) determined that the candidate pedestrian/bicycle bridge configurations do not increase the water surface elevations of the most probable 50- and 100-year floods or the ACOE SPF flood. Results of the hydraulic analysis are summarized in **Table 3.10-3**.

**Table 3.10-3. Results of pedestrian/bicycle bridge hydraulic analysis**

Characteristic	Option A (ft)	Option B (ft)
Existing 50-year flood elevation	2061.78	2037.85
Existing 100-year flood elevation	2062.37	2038.17
Existing SPF elevation	2064 <sup>2</sup>	2039.31
Candidate Bridge 50-year flood elevations	2061.78	2037.85
Candidate Bridge 100-year flood elevations	2062.37	2038.17
Candidate Bridge SPF elevations	2064 <sup>2</sup>	2039.31
Recommended minimum soffit elevation <sup>1</sup>	2067 <sup>3</sup>	2042.31 <sup>3</sup>

Source: Pacific Hydrologic Incorporated, 2002

- 1) Minimum soffit elevation to meet recommendations of Caltrans and FHWA. 3.0 feet of clearance between the water surface elevation of the most probable 50-year flood and the soffit.
- 2) Estimated by Pacific Hydrologic, Inc.
- 3) ACOE recommends the minimum soffit of bridges be 3.0 ft above the water surface elevation of the project design flood (SPF for East Weaver Creek).

Both bridge designs will pass the required flood events plus debris.

*Pedestrian/Bicycle Bridge - Floodplain Encroachment*

Both bicycle/pedestrian bridge options will completely span the width of the 100-year flood plain without the need for supporting pier walls or columns. The abutments will also be outside of the 100-year flood plain. The bicycle/pedestrian bridge will therefore not result in a floodplain encroachment and will not raise the elevation of the base flood or project design flood by any amount. The bicycle/pedestrian bridge will also not result in increased scour in the channel, and will have no effect on floodplain elevations or channel scour upstream or downstream.

*Pedestrian/Bicycle Bridge - Exposure to Hazards*

Because the bicycle/pedestrian bridge will not encroach into the floodplain, and because it will be designed to pass the flood protection project's design flood without impeding flood flows, the bridge will not increase the likelihood of levee failure, or otherwise expose people or structures to risk of flooding. The bridge will not be a critical structure for emergency access or evacuation, because it will not be designed for vehicles. As mentioned above, the levee area would likely be closed to the public in the event of a flood where the levee was in jeopardy of breaching, so the pedestrian bridge would be evacuated except for possible use by emergency workers, in that case.

**Floodplains Impact-1** Encroachment into the 100-year floodplain for the vehicular bridge and eastern roadway approach to the bridge will raise the base flood elevation, potentially causing shallow overflow of the west bank of East Weaver Creek and Five Cent Gulch at the confluence with East Weaver Creek. This overflow could jeopardize existing structures.

**Significance:** Significant, but mitigated.

**Floodplains Mitigation-1** The existing ridge line along the west bank of East Weaver Creek immediately downstream of the proposed bridge location shall be raised by constructing an earth berm along the ridge line. The berm will be of sufficient height so that the final elevation of the ridge along the west bank of East Weaver Creek is higher than the predicted elevation of the 100-year flood at that location, as calculated by the hydraulics engineer for the selected bridge alternative (approximately 0.6-foot high).

### 3.10.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

Project construction is not expected to increase the potential for flooding, flood-related property loss or hazard to life. However, construction will not be occurring during the winter storm season. Construction within the creek's ordinary high water channel will occur only between June 15 and October 15. Construction in all areas will be suspended during winter storms, and the site will be winterized prior to the winter storm season. In the unlikely event of a sudden, unseasonable flood, construction workers would have adequate warning to obtain safe higher ground. There is a risk that construction materials and petroleum products from construction vehicles and equipment could be washed into East Weaver Creek in an unexpected significant flood event.

**Floodplains Impact-2** Project-related construction materials and petroleum products could wash into East Weaver Creek in a flood.

**Significance:** Potentially significant, but mitigated (**Floodplains Mitigation-2** and **Hydrology Mitigation-4**).

**Floodplains Mitigation-2** All temporary fills, excavation spoils, materials stockpiles and construction equipment will be entirely removed from the 100-year floodplain, as mapped by the hydraulics engineer, on October 15. In no event will construction occur during winter storms.

**Hydrology Mitigation-4** The County will prohibit using the portions of Staging Areas 1, 2, and 4 that run through and immediately adjacent to Lance Gulch and East Weaver

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Creek. TCDOT will limit the use of Staging Area 4 to the south side of Lance Gulch. The north side of Lance Gulch is heavily vegetated and shall not be used for staging equipment and material. All staging areas will be established at least 50 feet from the top of the stream bank or 50 feet from the outer edge of the riparian habitat, whichever is farther. This buffer will be clearly identified on the design drawings and delineated in the field with orange construction barrier fencing. Sedimentation fencing or other erosion and sediment control measures will be installed between the staging area and the riparian area to prevent sediment and pollutant discharges to Lance Gulch and East Weaver Creek. There will be no removal of riparian vegetation for staging purposes.

**Post-mitigation Significance:** Less than significant

### 3.10.5 CUMULATIVE IMPACTS

The effects of the East Connector project on the floodplain of East Weaver Creek are localized and mitigated. The proposed vehicular bridge will not impede flood flows, and therefore will not impact hydraulic conditions upstream. The hydraulic analysis indicates that the effects on the floodplain elevation and channel scour from the proposed vehicular bridge dissipate within 600 feet of the proposed structure. The hydraulic conditions 600 feet downstream of the proposed bridge will be equal to existing conditions. Therefore, the proposed new bridge will not affect other structures in the floodplain, such as the existing Brown's Ranch Road Bridge, the proposed bicycle/pedestrian bridge, the SR 299 bridge, or the ACOE flood control project. The proposed pedestrian/bicycle bridge will be constructed within the flood control project reach, but will not impede flood flows or increase the base flood elevation, and therefore will have no effect on the function of the flood control project, or the other bridges located upstream or downstream. Caltrans proposes to widen the SR 299 bridge across East Weaver Creek, downstream of the proposed project. This widening will not involve any encroachment into the 100 year flood plain and will therefore have no effect on the base flood elevation, flood passage or channel scour.

### **3.11 COASTAL ZONE**

The proposed East Connector Roadway project is not located in a coastal zone and is not expected to have any direct or indirect impact upon coastal zones. Coastal zones were not determined to be an issue during the initial project scoping and public scoping process. Therefore, this issue is not addressed in detail in this EIR.



### **3.12 WILD AND SCENIC RIVERS**

The Trinity River is the only waterway in the project vicinity that is included in the inventory of rivers protected by the Wild and Scenic Rivers Act (PL 90-542, as amended). The project is located within the watershed of the Trinity River, below Trinity and Lewiston Lakes, and is drained by East Weaver Creek and Lance Gulch. East Weaver Creek joins West Weaver Creek at Mill Street in southern Weaverville, and the joined branches of Weaver Creek flow to the Trinity River at Douglas City.

The “wild and scenic” portion of the Trinity River nearest the project is classified as a recreational segment. The project would not have an impact on the recreational values that qualify this segment of the river wild and scenic. Wild and scenic rivers were not determined to be an issue during the initial project scoping and public scoping process. Therefore, this issue is not addressed in detail in this EIR.

### 3.13 PARKS, RECREATIONAL AREAS, WILDLIFE AND WATERFOWL REFUGES

#### 3.13.1 AFFECTED ENVIRONMENT

##### *REGIONAL SETTING*

Trinity County's natural resource areas provide an abundance of opportunities for outdoor recreational pursuits and enhance the overall appearance of the community. To the north of Weaverville are the Shasta-Trinity-Whiskeytown National Recreational Area and the Trinity Alps Wilderness area. Money spent in Trinity County by recreationists and other tourists to the area contributes significantly to the County's economy (see Section 3.16, *Community Impacts (Social Economic)*).

The USFS and the BLM also have jurisdiction over large areas of the Weaverville Basin. The USFS has jurisdiction over approximately six sections of land in the Weaverville Basin (within the Shasta-Trinity National Forest) and the BLM has jurisdiction over approximately four to five sections of land within the basin. Portions of these federally managed resource lands surrounding the town of Weaverville are also available for dispersed rural recreation and contain sites that could be developed in the future for intensive recreation.

There is an extensive, well-used network of hiking and equestrian trails in the East and West Weaver Creek watersheds. Old mining trails existing along many of the creeks in and around Weaverville and trails along ditch lines between creeks are regularly used by day hikers, horseback riders, joggers, and others. The annual La Grange Classic mountain bike race uses local roads and trails in the Weaverville area and draws hundreds of riders from outside the County. These trails are easily accessed from the core area of Weaverville. The Weaverville Community Plan recognizes that they contribute to the recreational, aesthetic, and historical values associated with the community.

SR 299 and SR 3 have been designated as "Scenic Byways," as discussed further in Section 3.15, *Visual Resources/Aesthetics*.

##### *COMMUNITY OF WEAVERVILLE*

Developed recreation sites in the Weaverville Basin include Lowden Park, Lee Fong Park, Joss House, Jake Jackson Museum and two school sites. These sites serve the resident population of the Weaverville Basin, and also serve visitors from the region and, particularly for the historical park sites (Joss House and Jake Jackson Museum), from outside the region.

Lowden Park is located on Washington Street, to the west of the proposed project bike/pedestrian path. The Option A bike/pedestrian path would end on County property adjacent to the park. The park is

owned by the County and is jointly managed by the County and the Weaverville/Douglas City Parks and Recreation District. Park facilities include a swimming pool, recreation hall, picnic facilities, rodeo grounds, tennis courts, and baseball diamonds. Lowden Park primarily serves the recreational needs of Weaverville and the surrounding region and is the community's most intensively used park (Trinity County, 1990). Lee Fong Park is located adjacent to the downtown historic district, and is outside the area impacted directly or indirectly by the proposed project. It currently has an amphitheatre and picnicking facilities. The historic Lee Ranch House, located nearby, is used by the Trinity Arts Council, and is open for visitors.

The Joss House, located on SR 299 (Main Street) at Oregon Street in Weaverville's downtown historic district, is a State Historical Park. The Jake Jackson Historical Park and Museum, also on SR 299, adjacent to the Joss House, is a County-owned property, but has been developed and maintained through the efforts of the Trinity County Historical Society. The Highland Arts Center, across SR 299 from the Joss House and Jake Jackson Museum, is operated by the non-profit Highland Arts Foundation. The Center provides a showcase for local and visiting artists. All three of these resources in the downtown historic district serve local, regional, and inter-regional recreational needs.

Trinity High School, located on the west end of Weaverville, off SR 299, has playing fields, courts, and a gymnasium open to the public. It is outside the area impacted directly or indirectly by the proposed project. Weaverville Elementary School is located on SR 3, approximately 0.5 to 0.75 mile west of the proposed East Connector Roadway and directly west of the south end of the proposed Option B bicycle/pedestrian path. It contains many of the same facilities as Trinity High School and both facilities serve primarily local recreational needs.

#### *PROJECT AREA*

The proposed East Connector project is primarily located on private land and does not pass through any public parks, recreational areas, or wildlife/waterfowl refuges. The proposed bicycle/pedestrian pathway along Levee Road will include a bicycle/pedestrian bridge over East Weaver Creek, providing access from the northern and eastern portions of Weaverville to Lowden Park and to Weaverville Elementary School on the west side of the creek.

#### *PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES*

##### *Trinity County General Plan*

The *Recreation Element* of the *Trinity County General Plan* (Trinity County, 1967) is largely superseded by the Parks and Recreation Element of the *Weaverville Community Plan* (see below). Many of the proposals contained in that element have since been implemented. It does, however, contain a list of

general principles of recreation development, some of which are relevant to the proposed project and are quoted here:

- Recreation development should be designed to harmonize with the landscape, thus creating a minimum of disturbance to the natural setting.
- Tourist development should be encouraged in and around the urban areas in order to provide convenient, compact service facilities.
- Deep highway setbacks are desirable for overnight facilities to encourage tree buffers, natural vegetation, and to protect the scenic qualities of the area.
- Heavily used trails should avoid meadows and other areas subject to erosion.

The *Open Space and Conservation Elements* of the *Trinity County General Plan* (Trinity County, 1973) also recognize the importance and value of recreational land in Trinity County and the importance of protecting this resource. A stated objective in the preservation of open space is “to reserve land for recreational facilities, encourage private recreational development and other open uses in categories characteristic and beneficial to the residents of Trinity County as well as to meet tourist needs of the immediate future and the long-range future.” The following recommendations from these elements also apply:

- Recommendation 1. Provide for the orderly development and control of a comprehensive recreation system on public lands where feasible and possible and on private lands where necessary for the development of the recreation system for Trinity county.
- Recommendation 2. Recreational resources on public and private land should be protected for the future as these resources are largely irreplaceable natural assets.
- Recommendation 3. Encourage or provide recreational facilities and other open uses in central locations near all living and working areas and in areas of outstanding beauty sufficient to meet the needs of the residents of the county, as well as the visitors to be served in the county.
- Recommendation 6. The development of lake front and river front property should be encourage clear of all flood plain areas for all suitable type of recreational uses to meet the needs of local, second home residents, and visitors to the County.

The proposed Class I bicycle/pedestrian pathway and bridge and a Class II bikeway along the proposed East Connector Roadway are included in the *Trinity County Regional Transportation Plan* (Trinity County, 2001), and the Circulation Element of the County’s General Plan (Trinity County 2002a).

### *Weaverville Community Plan*

The Parks and Recreation section of the *Weaverville Community Plan* (Trinity County, 1990) contains policies regarding parks and recreation that relate to the proposed East Connector Roadway project as follows:

- **Goal #1:** To ensure that future recreation development is designed to harmonize with the landscape, thus creating a minimum of disturbance to the natural setting. The purpose of this goal is to encourage recreation developments which emphasize natural conditions; that is, pathways along creek areas, parking lots, or playing fields on flat areas.
- **Goal #2:** To recognize and retain the trails around town.
- **Goal #3:** To recognize and encourage the development of recreation facilities which serve both local, regional, and tourist needs.
- **Goal #4:** To recognize the importance of the basin's creeks and encourage the development of pathways along these creeks.
  - **Objective 4.1:** Encourage the development of pedestrian and bicycle trails along Sidney Gulch, East Weaver, West Weaver, and Weaver Creeks as generally located in the Recreation Plan, Exhibit "R-3".
- **Goal #5:** To provide a variety of recreation opportunities for all ages and user groups.

### 3.13.2 SIGNIFICANCE CRITERIA

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant floodplain impacts:

Would the project:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- Include recreational facilities or require the expansion of recreational facilities which might have an adverse physical effect on the environment?

### 3.13.3 PERMANENT IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Implementation of the proposed project will not result in the use of any publicly owned land from a park, recreational area, or wildlife and waterfowl refuge. However, the Class I bicycle/pedestrian trail and bridge proposed as part of the project will provide a new recreational resource in itself and will provide a connection from Weaverville Elementary School and the County's Lowden Park to areas to the east on the other side of East Weaver Creek, without walking or riding on the state highways. This is considered a beneficial effect of the proposed project.

The proposed East Connector Roadway will improve access to recreational areas to the north of Weaverville (e.g., Shasta-Trinity-Whiskeytown National Recreation Area, Trinity Alps Wilderness). The convenience offered by a direct route to these areas is not likely to impact the number of visitors to these areas or recreational revenues in these areas.

Tourists passing through the area who are not visiting Weaverville with the intention of seeing the museum/arts complex and State Historic Park in the downtown historic district could potentially miss them altogether. Lower numbers of visitors to the downtown area could result in lower revenues for these facilities. On the other hand, opening of the East Connector would be expected to improve the circulation and parking situation in the downtown area, making the area more visually attractive, more easily accessed, and more pedestrian-friendly for recreational visitors. In addition, visitors unfamiliar with the area would likely travel on the State Highways rather than a County side-street, and would therefore see the museum/arts complex and state park. Given these opposing factors, it is difficult to know whether the project will have a positive or negative effect on the number of recreational visitors to the downtown historic district sights. Those who do visit the area are likely to enjoy the experience more due to reduced traffic and improved parking.

**Recreation Impact -1** The project may draw tourist traffic away from the museum/arts complex in the downtown historic district.

**Significance:** Less than significant, because it does not increase the use of, expand or degrade recreational facilities (no mitigation required).

Although no mitigation is required for this impact, Community Impact Mitigation-1 in Section 3.16, *Community Impacts (Social, Economic)* includes mitigation for this impact to downtown businesses.

**Community Mitigation-3** The County would not place signs directing traffic to Trinity Lake or Trinity Alps via the East Connector and would discourage Caltrans from doing so.

### 3.13.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

No temporary impacts associated with parks, recreational areas or wildlife/waterfowl refuges have been identified.

### 3.13.5 CUMULATIVE IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

The West Connector Roadway would have similar impacts on the downtown historic parks, such as the Joss House and Jake Jackson Museum. The State Park Service has recommended that directional signs for the Weaverville Joss House State Historic Park be included along the West Connector Roadway. The

cumulative effects of the East and West Connectors on downtown businesses are further discussed in Section 3.16, *Community (Social, Economic) Impacts*.

No cumulative impacts that would cause deterioration, increased use, or expansion of recreational sites, or use land from parks, recreational areas, or wildlife/waterfowl refuges have been identified.

### 3.14 LAND USE, PLANNING AND GROWTH

This section includes information concerning the land use effects of the project. It describes existing land use in the project area, summarizes the planning history of the currently proposed East Connector Road project and the project's consistency with existing local plans and policies. The section addresses land use incompatibilities between the proposed roadway and adjacent land use. Finally, the section addresses the growth-inducing potential of the project.

#### 3.14.1 AFFECTED ENVIRONMENT

##### *REGIONAL SETTING*

Trinity County contains no incorporated cities. The largest population centers in the County are Weaverville, Hayfork, and Lewiston, with Weaverville serving as the County seat and economic center of the County. Trinity County's total population for 2000 was estimated at 13,022 (U.S. Census Bureau, 2001). The 1997 population for the community of Weaverville was estimated at 3,555 (California Department of Finance, Demographic Research Unit). Table 3.14-1 shows population and growth rate estimates for Trinity County and Weaverville for the years 1970 to 1997.

Over the past 10 years, the County's population has fluctuated, exhibiting a moderate population increase between 1990 and 1996 and a decrease between 1996 and 2000. Population growth has slowed in the past decade, compared to the previous two decades. Population estimates prepared by the California Department of Finance predict a gradual increase in Trinity County to an estimated population of 15,026 by the year 2020. The population forecasts reflect an average annual growth rate of 0.84 percent between 2000 and 2010 and 0.61 percent between 2010 and 2020, or less than one percent per year. These growth rates are significantly lower than the State of California average.

**Table 3.14-1. Historical Population and Growth Rates,  
Trinity County and Weaverville**

<b>Population</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>1997</b>
Trinity County	7,615	11,858	13,063	13,400
Weaverville	1,489	2,787	3,370	3,555
<b>Annual Growth Rate</b>		<b>1970-80</b>	<b>1980-90</b>	<b>1990-97</b>
Trinity County		4.5%	1.0%	0.4%
Weaverville		65%	1.9%	0.8%
Source: California Department of Finance, Demographic Research Unit				



For the years 2000-2010, the County's greatest population growth (still low at 1.31 percent) is expected to occur in the 20- to 64-year-old age bracket. During these years, a decline in population is expected in the 0- to 19-year-old bracket. This trend is expected to change between 2010 and 2020, however, when the retired population (age 65 and over) is expected to show the greatest increase and the 20- to 64-year old population is expected to decline. Additional population and demographic data is provided in the project *Community Impact Analysis* for the East Connector Roadway project (Hughes Environmental Consultants 2002a; see Appendix C).

Weaverville is the most "urban" of all the communities in Trinity County and the community therefore contends with many of the problems related to urban areas, including problems related to utilities and capacities, traffic and circulation, land use conflicts, and concerns about architectural consistency and compatibility (Trinity County, 1990).

Trinity County covers an area of approximately 2.0 million acres (3,191 square miles). Approximately 72 percent of this land area is federally- or state-owned, including a large portion of the Trinity National Forest, Six Rivers National Forest, and the Shasta-Trinity National Recreation Area. The remaining 28 percent of the County in private ownership is divided into industrial timber lands (15 percent) and agricultural, commercial, and residential lands (13 percent) (Trinity County, 2001).

The Weaverville planning area (the area encompassed by the *Weaverville Community Plan*) covers approximately 12,300 acres (approximately 19.25 square miles). Approximately 46 percent of this area is managed by the federal government (Trinity County, 1990).

Due to the mountainous terrain and rural nature of the area, a significant proportion of the commercial development in the area is focused along the State Highway corridors. Commercial uses in Weaverville are concentrated along Main Street (SR 299), with some commercial use located along SR 3. The community's primary industry is the Trinity River Lumber Company. The company mill is centrally located on the north side of SR 299, east of SR 3. There is also an industrial park located at the east end of Weaverville south of SR 299. Public and government uses are dispersed throughout the community. Open space includes the mountains and hills that surround Weaverville, as well as land along East Weaver Creek, including Lowden Park, public lands managed by the BLM or Shasta-Trinity National Forest, and the undeveloped privately-owned lands of the Sierra Pacific Lumber Company.

The southeastern part of Weaverville, along Martin Road and stretching east along Pioneer Lane, is an area of residential growth. This area is made up primarily of single family dwellings with a 1/2-acre minimum parcel size (R-1A zoning). Stretching east along Brown's Ranch Road, in the northeastern section of Weaverville, is an area of lower-density residential growth. This area is made up of single-family dwellings with a 5-acre minimum parcel size (RR-5 zoning). The Weaverville area has not experienced significant growth in its residential, commercial, or industrial sectors in recent years.

### *PROJECT AREA*

The proposed East Connector Roadway would be located on a mix of developed commercial, industrial, residential and forest land between SR 3 and SR 299. Most of the project is located on the Trinity River Lumber Company mill property. At its north end, the roadway passes through County land recently acquired from BLM and zoned for Public Facilities use (PF). As it crosses East Weaver Creek, the route passes through privately owned lands zoned for Heavy Commercial use (C-3). The route continues through the Special Unit Development (SUD) area of the Golden Age Senior Center. The remainder of the route runs through the eastern edge of Trinity River Lumber property, primarily through land zoned for Industrial use (I) and through small sections of the Open Space (OS) buffer that defines the mill's eastern boundary, and then through General Commercial (C-2) properties, including an undeveloped phase of the Trinity Plaza Shopping Center and the CHP office, partially within an existing right of way set aside for the East Connector. Other General Commercial properties along Nugget Lane will be affected by changes at the intersection of Glen Road and Nugget Lane. Rural Residential uses (RR-5, residential with a 5-acre minimum) in the Brown's Ranch Road area, and Residential uses (R-1A, residential with a ½-acre minimum) in the Martin Road/Pioneer Heights area are located to the west, and approximately 35 feet above, the majority of the alignment.

The proposed bike trail is located primarily along the Levee Road, through property owned by the Trinity River Lumber Company and Yingling Construction, zoned for Industrial use (I). The Option A trail would cross East Weaver Creek immediately south of the Yingling Construction Yard, through county property adjacent to Lowden Park, zoned Public Facilities (PF). The Option B trail would continue along the mill side of Levee Road, to cross East Weaver Creek through the Weaverville Community Services District yard (zoned Single Family Residential (R-1)) to the intersection of Park Avenue, Weaver Street and Lowden Lane. Levee Road is not a County Road, but the County has a Flood Control Easement along its length. The underlying ownership of this portion of Levee Road is primarily Trinity River Lumber Company. However, a few of the residential properties zoned for Residential Duplexes (R-2) that front on Park Avenue may extend across East Weaver Creek. Property boundary surveys would be required to determine this. In any case, these residential uses would be separated from the trail by East Weaver Creek, except where it crosses the creek at the County (Option A) or WCSD (Option B) property.

### *SPECIFIC LAND USE DESIGNATIONS*

A total of 40 land parcels are located within the environmental study limits (ESL) for the proposed East Connector Roadway Project. This ESL includes areas of temporary and permanent use, all alternatives for the road alignment, and the bike trail proposed in conjunction with the project. Table 3.14-2 lists the affected parcels, their current land use, zoning, and the alternatives in which they are included.

**Table 3.14-2  
Summary of Affected Parcels**

Assessors Parcels Number	Land Use	Zoning	Alternative(s)
024-200-1900	Public Facilities	PF	Alts 1, 2
024-390-5900	Public Facilities	PF	Alts 1, 2
024-390-1400	Heavy Commercial	C-3	Alts 1, 2
024-390-2800	Special Development Unit	SUD	Alts 1, 2
024-410-0800	Rural Residential	RR-5	Alt. 2
024-410-0700	Rural Residential	RR-5	Alt. 2
024-210-0800	Industrial, Open Space	I, OS	Alts. 1, 2, Bike path (Options A & B)
024-210-1000	Industrial	I	Alts. 1, 2
024-430-5300	Single Family Residential	R1A	Alts. 1, 2
024-210-0900	Industrial	I	Alts. 1, 2
024-500-6900	General Commercial	C-2	Alts. 1, 2, A, B, C
024-500-5700	General Commercial	C-2	Alts. A, B, C
024-500-4000	General Commercial	C-2	Alts. A, B, C
024-610-2900	Highway Commercial	H-C	Alts. A, B, C
024-480-2600	Single Family Residential	R-1	Alts. A, B, C
024-480-3100	General Commercial	C-2	Alts. A, B, C
024-480-0600	Retail Commercial, Residential Office	C-1, R-O	Alts. A, B, C
024-480-0700	Single Family Residential	R-1	Alts. A, B, C
024-500-6500	General Commercial	C-2	Alts. A, B, C
024-500-5000	General Commercial	C-2	Alts. A, B, C
024-500-0500	General Commercial	C-2	Alts. A, B, C
024-500-0600	General Commercial	C-2	Alts. A, B, C
024-500-6400	General Commercial	C-2	Alts. A, B, C
024-500-5600	General Commercial	C-2	Alts. A, B, C
024-500-5500	General Commercial	C-2	Alts. A, B, C
024-500-1000	General Commercial	C-2	Alts. A, B, C
024-500-1100	General Commercial	C-2	Alts. A, B, C
024-500-1200	General Commercial	C-2	Alts. A, B, C
024-210-0600	Industrial	I	Bike path (Options A & B)
002-100-0200	Industrial	I	Bike path (Options A & B)
002-100-5200*	Public Facilities	PF	Bike path (Options A & B)
002-100-7000*	Residential Duplex	R-2	Bike path Option B
002-100-7100*	Residential Duplex	R-2	Bike path Option B
024-210-1100	Industrial	I	Bike path Option B
002-100-7200*	Residential Duplex	R-2	Bike path Option B
002-100-6000*	Residential Duplex	R-2	Bike path Option B
002-100-1900*	Residential Duplex	R-2	Bike path Option B
002-100-2800*	Residential Duplex	R-2	Bike path Option B
002-100-2500*	Residential Duplex	R-2	Bike path Option B
002-100-2700	Single Family Residential	R-1	Bike path Option B

\* These parcels affected only if they extend east of East Weaver Creek to Levee Road

#### REGULATORY FRAMEWORK – ADOPTED PLAN CONSISTENCY

Congestion on the state highways in the downtown Weaverville area has been a recognized problem by Caltrans and the TCTC since 1984. A variety of planning efforts to improve transportation capacity in the Weaverville Basin have occurred since that time (see discussion in Sections 1.2, *Project Background* and

1.3, *Project Objectives*). The proposed East Connector Roadway Project is consistent with the *Trinity County General Plan*, including the *Land Use Element* (Trinity County, 1988) and *Circulation Element* (Trinity County, 2002a) of the General Plan, and is also consistent with the *Trinity County Regional Transportation Plan* (Trinity County, 2001) and *Weaverville Community Plan* (Trinity County, 1990).

The East Connector Roadway is fully within the existing growth/planning boundary for the community of Weaverville. The following policies regarding land use, contained in the *Land Use Element* of the *Trinity County General Plan* under “Weaverville Findings and Policies,” relate to the proposed East Connector Roadway project:

- **Policy 1.e.:** Improve parking and circulation in the downtown area to adequately accommodate commercial growth.

The *Circulation Element* of the *Trinity County General Plan* (Trinity County, 2002a) and the *Trinity County Regional Transportation Plan* (Trinity County, 2001) both describe the East Connector in detail under their descriptions of the existing transportation system as an anticipated project currently in the planning phase. In addition, the *Circulation Element* contains the following findings, goals, objectives and policies regarding land use and planning that are relevant to the proposed project:

- **Finding 1:** Increasing seasonal traffic congestion in Weaverville creates potential safety issues and adverse impacts to the community.
- **Finding 2:** State Route 299 in Weaverville operates at level of service E during peak periods. During peak periods, vehicle movements along SR 299 are slowed, while movements onto the highway experience significant delay. Conflicting traffic movements (turns from side streets, parking ingress and egress, delivery vehicles, etc.) cause additional delays.
- **Finding 5:** Facilities for non-motorized travel, including sidewalks and bicycle/pedestrian paths, are limited and do not provide safe continuous routes that link to recreational activity, commercial and residential areas.
- **Goal 1:** Provide for the long-range development of the county’s roadway system that is consistent with adopted land use patterns, ensures the safe and efficient movement of the people and goods, minimizes impacts on the attractiveness of the community, meets environmental and circulation objectives and implements funding strategies for construction, improvement, and maintenance of existing and new roadways.

- Goal 4: Increase bicycle and pedestrian travel by developing a safe and convenient system of bicycle routes, trails, storage facilities and pedestrian walkways, connecting all of Trinity County's major activity centers.
- Objective 1.2: Determine and, as appropriate, address the probable land use impacts of transportation projects prior to approving or funding the projects.
  - *Policy 1.2.A:* Location, design and development of transportation project shall be consistent with the adopted land use policies of the county.
  - *Policy 1.2.B:* Identify potential impacts and/or conflicts between potentially growth-inducing transportation projects and the adopted land-use policies of the county.
  - *Policy 1.2.C:* Require mitigation for transportation projects with potentially significant impacts to existing or planned land uses in the county.
- Objective 1.4: Develop road systems which are compatible with the areas they serve.
- Objective 1.5: Utilize environmental protection/mitigation measures that consider environmental, social, and economic factors when designing, constructing and operating transportation facilities.
  - *Policy 1.5.E:* Ensure that social and economic issues are considered along with the natural and man made environments when environmental review is conducted for proposed projects.
- Objective 1.6: Identify anticipated street and road congestion/capacity problems before they become critical in order to program preventative measures and reduce the cost of correction.
  - *Policy 1.6.A:* The minimum acceptable Level of Service (LOS) standard for roadway and intersection operation in Trinity County is "D". No public highway or roadway should be allowed to fall to or below LOS "E".
  - *Policy 1.6.B:* Traffic analysis, engineering judgment and/or special studies should be utilized to assess whether roadways or intersections are operating near or at LOS "E". If a roadway or intersection is at or near LOS "E", improvements or other strategies to remedy the condition should be considered a priority.
- Objective 1.13: As feasible under financial constraints, expand the transportation system to accommodate and attract new businesses and visitors.
  - *Policy 1.13.B:* Assess each project's contribution to the aesthetics of the area in which it is implemented and support those projects that enhance the visitor's experience in the region.
- Objective 1.14: Support and promote economic development through the efficient movement of freight and tourist travel to, and through Trinity County.

- *Policy 1.14.A:* Support efforts to maintain and improve Trinity County's highway system as important inter-regional trucking routes, as well as connecting highways in adjacent counties.
- **Objective 4.1:** Increase the total mileage of safe bike routes, trails and pedestrian walkways.
  - *Policy 4.1.A:* A minimum of four-foot paved shoulders should be provided when any new State highway lane miles are added in Trinity County. Four-foot paved shoulders should also be provided when any new county road classified as a major or minor arterial is constructed.
  - *Policy 4.1.B:* Bicycle and pedestrian facilities shall be developed in accord with applicable County and State regulations.

The *Trinity County Regional Transportation Plan* (Trinity County, 2001) also contains the following goal and objective relevant to land use and the proposed project:

- **Goal #2:** To assure the coordination of transportation facilities with adopted land use plans.
  - **Objective 2.1:** Design and construct future streets serving residential areas in keeping with the neighborhood existing characteristics and right-of-way conditions.

#### *Weaverville Community Plan*

The *Weaverville Community Plan*, adopted in 1990, updates and implements the *Trinity County General Plan* relative to the Weaverville Plan Area (Trinity County, 1990). The *Weaverville Community Plan* addresses all applicable sections and issues of the various General Plan Elements. The East Connector Roadway Project would be consistent with the following major proposal presented in the *Weaverville Community Plan*:

- Provide for a number of circulation improvements throughout the Community, including an eventual truck alternate route.

The *Transportation* section of the *Weaverville Community Plan*, (Trinity County, 1990) contains the following goals relevant to the proposed project:

- **Goal #1:** To provide a streets and highways system which effectively, efficiently and safely serves the variety of transportation needs of the community.
- **Objective #1.1:** Improve the community's circulation by implementation of the various roadway improvements identified on Exhibit "T-2"

- **Objective #1.2:** Plan for improved capacity and level of service of State Highway 299, which will not impact the historic nature of the downtown area. The Plan specifically rejects the implementation of four traffic lanes through this area.
- **Goal #4:** To increase bicycle and pedestrian traffic by developing a safe and convenient system of bicycle routes, trails, storage facilities, and pedestrian walkways.
- **Goal #5:** To preserve the historic nature and rural atmosphere of the County.

The Transportation Element of the *Weaverville Community Plan* goes on to say that “One of the major proposals of this Plan consists of a series of traffic and roadway improvements which are intended to improve, or at least maintain, the basin’s circulation system with the least disruption of Weaverville’s neighborhoods.” The Plan includes “Exhibit “T-2”, a map showing several “Potential New Roads” in Weaverville, including: “Brown’s Ranch/Airport Connector” and “Martin Road/Brown’s Ranch Connector” which together make up the presently proposed East Connector. The Plan specifically “prepares for the possibility of an alternate Route [sic] around the downtown area in the future.” Other relevant objectives from the *Transportation* section of the *Weaverville Community Plan* include:

- **Objective 4.1:** Increase the total mileage of safe bike routes, trails and pedestrian walkways by requiring paved shoulders on roads where pedestrian or bicycle usage is anticipated.
- **Objective 5.1:** Implement incremental traffic control improvements, such as crosswalk relocations and turn lanes, within the downtown area to the extent possible. Allow intersection signalization only when these measures are not adequate to safely control traffic movements.

The following specific goals and objectives regarding land use, contained in the Land Use section of the *Weaverville Community Plan*, relate to the proposed East Connector Roadway Project:

- **Goal #1:** To develop a land use pattern which implements other elements of the Community Plan.
- **Objective 1.4:** Retain and encourage further development of pathways, as opposed to sidewalks, except along state highways and the central business district, where sidewalks are warranted.
- **Objective 1.6:** Encourage the development of “pedestrian friendly” improvements within the Central Business District in recognition of the high degree of pedestrian use in this area.

### 3.14.2 SIGNIFICANCE CRITERIA

#### *LAND USE*

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant land use impacts:

Would the project:

- Physically divide an established community?
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- Conflict with any applicable habitat conservation plan or natural community conservation plan?

The East Connector Roadway would not physically divide a community, but the Alternative 1 alignment would pass between an apartment complex for senior citizens and a senior center on Brown's Ranch Road. This impact is discussed below. The proposed project alternatives would not conflict with applicable land use plans, policies or regulations and is consistent with the goals and policies of local planning documents to provide an alternative transportation route to improve the existing congestion on SR 299 and SR 3. There are no habitat conservation plans or natural community conservation plans that apply to the project area.

#### *GROWTH INDUCEMENT*

According to Appendix G, additional questions may be considered in determining whether the project would cause significant growth-inducing impacts (listed under "Population and Housing" in the checklist):

Would the project:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?



- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The East Connector Roadway project, in itself will not directly induce growth in the project area, for the reasons stated below. A minor indirect effect could occur to the degree that benefits to traffic circulation and congestion reduction in the downtown area make development there more desirable. Other growth-inducing effects could result from two projects associated with construction of the East Connector: construction of a new water main along the proposed road and the rezone of a 2 acre industrial parcel to 0.5-acre residential use. The project would not displace houses or people, but one business may be displaced if intersection Alternative B is selected. As discussed in Section 3.16, the project would draw upon the regional labor pool for construction and labor forces. The anticipated 2 to 25 construction workers from outside the local area would be able to find temporary housing in local hotels, motels and RV parks during the period of construction, without displacing local residents or requiring construction of new housing.

### 3.14.3 PERMANENT IMPACTS

#### *LAND USE IMPACTS*

##### *Impacts Common To All Alternatives*

The land use evaluation is based on qualitative and quantitative evaluation of the proposed East Connector Roadway project's effect on existing and future planned land uses in the project area. The proposed project would represent a minor, but permanent effect on land use patterns in the project area by changing existing land uses to roadway right-of-way. The project would encroach on public facilities land uses, heavy commercial land uses, light industrial land uses, and open space land uses. As noted above (Section 1.3), the project is consistent with adopted environmental plans and goals of the community, including the *Trinity County General Plan*, *Trinity County Regional Transportation Plan*, and *Weaverville Community Plan*. These documents discuss the need to provide an alternative route within Weaverville to address existing traffic and circulation problems.

A narrow sliver of the Trinity River Lumber Company property (Assessor's Parcel Number [APN] 024-210-0800) would be severed by either alternative of the East Connector Roadway. A portion of this land, along Lance Gulch, is designated as Open Space, as a buffer between industrial use and Lance Gulch. Trinity County will acquire this land, which could then be used to construct a Class I bicycle/pedestrian trail along the east side of the East Connector from Pioneer Lane to Brown's Ranch Road. As noted in Chapter 1, construction of the trail would be the responsibility of the Weaverville Basin Trails Committee. As discussed in Section 3.7, this area would also be used to create seasonal wetlands and a

vegetated buffer to compensate for wetlands lost due to this project. The use of this land for trails and wetlands would be consistent with its Open Space land use designation, and would actually expand the area of land dedicated to Open Space uses.

An adjacent parcel owned by the Trinity River Lumber Company, (APN 024-210-1000), at the end of Martin Road, may be rezoned from industrial to a residential zoning designation (R1A, 0.5-acre minimum) as part of the project. Trinity River Lumber would retain this parcel, which would be accessed by Martin Road. The general types and distribution of land uses within the project area would not be directly or indirectly altered, however, because this property is adjacent to existing residential parcels of the same density.

The proposed roadway would generate traffic noise, vehicular emissions, and visual impacts that would be incompatible with adjacent rural residences and senior facilities at the north end of the project. In addition, there would be pedestrian safety impacts associated with the new roadway.

The project would not pass through, or divide, the established residential communities on Brown's Ranch Road or Martin Road/Pioneer Lane. These neighborhoods would be separated from the roadway by topography. The road would be approximately 35 feet below the adjacent residential properties, at the base of a steep slope. The topographic separation would reduce the visual and noise impacts and safety hazards, because the road will not pass directly in front of any of the nearby homes. Land use incompatibilities with residential properties are therefore not considered significant.

Both the Mill and Yingling Construction Yard on Levee Road have expressed concerns over security for their facilities, because of increased traffic along their boundaries. Placing the roadway through or adjacent to an operating lumber mill would create potentially significant safety and aesthetic conflicts. Mitigation for this impact is discussed below.

#### *Alternative 1*

East Connector Roadway Alternative 1 would pass between an apartment complex for senior citizens and a senior center on Brown's Ranch Road, making it more difficult to pass between the two. This could be considered "dividing" a community, although not physically. Pedestrian traffic along Brown's Ranch Road between the Weaver Creek Senior Apartments and the Golden Age Senior Center, which are located on opposite sides of Brown's Ranch Road, would be impacted since the road would utilize the segment of Brown's Ranch Road between these properties. This is considered a significant impact on the Senior Citizen community.

This alternative would also take more property from the Trinity River Lumber Company mill than Alternative 2, but the mill would remain operational.

### *Alternative 2*

Alternative 2 would convert a greater amount of existing uses to roadway right-of-way and would require acquisition of additional right-of-way from privately owned lands, particularly the senior center property east of the building. On the other hand, less property would be taken from the Trinity River Lumber Mill.

The incompatibility between the proposed roadway and rural residences to the east of the project on Brown's Ranch Road may be greater under Alternative 2 since this alignment would be closer to these land uses. This alignment would be placed closer to residents along Brown's Ranch Road who have expressed a concern regarding impacts to pedestrian safety and the safety of playing children due to the proximity of the proposed roadway. The impact to pedestrian safety between the senior apartments and the senior center would be eliminated under Alternative 2, since this alignment would be to the east of the senior center and would intersect Brown's Ranch Road at only one point, southeast of the center.

This alternative would have a greater effect on future plans to add senior apartments on the south side of the senior center property, south of the existing parking lot. The SUD Guidelines developed for the Senior Center include a proposal for up to 10 apartment units. This proposal has been delayed due to lack of funding and limitations of the center's sewage disposal capacity. Alternative 2 would come close to the northeast corner of the proposed development, as shown on the SUD Guidelines. The senior apartments could still be developed, but would have to be slightly rearranged or reduced by one or two units to establish appropriate setbacks from the road right-of-way.

### *Intersection Sub-Alternative A*

Businesses located at the south end of the project, in particular the shoe store (On Your Feet) and the mini market/car wash (the Weaver Valley Market), located at the corner of Glen Road and Nugget Lane, would experience reduced access due to the closure of Nugget Lane at Glen Road. This is considered a significant effect on these businesses.

### *Intersection Sub-Alternative B*

Similar to Alternatives A, the businesses located at the south end of the project would experience reduced access as a result of the closure of Nugget Lane at Glen Road. In addition, under Alternative B, realignment of Glen Road would necessitate the modification or removal of the commercial building located on APN 024-500-4000 (On Your Feet shoe store). Reduced access and removal of the shoe store are considered significant adverse effects, and mitigation is discussed below.

### *Intersection Sub-Alternative C*

Under this sub-alternative, in-only access to Nugget Lane from Glen Road would be maintained, but traffic would be prohibited from exiting Nugget Lane onto Glen Road. Access to the businesses along Nugget Lane near Glen Road would be reduced, but to a lesser extent than with the other sub-alternatives. The commercial building on APN 024-500-4000 (On Your Feet shoe store) would remain.

### *Bicycle/Pedestrian Trail and Bridge*

Option A and B would both be consistent with adopted environmental plans and goals of the community, including the *Trinity County General Plan*, *Trinity County Regional Transportation Plan*, and *Weaverville Community Plan*. These documents discuss the community's goal of increasing bicycle and pedestrian travel by developing a safe and convenient system of bicycle routes, trails, storage facilities and pedestrian walkways.

The bike trail and bridge would not result in any significant land use incompatibilities or in any changes in the general pattern and distribution of land use in the project area. There are potential safety concerns from vehicular traffic on Levee Road and from truck traffic entering and exiting Yingling Construction Yard. The proposed trail crosses this property before the Option A bridge crossing of East Weaver Creek. However, vehicular traffic is not heavy at this location or along other portions of Levee Road. Mitigation for this impact is addressed below.

In addition, there are right-of-way and compatibility/safety issues associated with Option B that are not an issue with Option A. Under Option B, the proposed trail would terminate at a three-way intersection of Weaver Street, Park Avenue, and Lowden Lane. There is a stop sign on Park Avenue, but Weaver Street and Lowden Lane have no stop controls. Under Option B, County roads would have to be traveled to reach Lowden Park or the elementary school. The three-way intersection and use of County roads to reach the park or school pose potential safety hazards to bicyclists and pedestrians. Under Option A, access to the park is more direct and the three-way intersection is avoided. The Option A bridge crossing East Weaver Creek would be located entirely on County lands adjacent to Lowden Park, beyond the end of Park Avenue.

The Option B bridge crossing would require that the County obtain right-of-way along Levee Road. This right-of-way is currently with the County's Flood Control Easement, which requires access to the levee be kept clear at all times. Therefore the land within the easement cannot be used for buildings or storage. The County would acquire the right-of-way on these parcels in fee title, relieving the property owners of the tax burden and liability for property that is unusable to them due to the existing flood control easement. The majority of this land is owned by Trinity River Lumber mill. However, a few of the residential properties that front on Park Avenue may extend across East Weaver Creek. Property

boundary surveys would be conducted at the time of right-of-way acquisition. The bicycle trail along levee road would not be incompatible with residential uses across East Weaver Creek.

Under Option B, the trail would also pass through the Weaverville CSD yard. This would reduce the size of the maintenance yard, and have a minor impact on CSD operations. A fence would be constructed between the bike path and CSD yard, for security.

*No Project Alternative*

The No Project Alternative would not result in land use incompatibilities in the project area. However, this alternative would also not support the adopted plans and goals of the community to provide an alternative route and improve the existing congestion on SR 299. Although there would be no immediate costs or environmental impacts from this alternative, it would not provide a long-term solution for the operational issues and circulation issues in the Weaverville area. This alternative would not meet the objectives to relieve congestion within the community or provide a viable alternative for local traffic within Weaverville, and truck and through-traffic traveling between SR 299 and SR 3. This alternative would therefore be inconsistent with the goals of the *Weaverville Community Plan and Circulation Element of the Trinity County General Plan*.

**Land Use Impact-1** The East Connector Roadway project would affect land use patterns in the project area by changing existing land uses to roadway right-of-way.

**Significance:** Less than significant (no mitigation required).

**Land Use Impact-2** Alternative B would alter or remove one existing commercial property located at the SR 299 and Glen Road intersection.

**Significance:** Significant, but mitigated (**Land Use Mitigation-1**).

**Land Use Mitigation-1** If Alternative B is selected, the County will purchase the affected property and provide appropriate compensation to the property owner, building owner, and business owner in compliance with federal and state law and provide relocation assistance to the business owner, if necessary.

**Post-mitigation Significance:** Less than significant

**Land Use Impact-3** The East Connector Roadway and bicycle/pedestrian trail could create land use and safety incompatibilities with adjacent industrial properties and senior facilities.

**Significance:** Potentially significant, but mitigated (**Land Use Mitigation-2 and -3**).

**Land Use Mitigation-2** If Alternative 1 is selected, the northern intersection of the East Connector with Brown's Ranch Road would be all-way stop controlled. A pedestrian crossing would be provided at the all-way stop intersection. The pedestrian crossing will be clearly marked with "Pedestrian Crossing" signs and pavement striping.

**Land Use Mitigation-3** The County will provide fencing along property lines separating the East Connector and Class I bicycle trail from the mill and construction yard. In addition, fast-growing trees and shrubs, such as cedar or cypress trees, will be planted between the East Connector and the mill, to screen views of the mill. The bicycle/pedestrian path will be routed along the creek side of Levee Road where it crosses the entrance to the construction yard.

**Post-mitigation Significance:** Less than significant

### *GROWTH-INDUCING IMPACTS*

According to CEQA, a project would normally be considered to have a significant effect on the environment if it would induce substantial growth or concentration of population. Caltrans' *Community Impact Assessment Environmental Handbook Volume 4* (Caltrans 1997) provides guidance for determining whether a project will be growth-inducing. According to the Caltrans document, "a traditional shorthand way of looking at growth inducement is as the removal of obstacles to growth. The question is, will the project promote future economic or population growth?"

Land use planning in California is primarily implemented at the local level, through the general plans of local cities and counties. General Plans are required to balance local resources, fiscal capabilities and the quality of life concerns of each community to determine the appropriate type, level and pace of growth. Since the General Plan of a community defines the location, type and intensity of growth, it is the primary means of regulating development and growth in California. An important consideration in assessing the potential growth impact of a proposed project is whether the capacity of the project could permit a level of growth in excess of that planned by local jurisdictions (i.e., whether the project creates "excess" infrastructure capacity). Infrastructure projects that could accommodate the level and character of growth identified in local General Plans are generally "growth-accommodating" rather than "growth-inducing." However, as noted in Caltrans' *Community Impact Assessment Environmental Handbook Volume 4* (Caltrans 1997), a project's consistency with adopted plans and policies is not sufficient evidence that the project will not be growth-inducing. A more detailed discussion of growth impacts in the context of the proposed East Connector Roadway is presented below.

*IMPACTS COMMON TO ALL ALTERNATIVES*

The proposed East Connector Roadway does not provide access to lands that cannot currently be developed or are underdeveloped because of access limitations. The proposed project is intended to accommodate the rate of growth anticipated in the *Weaverville Community Plan and Land Use Element of the General Plan*, as identified in the *Weaverville Basin Traffic Circulation Study*. (Trinity County 1998). However, the road itself will not cause further development for the following reasons:

- The road will be a limited access arterial. The only individual driveways allowed to encroach onto the East Connector will be those for already existing adjacent land uses, such as Trinity River Lumber Mill, Trinity Plaza Shopping Center, California Highway Patrol and the Golden Age Senior Center (Alternative 1 only). Any new development would be required to include an interior road with a single shared encroachment onto the new road.
- Most of the alignment goes through the mill property, which is zoned Industrial. If the mill were to close, the Trinity County Planning Department expects the property would be rezoned to Commercial. The property might then be subdivided into smaller commercial parcels. The mill property includes 110 acres, which is mostly flat and is mostly occupied by the mill. Right-of-way for the East Connector would acquire approximately 23 acres. The internal road required by the "limited access" design of the East Connector would take at least another 5 to 10 acres. If the mill were to go out of business, its property would likely be subdivided for commercial, or possibly residential, use, regardless of whether the East Connector Roadway is constructed or not. Therefore, with or without the East Connector, the new commercial district would have to build an internal road to access either Brown's Ranch Road, the East Connector, SR 299 or Levee Road. Without the East Connector, there would be an additional 23 acres available for development. Since a road would have to be built to connect all the parcels in any case, the East Connector is not helping or encouraging the mill property to subdivide. The East Connector is not taking away usable operational areas of the mill that may cause it to shut down.
- The County will acquire the portions of the mill parcel east of the East Connector, and this will be dedicated to a separate bicycle/pedestrian trail and open space designed to protect and enhance the seasonal wetlands and Lance Gulch.
- Use of the East Connector to facilitate development on parcels to the east of the mill property, including constructing driveways from these properties to the proposed roadway, is precluded by topography. Lance Gulch and a steep bluff immediately east of the Gulch make it impossible to use the East Connector to access this area. The road would be at the base of the approximately 35-foot-high bluff, with adjacent residential properties at the top of the bluff. Furthermore, this area is already accessible, from private driveways off Brown's Ranch Road or Martin Road.
- The Brown's Ranch Road area is zoned Rural Residential 5 acre minimum. Residential areas on Brown's Ranch Road are nearly at full buildout. All but one parcel is currently the minimum size

and cannot be further subdivided. This one parcel (024-410-6000), which could potentially be further subdivided, would be easily accessed by Brown's Ranch Road. In the Brown's Ranch Road area, septic systems are the limiting factor for development, not access.

- The Martin Road area is already almost fully developed, in the absence of the East Connector roadway project. There are a few parcels that could still be subdivided. They would access Martin Road or Pioneer Lane. Development is occurring in this area because community water and sewer systems and County roads are already available. The existing access from this area to SR 299 via Martin Road is quite efficient and is not limiting development there. Residential areas on Martin Road are nearly at full buildout. Additional residential construction on Pioneer Lane east of Martin Road is planned, with or without the proposed project.
- The proposed Pioneer Lane extension to the East Connector project will go through property that could easily access Martin Road for development. The County does not intend to allow encroachment of private driveways onto the Pioneer Lane extension.
- Commercial areas at the south end of the alignment at SR 299 are already developed. There is a proposed new fuel facility at Weaver Valley Market that would replace a previous fuel facility removed due to the Underground Storage Tank upgrade requirements in 1998. This new facility is not being proposed because of the East Connector, but because it is on the existing commercial throughfare of SR 299, and a good location for a gas station. There is another gas station at the intersection of Brown's Ranch Road and SR 3 that will be easily accessible from the East Connector. The East Connector would not cause the need for additional gas stations in Weaverville.
- Properties at the north end of the alignment are zoned either Heavy Commercial (existing logging yard) or Public Facilities (existing County Road Maintenance yard and proposed expansion). These are fully developed, except for the County maintenance yard expansion. The expansion is occurring because the County has acquired the land from BLM, along with other land around the existing airport and county landfill, and because it is adjacent to the TCDOT's existing yard, which requires more space. This expansion will occur regardless of whether the East Connector Roadway is built.

As noted above, the proposed project's objectives are consistent with the goals and policies of the *Trinity County Regional Transportation Plan*, *Trinity County General Plan Land Use Element and Circulation Element*, and the *Weaverville Community Plan* to provide an alternative route to improve the existing congestion on SR 299 and SR 3 (see Section 1.3). These documents attempt to address the potentially adverse implications of development and growth through policies, programs, and proposals for adequate infrastructure, promotion of a reasonable balance between jobs and housing, and protection of environmentally sensitive resources. The East Connector Roadway project was conceived to deal with projected growth in the Weaverville Basin, as projected in the *Weaverville Basin Traffic Circulation*



*Study* (WBTCs), based on an annual population growth rate of 1 percent in the basin. Therefore, in general, the project is considered growth-accommodating.

Improved traffic capacity and operating conditions could enhance development potential and indirectly support development in the downtown area. This is generally considered desirable by the community, as evidenced by numerous Community Plan policies. This possible indirect effect is not quantifiable, but is not expected to be substantial.

The possible rezone of a 2-acre parcel of land owned by the Trinity River Lumber Company, separate from the Mill parcel and adjacent to Martin Road, is discussed in the Project Description. This aspect of the project would be directly growth inducing. The R-1A (0.5-acre minimum) land use designation for this parcel would allow a maximum of four more parcels to be developed for residential use. This would not comprise a significant contribution to recent development in the Weaverville Basin. The new zoning would be consistent with adjacent land uses and zoning densities.

The East Connector is included in the Weaverville CSD's Master Plan for improvements to the Weaverville water supply system. The CSD proposes to install a water main within the new road right-of-way. For cost efficiency and to save later disruption of the new paved road surface, this water line would be installed during construction of the East Connector. The Master Plan does not propose any expansion of the CSD boundaries, or extension of service into currently unserved areas. The new line would loop sections of Weaverville together, giving the CSD the ability to supplement the system with Trinity River water from their existing diversion at Douglas City if the source at East Weaver Creek failed, or bypass the existing line from East Weaver Creek if the pipe failed. The purposes of these improvements are circulation, better gravity feed and reliability rather than expansion. The new line would not increase the overall community water supply or change the amount of water drawn from the Weaver Creek/Trinity River watersheds.

Although no expansion is planned, the proposed new water main would improve water pressure and reliability, eliminating an existing barrier to development because some areas in the community cannot currently be served by the Weaverville Fire District due to inadequate water pressure and/or supplies. Thus, the improvements proposed in the Weaverville CSD's Master Plan, including the proposed new water main along the East Connector project, could indirectly induce growth in some areas of the community. This indirect effect is difficult to quantify, but is not expected to make a significant difference in the growth rate of the Weaverville community.

### *ALTERNATIVES 1, 2, A, B, C*

There is no difference in the growth-inducing impacts of the alternatives. All alternatives would be consistent with land use and growth policies contained in existing plans for the project area, including

policies to address circulation problems expected to occur due to growth anticipated in these plans. Although the alternatives are not expected to directly induce growth, improved traffic capacity and operating conditions could enhance development potential and indirectly support development in the community. As noted above, the proposed rezoning of a severed lumber mill parcel could result in a direct minor growth impact of four new residences if the mill decides to subdivide the parcel and develop it for residential use. In addition, construction of a new water main along the East Connector could indirectly induce growth by removing an existing barrier to development (inadequate water supplies and pressure for fire fighting).

#### *BICYCLE/PEDESTRIAN TRAIL AND BRIDGE*

Neither Option A nor Option B would cause growth-inducing effects and would be consistent with land use and growth policies contained in existing plans for the project area.

#### *NO PROJECT ALTERNATIVE*

The No Project Alternative would not induce growth in the project area. However, this alternative would also not support polices to provide an alternative route to improve the existing congestion on SR 299 and increased congestion due to anticipated growth. This alternative would not provide a long-term solution for the operational issues and circulation issues in the Weaverville area and would not meet the objectives to relieve congestion within the community or provide a viable alternative for local traffic within Weaverville and truck and other through-traffic traveling between SR 299 and SR 3.

**Land Use Impact-4** Creation of a new roadway could indirectly induce development along its length.

**Significance:** Potentially significant/indirect, but mitigated (**Land Use Mitigation-4**).

**Land Use Mitigation-4** The County would, as a condition of project approval, limit access to the East Connector as follows. The East Connector is to be classified as a limited-access minor arterial route and adjacent property access will be minimized to preserve the functionality of the route as an Arterial. The TCDOT is the agency responsible for issuing Encroachment Permits on County Roads. The TCDOT will only issue permits for encroachment onto the East Connector on a limited basis, as follows: Land uses existing on properties immediately adjacent to the East Connector at the time of construction of the East Connector may be allowed up to two encroachments, provided proposed encroachments can be located and designed to meet TCDOT standards at the time of their construction. This includes Trinity Plaza Shopping Center, Trinity River Lumber Company, California Highway Patrol, and Golden Age Senior Center. Future development along the East Connector shall only be allowed a single encroachment point for

any entire development plan (subdivision, industrial park, etc.) Internal collector roads will be required for any development proposed along this route, connecting to a single encroachment point on the East Connector. No parking will be allowed on the East Connector, and any adjacent development (existing or future) shall be required to provide adequate off-street parking. All other applicable building, zoning, land use, subdivision ordinance, encroachment permit requirements, etc. shall apply. In no case shall future encroachments onto the East Connector be spaced closer than 300 feet from any other encroachment or roadway intersection.

**Post-mitigation Significance:** Less than significant

**Land Use Impact-5** Construction of a new water main along the proposed road and creation of four new residential properties may result in four new residences and an unquantifiable indirect effect on growth within the Weaverville CSD or Fire District service areas.

**Significance:** Less than significant (no mitigation required).

### 3.14.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

#### *IMPACTS IN COMMON FOR ALL ALTERNATIVES*

Construction activities are tentatively scheduled over two construction seasons. There would be some disruption and temporary land use incompatibilities with adjacent residential and commercial land uses during the construction period.

**Land Use Impact -6** Construction of the proposed East Connector Roadway project would produce short-term adverse effects on adjacent residential and commercial areas in the community of Weaverville from construction activities.

**Significance:** Significant, but mitigated (**Land Use Mitigation-5**)

**Land Use Mitigation-5** During construction activities, the County shall limit the amount of daily construction equipment traffic by staging most construction equipment and vehicles on the project site at the end of each work day rather than removing them.

**Post-mitigation Significance:** Less than significant

### 3.14.5 CUMULATIVE IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

The project will meet existing traffic needs and, as a limited access roadway, is not expected to contribute to cumulative growth in the project area. If access to a new airport in northeast Weaverville is provided from the East Connector, the combined traffic from the airport and through-traffic on the East Connector would contribute cumulatively to land use and safety incompatibilities with adjacent residential properties and senior facilities along Brown's Ranch Road.

**Land Use Impact-6** Combined traffic from the East Connector Roadway project and a proposed new airport access road could create land use and safety incompatibilities with adjacent residential properties and senior facilities along Brown's Ranch Road.

**Significance:** Potentially significant, but mitigated (see **Land Use Mitigation-2**, above).

**Post-mitigation Significance:** Less than significant

### **3.15 FARMLANDS/AGRICULTURAL LANDS**

The proposed East Connector Roadway project is not located in a farmland or agricultural area. None of the parcels within the proposed road right-of-way are located on land zoned for agriculture. Two parcels (APN 024-410-06 and -07) zoned for agriculture (AG) are located adjacent to the road right-of-way (east of the road on Brown's Ranch Road). These parcels are used primarily for sheep grazing and are the only parcels zoned AG in the Weaverville Basin. The project will not directly impact the agricultural use of these parcels. Indirect noise and visual effects to the parcels are addressed in Section 3.5 and 3.19, respectively.

Farmlands and agricultural lands were not determined to be an issue during the initial project scoping and public scoping process. Therefore, this issue is not addressed in detail in this EIR.

### 3.16 COMMUNITY IMPACTS (SOCIAL, ECONOMIC)

This section identifies the social and economic impacts of the proposed project, including population/ demographic/ workforce impacts, safety and efficiency impacts, taxable sales impacts and other impacts to local businesses, fiscal impacts related to acquisition of right-of-way and loss of property taxes, and relocation impacts. Social and economic effects are usually considered significant effects under CEQA only if they are reasonably tied to physical effects on the environment.

Some of the affects analyzed in this section, such as fiscal effects and taxable sales cannot be reasonably tied to a physical change in the environment. Therefore their analysis is not required by CEQA, and these types of impacts are not considered significant under CEQA. However, the social and economic effects of the project are of concern to the community. They are discussed here in the interest of disclosure, for use by County decision makers, so that the social and economic consequences of their decisions will be fully understood.

#### 3.16.1 AFFECTED ENVIRONMENT

Trinity County's population has fluctuated over the past 10 years, showing a general trend towards slower growth than in previous decades. Population growth trends and projections are discussed in Section 3.14, *Land Use, Planning and Growth*. Additional demographic and economic patterns are discussed below.

The 1999 average population density for Trinity County (4.1 persons per square mile) is significantly below the statewide average (212.5 persons per square mile) (U.S. Census Bureau 2001). The number of housing units in the County was estimated to be 8,074 in 1999 (California Department of Finance 2001). Of these, 5,523 were occupied at least six months of the year, while the remaining 2,551 were vacant at least six months of the year, resulting in a vacancy/second home rate of approximately 31.6 percent. The high percentage of vacant housing in the County is attributed to the high volume of second homes in the vicinity of Trinity Lake, located in the northeastern portion of Trinity County (Trinity County, 1998). By comparison, in 1997, Weaverville had 1,574 occupied housing units and 126 vacant units, for a vacancy/second home rate of approximately 7.4 percent. The high vacancy/second home rate in the County is expected to remain relatively constant over the next decade and is not reflective of an area that has a high demand for new housing development.

Total 2000 employment in Trinity County, including wage and salary employment, self-employed and all other categories, was estimated at approximately 4,150. Employment in Weaverville was 1,230, representing 28 percent of the County's employment.

Historically, the local economy has been based on government, forestry, light manufacturing, and tourism. The predominant sector of employment in the County is government, largely due to employment

with the Forest Service, the Bureau of Land Management, as well as schools and other governmental agencies. The retail and service sectors play an increasingly important role in County employment. The principal manufacturing industry in the County, lumber and wood products, supports nearly all of the County's manufacturing workers. More recently, however, there has been a decline in forestry jobs, due to poor market conditions and increasing environmental limitations on timber harvesting. The Trinity River Lumber Company mill in Weaverville is the last operating mill in the County.

A profile of Trinity County employment in February 2000 is provided in Table 3.16-1.

**Table 3.16-1. Trinity County Employment Profile, February 2000**

Industry	No. of Jobs	% Employed by Industry
Government	1,360	44.6
Agriculture	100	3.3
Manufacturing	260	8.5
Wholesale Trade	40	1.3
Retail Trade	560	18.4
Services	390	12.8
Finance, Insurance & Real Estate	80	2.6
Transportation, Communication, Public Utilities	140	4.6
Construction and Mining	120	3.9
Wage & Salary Employment	3,050	100.0
Self Employment and Other Categories	1,100	

Source: Labor Market Information Division of the California State Employment Development Department, February 2000.

Economic forecasts for the County indicate employment growth in transportation and public utilities, in relatively high-wage industries, such as business and health services, and in the trade and services employment sectors. Governmental employment, on the other hand, is expected to experience low growth at less than one percent during the same period (California Employment Development Department, 2000).

The California Employment Development Department reports that Trinity County's unemployment rate declined from an annual average of 14.7 percent in 1995 to 12.4 percent in 2000. This compares with the statewide annual average of 4.9 percent in 2000. The unemployment rate reflects the seasonal nature of employment in the economy, with an average high unemployment of 18.1 in February and an average low unemployment rate of 7.8 percent in September. Unemployment in February 2000 was 16.3 percent for the County and 6.2 percent for Weaverville.

Per capita personal income in Trinity County grew from \$12,997 in 1988 to \$18,704 in 1998. Recent census data estimate the County's median household income at \$27,042, compared to the statewide median income of \$39,595. An estimated 19.4 percent of the County's population lives below poverty, compared to 3.4 percent of the statewide living below the poverty level (U.S. Census Bureau 2001).

The majority (87.3 percent) of workers residing in Trinity County are employed within County. The remaining percentage, approximately 12.7 percent of the available work force residing in Trinity County, works outside the County.

Taxable sales data and trends can provide an indication of the success of local businesses and demand for goods and services. Trinity County sales data available from the State Board of Equalization reflect the seasonal nature of sales in the County, with peak sales occurring from late spring to early fall.

Weaverville is the most populated community in Trinity County and has more convenient access to areas with larger population and commercial bases (e.g., Redding, Lake Shasta, the Interstate 5 corridor, and Eureka) than many other communities in the County. Businesses in the Weaverville area are predominately of three types, as described in the *Weaverville Community Plan* (Trinity County, 1990):

- Community-oriented commercial services
- Recreation-oriented commercial services
- Industrial and resource base activities

A description of the business characteristics and constraints to growth of each of these is provided below.

#### *COMMUNITY-ORIENTED COMMERCIAL SERVICES*

This type of business includes retail stores, professional services, etc. and is dependent upon local residents to provide the majority of their business activity. These businesses are scattered along the SR 299 and SR 3 corridors and within the "downtown" central business district in Weaverville. Challenges and constraints to the continuing success and growth of these businesses include:

- Competition with similar businesses in more populated areas (e.g., Redding and Eureka)
- Infrastructure deficiencies (need for sewer and water main extensions), particularly at the north end of SR 3 and southeast end of SR 299
- Inadequate parking and circulation in the downtown area to adequately accommodate commercial growth



*RECREATION-ORIENTED COMMERCIAL SERVICES*

Recreation-oriented commercial services include hotels, restaurants, retail outlets and tourist attractions that cater more to seasonal or weekend trade. These businesses are concentrated within Weaverville's central business district, with some restaurants and hotels scattered along the SR 299 and SR 3 corridors. Challenges and constraints to the continuing success and growth of these businesses include:

- The largely seasonal nature of this business, relying upon the tourist season which is concentrated between Memorial Day and Labor Day
- Lack of public awareness of the area's tourist attractions and historical significance
- Inadequate funding for promoting area tourism
- Insufficient accommodations or services to support major growth in tourism
- Inadequate parking and circulation in the downtown area to adequately accommodate commercial growth
- Physical distance of the area from major population centers reduces the number of impulsive, spontaneous visitors visiting the area (high fuel costs also factor here)
- Limited scope of recreational development on specially protected federal lands (e.g., wilderness or wild and scenic areas)

*INDUSTRIAL AND RESOURCE-DEPENDENT ACTIVITIES*

Industrial activities include bulk petroleum plants, warehousing, and manufacturing businesses. Resource based activities include timber management and harvesting, mining, and subsequent milling or processing of the resources. Weaverville has two main industrial areas: one extending from Washington Street to the Trinity River Lumber mill on SR 299, and the other located at the southeast end of town along SR 299. An increase in business in this area has the opportunity to significantly increase employment. Low electricity rates of the Trinity County Public Utility District are an inducement to growth of this type of activity. Challenges and constraints to the continuing success and growth of these businesses include:

- Changes in federal land management policies that disfavor industrial and resource-based businesses
- Changes in the demand for industrial and resource-based products
- Transportation constraints posed by mountainous roads that can restrict winter-time travel

Businesses in the East Connector Roadway project area consist of commercial and light industrial establishments located along SR 299 and SR 3, the Trinity River Lumber Company mill, and other light industrial businesses located at the north end of the roadway alignment and along the bike path proposed to parallel Levee Road (e.g., Yingling Construction Yard).

### *REGULATORY SETTING*

As noted above, social and economic effects are not considered significant effects under CEQA unless a chain of cause and effect can be established between the social or economic effect and an adverse physical effect on the environment.

### *RELOCATION*

Under CEQA, a project would normally have a significant effect on the environment if it would displace a large number of people. The Fifth Amendment to the United States Constitution (as well as the State Constitution) requires just compensation for the taking of private property for public use. Trinity County must compensate the affected property owners at fair market value for the acquisition of property (land and improvements) needed for the project.

In addition to compensation for property acquisition, the federal *Uniform Relocation Assistance and Real Properties Acquisition Policies Act* and state law (California Government Code, Chapter 16, Section 7260, et seq.) require that relocation assistance be provided to any person or business displaced because of acquisition of real property by a public entity for public use. Comparable replacement properties must be made available or provided within a reasonable time prior to displacement. Relocation assistance may also be provided. These measures help those displaced find adequate replacement properties and cover certain expenses involved in finding, purchasing or renting, and moving to a new location.

### *SOCIAL AND ECONOMIC DEVELOPMENT*

#### *Trinity County General Plan*

The *Land Use Element* of the *Trinity County General Plan*, (Trinity County, 1988) contains the following goals regarding socioeconomic development relevant to the proposed project:

- Improve parking and circulation in the downtown area to adequately accommodate commercial growth.

The *Circulation Element* of the *Trinity County General Plan*, (Trinity County, 2002a) and the *Trinity County Regional Transportation Plan* (Trinity County, 2001) both describe the East Connector in detail under their descriptions of the existing transportation system as an anticipated project currently in the planning phase. In addition, the *Circulation Element* contains the following findings, goals, objectives and policies regarding socioeconomic development that are relevant to the proposed project:

- **Finding 1:** Increasing seasonal traffic congestion in Weaverville creates potential safety issues and adverse impacts to the community.

- **Finding 2:** State Route 299 in Weaverville operates at level of service E during peak periods. During peak periods, vehicle movements along SR 299 are slowed, while movements onto the highway experience significant delay. Conflicting traffic movements (turns from side streets, parking ingress and egress, delivery vehicles, ect.) cause additional delays.
- **Objective 1.13:** As feasible under financial constraints, expand the transportation system to accommodate and attract new businesses and visitors.
- **Objective 1.14:** Support and promote economic development through the efficient movement of freight and tourist travel to, and through Trinity County.
- **Policy 1.14.A:** Support efforts to maintain and improve Trinity County's highway system as important inter-regional trucking routes, as well as connecting highways in adjacent counties.

The *Trinity County Regional Transportation Plan* also contains the following goals, objectives and policies regarding socioeconomic development that are relevant to the proposed project:

- **Goal #5.1:** Improve the transportation system to support access to and economic viability of locally-operated businesses for economic enhancement.
- **Objective 5.1.1:** As feasible under financial constraints, expand the transportation system to accommodate and attract new businesses and visitors. *Performance Measure: Countywide retail sales.*
- **Goal #5.2:** Preserve high quality viewsheds along State highways and County roads in an effort to improve visitor experience and economic enhancements.

### *Weaverville Community Plan*

The Transportation section of the *Weaverville Community Plan*, (Trinity County 1990) contains the following goals:

- **Goal #1:** To provide a streets and highways system which effectively, efficiently and safely serves the variety of transportation needs of the community.

The *Weaverville Community Plan* goes on to say that "One of the major proposals of this Plan consists of a series of traffic and roadway improvements which are intended to improve, or at least maintain, the basin's circulation system with the least disruption of Weaverville's neighborhoods." The Plan includes "Exhibit "T-2", a map showing several "Potential New Roads" in Weaverville, including: "Brown's Ranch/Airport Connector" and "Martin Road/Brown's Ranch Connector" which together make up the presently proposed East Connector.

- **Objective #1.1:** Improve the communities circulation by implementation of the various roadway improvements identified on Exhibit "T-2"
- **Objective #1.2:** Plan for improved capacity and level of service of State Highway 299, which will not impact the historic nature of the downtown area. The Plan specifically rejects the implementation of four traffic lanes through this area.

The *Economic Development* section of the *Weaverville Community Plan*, contains the following goals regarding socioeconomic development relevant to the proposed project:

- **Goal #4:** To construct and maintain a more adequate State and County road system, in order to provide better all-weather access to all parts of the County.

### 3.16.2 SIGNIFICANCE CRITERIA

The impact discussion below looks at areas of impact that are not addressed in Appendix G of the CEQA *Guidelines*, including population, demographic, and workforce impacts, access impacts, safety and efficiency impacts, taxable sales and other business impacts, fiscal impacts, and relocation impacts. As mentioned above, strictly social and economic effects that do not result in a physical change in the environment are not considered significant effects under CEQA. Therefore, there are no CEQA significance criteria that apply to these effects. In each case, the criterion for significance is whether the social or economic impact can be reasonably tied to a physical change to the environment that would have a significant effect.

### 3.16.3 PERMANENT IMPACTS

#### *POPULATION / DEMOGRAPHIC / WORKFORCE IMPACTS*

##### *Impacts Common to All Alternatives*

As explained in Section 3.14, *Land Use*, the project is not expected to induce significant residential, commercial, or industrial growth. Therefore, changes to the population or demographic character of the project area are not expected. The project will draw largely upon the local and regional labor force to construct the project. Workers may reside for the short-term of construction in one of the area's hotels, motels or RV parks, but would probably not permanently relocate to the Weaverville area as a result of the project.

### *No Project Alternative*

The No Project Alternative would not result in displacement impacts, or changes in population, housing or demographic characteristics; however, the No Project Alternative would also fail to meet local community goals, objectives, and planning policies.

### *CHANGES IN ACCESS*

#### *Impacts Common to All Project Alternatives*

The East Connector project would result in overall improvements in traffic operations, circulation, and access to parking spaces along SR 299 from reduced congestion on the SR 299 corridor within the business district. The project would also improve access between the east end of SR 299 and north end of SR 3 within Weaverville and between SR 299 and the Trinity Lake/Trinity Alps area to the north of Weaverville.

Businesses located at the south end of the project, near the intersection of SR 299 and Glen Road would experience reduced access as a result of the new traffic signal at Glen Road/SR 299 and changes to the Glen Road/SR 299/Nugget Lane intersection.

#### *Alternative A*

Glen Road would be slightly realigned at its terminus with SR 299 to line up with the new East Connector. Access to the Nugget Lane frontage road from Glen Road would be eliminated. The existing driveway between the car wash and Coast Central Credit Union would remain open to two-way in and out traffic. No turn pockets would be provided on Glen Road for this private driveway, but left and right turns would be allowed. Changes in access may negatively impact businesses at this location, and mitigation for this impact is discussed below and in Section 3.18, *Traffic and Transportation*.

#### *Alternative B*

Access impacts from this alternative would be similar to Alternative A. Access to the Nugget Lane frontage road would be eliminated. This alignment would also require removing all or part of the building currently occupied by On Your Feet shoe store, the Dollar Store, and Trinity Transit. Glen Road would be realigned further south at its terminus with SR 299 to better line up with the new East Connector across SR 299. A new access to Nugget Lane would be provided from Golf Course Drive, through the area currently occupied by the shoe store building. This would provide an access to Glen Road and SR 299 from this end of Nugget Lane, preserving access to and from Glen Road for the remaining businesses on Nugget Lane south of Glen Road. Like Alternative A, the existing driveway between the car wash and Coast Central Credit Union on the other side of Glen Road would remain open to two-way in and out traffic. Changes in access may negatively impact businesses at this location, and

mitigation for this impact is discussed below and in Section 3.18, *Traffic and Transportation*. Impacts from removal of the shoe store building are discussed under *Relocation*, below.

### *Alternative C*

Under Alternative C, the East Connector curve at the CHP building would be tightened to minimize the skew of the intersection across SR 299, while allowing the shoe store to remain. An in-only access to Nugget Lane would be provided on both sides of Glen Road. Northbound and southbound cars and trucks on SR 299 would be able to turn onto Glen Road and enter Nugget Lane on either side. The southbound turn onto Glen Road and then to northbound Nugget Lane would be nearly a U-turn, but the turning radius would be sufficient to accommodate trucks. Alternatively, southbound trucks could enter at the driveway in front of Ben Franklin, at the north end of Nugget Lane, but would have to turn around to exit, or use the existing driveway between the car wash and Coast Central Credit Union which would remain open to two-way in and out traffic. "Keep Clear" striping would be provided across Glen Road at Nugget Lane to prevent eastbound traffic stopped at the signal from blocking entry to south Nugget Lane. The Golf Course Drive access would not be provided (see Alternative B).

Provision for in-only access to Nugget Lane from Glen Road would result in less impact on access to commercial properties along Nugget Lane than Alternatives A or B. Inbound traffic would be able to access the businesses as they do now. However, southbound trucks at the Weaver Valley Market would have to either turn around to exit or drive around the existing car wash and make a tight turn onto Glen Road. This difficulty may discourage some trucks from stopping at Weaver Valley Market. On the south side of Glen Road, inbound trucks could enter Nugget Lane from Glen Road, and exit from the other end of Nugget Lane, across from Martin Road. There would not be sufficient room for a truck to turn around on Nugget Lane.

Although the impact is minimized by the Alternative C intersection configuration, changes in access may still negatively impact businesses at this location, and mitigation for this impact is discussed below and in Section 3.18, *Traffic and Transportation*.

**Community Impact -1** Commercial enterprises along Nugget Lane may lose business due to changes in access from Glen Road to Nugget Lane (Alternatives A, B, C).

**Significance:** Potentially significant, but mitigated (**Community Mitigation-1** and **-2**, and **Traffic Mitigation-1**).

**Community Mitigation-1** If Alternative A is selected, the County will vacate their right-of-way on Nugget Lane across the properties that contain the Weaver Valley Market (APN 024-480-3100) and the On Your Feet Shoe Store (APN 024-500-4000). This will provide additional flexibility to the businesses to improve internal circulation and

parking. If Alternative B is selected, the County will vacate only Nugget Lane north of Glen Road (APN 024-480-3100). South of Glen Road, Nugget Lane would continue to a new intersection with Golf Course Drive.

**Community Mitigation-2** Under all three intersection alternatives, on-street parking would be provided on the west (eastbound) side of SR 299 adjacent to Weaver Valley Market. This would allow eastbound trucks to park on SR 299 and walk to the Market, without having to perform any tight-radius turns.

**Traffic Mitigation-1**

**Sub-alternative A:** Allow on-street parking on the south side of Glen Road adjacent to the existing shoe store .

**Sub-alternatives A, B and C:** Add a new entrance to Nugget Lane from SR 299 approximately half way between Glen Road and Martin Road, across from the existing Burger King driveway.

**Post-mitigation Significance:** Less than significant

Note that, at the request of the property owners and business owners, the County is currently in the process of abandoning Nugget Lane north of Glen Road. This action was initiated by the new owner of the Weaver Valley Market, who wishes to rearrange the parking and circulation at the market in order to add new services, including fuel sales. The existing Nugget Lane north of Glen Road is ill-defined and vehicles often park in the County right-of-way. Adjacent businesses and property owners and the Trinity County DOT agree that the added flexibility in parking and circulation would be desirable for the entire segment of Nugget Lane north of Glen Road. Therefore, pending Board of Supervisor's approval, Community Mitigation-1 will be partially implemented independent of the East Connector project.

*Bicycle/Pedestrian Trail and Bridge*

Children using the proposed bike path to access the Weaverville Elementary School and Lowden Park would benefit from this project. As discussed in Section 3.14, the Option A alignment for the trail and bridge would provide a safer route for children and others than Option B.

*No Project Alternative*

Under the No Project Alternative, poor circulation and access would continue to impair the economic potential of downtown Weaverville. Increasing congestion would continue to result in inefficiencies for patrons, service and delivery vehicles and employees/business people. Access to Nugget Lane would remain open, but levels of service at the Glen Road/SR 299 intersection would continue to degrade.

## *SAFETY AND EFFICIENCY*

### *Impacts Common to All Alternatives*

The proposed project would result in beneficial effects in terms of savings in fuel, maintenance and repair, and operating expenses. Mobility improvements would also reduce emergency response times in Weaverville and surrounding areas.

The project is proposed to enhance safety and transportation efficiency by providing a limited access arterial route between SR 3 and SR 299, relatively free of driveways, adjacent development and on-street parking, as an efficient alternative means for residents and frequent visitors to get around in Weaverville without passing through the historic district or using Washington Street, past the elementary school and Lowden Park.

The reduction in traffic on SR 299 would improve pedestrian and bicycle safety as well as vehicular safety. In addition, replacement of the existing two-way left turn lane with exclusive left-turn pockets and addition of a traffic light at the SR 299/Glen Road intersection would improve vehicle and pedestrian safety at this location.

The CHP, Trinity River Lumber Company, and Yingling Construction have expressed concerns about security of their facilities, due to the expected project-related increase in traffic adjacent to their properties. This impact is discussed and mitigated in Section 3.14, *Land Use*, as follows:

**Land Use Mitigation-3** The County will provide fencing along property lines separating the East Connector and Class I bicycle trail from the mill and construction yard. In addition, fast-growing trees and shrubs, such as cedar or cypress trees, will be planted between the East Connector and the mill, to screen views of the mill. The bicycle/pedestrian path will be routed along the creek side of Levee Road where it crosses the entrance to the construction yard.

**Post-mitigation Significance:** Less than significant

### *Alternative 1*

Alternative 1 will have an adverse effect on the safety of senior citizens who use the Golden Age Senior Center. Many senior citizens live in the senior apartments or the Twin Creeks Mobile Home Park on Brown's Ranch Road west of East Weaver Creek, and walk, drive or take powered wheelchairs or carts to the senior center across Brown's Ranch Road. Alternative 1 runs along the existing Brown's Ranch Road alignment at this location. Although the senior citizens already have to cross a street to get to and from the senior center, the East Connector would be a wider street with more traffic and potentially higher speeds. This impact is discussed and mitigated in Section 3.14, *Land Use*, as follows:



**Land Use Mitigation-2** If Alternative 1 is selected, the northern intersection of the East Connector with Brown's Ranch Road would be all-way stop controlled. A pedestrian crossing would be provided at the all-way stop intersection. The pedestrian crossing will be clearly marked with "Pedestrian Crossing" signs and pavement striping.

### *Alternative 2*

Selection of Alternative 2 would eliminate the impact on the Senior Citizens who travel between the Center and Senior Apartments or Mobile Park on Brown's Ranch Road.

### *Bicycle/Pedestrian Trail and Bridge*

The bike path along Levee Road would pass across the entrance to the Yingling Construction yard, creating potential safety and operational impacts. The construction company also has concerns regarding security of the construction yard, due to the increase in foot and bicycle traffic along its borders. This impact is discussed and mitigated in Section 3.14, *Land Use* (see Land Use Mitigation 3, repeated above) As also discussed in Section 3.14, the Option A alignment for the trail and bridge would provide a safer route for children and others than Option B since it would be more direct, and would avoid a three-way intersection and the use of county roads.

### *No Project Alternative*

Under the No Project Alternative, there would be no new safety or efficiency impacts. However, safety risks from vehicle congestion in the Weaverville business district and inefficiencies from the traffic and idling vehicles would continue. Safety problems in the vicinity of Glen Road, Nugget Lane and the Trinity Plaza Shopping Center associated with the two-way left turn lane in the median of SR 299 and pedestrians crossing SR 299 between retail shops would continue.

## *TAXABLE SALES AND OTHER BUSINESS IMPACTS*

### *Impacts Common to All Project Alternatives*

The proposed project would provide an alternative route between the eastern and northern portions of Weaverville. As a result, there would be potentially less traffic through the eastern portions of the downtown historic and commercial district, and the southern end of SR 3. Potential economic effects on community-oriented commercial businesses and recreation-oriented commercial businesses along SR 299 and SR 3 would be offset by improvements in access for potential patrons due to overall improvements in traffic operations, circulation, and access to parking spaces along SR 299, that would result from reduced congestion on the SR 299 corridor within the business district. Also, as noted in Section 1.3, *Project Objectives*, the project would primarily have an effect on east-to-north through-traffic from Redding to the Trinity Lake area, and would be used primarily by locals and truck through-traffic. Those who do not

know the area would likely continue to use the SR 299 to SR 3 route, rather than the East Connector. Residents as well as non-residents who know the area would also continue to use the SR 299 to SR 3 route when they have some particular purpose for obtaining services or goods along SR 299 west of the East Connector or SR 3 south of the East Connector.

The impact would not be so great as to cause significant physical effects such as relocation of a significant number of businesses or physical degradation of the downtown area. However, a mitigation measure to help prevent diversion of economically valuable visitors from the downtown area is presented below.

**Community Impact -2** The loss of sales revenues from traffic diverted away from the SR 299, SR 3, and downtown business districts in Weaverville could impact the local economy.

**Significance:** Potentially significant, but mitigated (**Community Mitigation-3**).

**Community Mitigation-3** The County would not place signs directing traffic to Trinity Lake or Trinity Alps via the East Connector and would discourage Caltrans from doing so.

**Post-mitigation Significance:** Less than significant

#### *Alternative A*

Businesses located on Nugget Lane near the intersection of SR 299 and Glen Road may experience long-term economic impacts and loss of business as a result of the proposed permanent closure of Nugget Lane at Glen Road and permanent changes in access to these businesses from SR 299 (see discussion under *Changes in Access* section above). Several of these businesses cater to truck traffic and other through-traffic along SR 299 that patronize these businesses partly because of the convenient access from SR 299. Particularly affected would be the shoe store (On Your Feet) and the mini market/car wash (the Weaver Valley Market), located at the corner of Glen Road and /Nugget Lane. Businesses along Nugget Lane at this location have expressed a concern regarding these impacts and at least one business (On Your Feet) has indicated that they would close and/or relocate if the project is constructed blocking off convenient entry to Nugget Lane from Glen Road. The County is working with these businesses to develop a solution that minimizes the economic impact and meets County and Caltrans traffic turning movement requirements. The development of Alternative C is part of this effort.

#### *Alternative B*

In addition to impacts from this alternative similar to Alternative A, this alternative would require the shoe store, and possibly the Dollar Store to relocate or close. Taxable sales would be lost if these businesses closed or relocated to less desirable locations (see also discussion under *Changes in Access* section above, and *Relocation*, below).

### *Alternative C*

Provision for in-only access to Nugget Lane from Glen Road would result in less impact on access to commercial properties along Nugget Lane than Alternatives A or B (see also discussion under *Changes in Access* section above). Inbound traffic would be able to access the businesses as they do now. However, southbound trucks at the Weaver Valley Market would have to either turn around to exit or drive around the existing car wash and make a tight turn onto Glen Road. This difficulty may discourage some trucks from stopping at Weaver Valley Market. On the south side of Glen Road, the additional access to SR 299 from Nugget Lane should provide adequate circulation for customers and delivery trucks. Eastbound trucks could enter Nugget Lane from Glen Road, and exit from the midblock or southerly accesses to SR 299, and would not have to turn around on Nugget Lane.

### *Bicycle/Pedestrian Trail and Bridge*

Neither bridge Options A nor B would result in impacts from losses of taxable sales or in other impacts to local businesses. However, Option B would take a portion of the Weaverville CSD's maintenance yard.

### *No Project Alternative*

The No Project Alternative would not directly result in impacts from losses of taxable sales or in other impacts to local businesses. However, circulation and parking problems in the downtown area would continue or worsen. This may indirectly result in loss of taxable sales, or cause downtown businesses to relocate outside of the downtown area, or close.

## *FISCAL IMPACTS*

### *Impacts Common to All Project Alternatives*

Funding for design, right-of-way acquisition, and construction of the East Connector comes from local, state, and federal transportation funds, which are derived primarily from road and fuel taxes. These funds are specifically designated for road construction and cannot be used for other purposes. Maintenance of the East Connector will be the responsibility of TCDOT. Road maintenance is performed using County Road Funds derived from fuel taxes, the County Roads share of "Secure Rural Schools and Community Self-determination Act" funds, Governor's Traffic Congestion Relief Program (TCRP) and other sources specifically designated for road maintenance. No State or County General Funds can be used for design, right-of-way acquisition, construction or maintenance of the East Connector. Therefore, these activities will not take away funding from other State or County non-road projects.

The County would need to acquire portions of private parcels for right-of-way to build the roadway project and bike path. All alignment alternatives would sever the Trinity River Lumber Mill property.

The new road would create a narrow sliver of property on its east side that would become practically unusable to the mill. This area is not currently in use by the mill operations. It consists of seasonal wetlands, Lance Gulch, and mine tailings piles. It is doubtful if the mill could develop this area to support mill operations in the future. The County would purchase this severed portion of the Mill property as part of right-of-way acquisition, thereby compensating the mill owners for loss of usefulness of this area. As further compensation, the Trinity River Lumber Company is interested in having an adjacent parcel rezoned from Industrial to Residential. If the County agrees, the Company may subdivide the 2-acre parcel, located at the end of Martin Road, into four residential parcels.

The proposed project would result in a very minor loss of property taxes from direct conversion of portions of private properties to right-of-way and their removal from the tax rolls, but no whole properties will be taken for right-of-way. These minor property tax revenue losses may be offset to some degree by changes in assessed value of the 2-acre parcel belonging to the Trinity River Lumber Company, that would be re-zoned from Industrial to Residential, ½-acre Minimum. Reductions in traffic and noise levels would contribute to property values and the overall quality and character of the Weaverville downtown area, but this could be partially offset by loss of property values on Martin Road or Brown's Ranch Road. These changes in property values and corresponding tax revenues are expected to be minor.

#### *Alternative 1*

Overall, Alternative 1 would require the acquisition of less right-of-way easements from private property owners than Alternative 2. However, Alternative 1 would sever a larger portion of the Trinity River Lumber Mill than Alternative 2, resulting in loss of more area for the mill, and more right-of-way acquisition costs and associated property tax revenue loss from this property.

#### *Alternative 2*

Alternative 2 would require the acquisition of more right-of-way from the senior center than Alternative 1, because Alternative 1 would use a portion of the existing Brown's Ranch Road alignment in this area. However, less property would be acquired or severed from the mill.

#### *Bicycle/Pedestrian Trail and Bridge*

Bike path Options B would result in slightly more economic impacts from right-of-way acquisitions and associated loss of property tax revenues, due to acquisition of additional land along Levee Road. The county would acquire the land in fee title, rather than relying on the existing Flood Control Easement.

*No Project Alternative*

The No Project Alternative would not result in economic impacts from right-of-way acquisitions or loss of property tax revenues.

*RELOCATION IMPACTS*

*Impacts Common to All Alternatives*

There are no housing units within this roadway corridor. No population would be displaced and no acquisition or demolition of housing would be required.

*Alternatives 1 and 2*

Alternatives 1 and 2 (not including the Glen Road/SR 299 intersection at the south end of the East Connector Roadway; see discussion for Alternatives A, B, and C below) would not require any relocations. Thus, these alternatives would not require that Trinity County provide relocation compensation or assistance to private property owners in the project area.

*Alternatives A and C*

Although access to businesses near the intersection of Glen Road and SR 299 would be negatively impacted (see discussion under *Changes in Access* above), Alternatives A and C would not require any relocations. Thus, these alternatives would not require that Trinity County provide relocation compensation or assistance to private property owners in the project area.

*Alternative B*

This alignment would require removal of one commercial building on the south side of Glen Road, (currently occupied by On Your Feet shoe store, the Dollar Store and Trinity Transit) and the acquisition of the underlying property. The County would have to compensate the property and building owners for this loss. The building owner has expressed a preference to sell the property to the County, rather than having a reduced building or parking area. If the building is demolished, the County would also have to provide relocation assistance or other compensation to the affected businesses, and possibly relocate their own transit facility. This impact is discussed and mitigated in Section 3.14, *Land Use*, as follows:

**Land Use Mitigation-1** If Alternative B is selected, the County will purchase the affected property and provide appropriate compensation to the property owner, building owner, and business owner in compliance with federal and state law and provide relocation assistance to the business owner, if necessary. (See Section 3.14.)

This impact could indirectly result in a physical effect on the environment if any of these relocated businesses were to construct a new building elsewhere. For business reasons, the new facility(ies) would likely be located in an area already zoned for commercial use, because these areas are the more desirable business locations in the Weaverville area. The relocation of one to three small businesses to an already developed area would probably not result in a significant impact. If the businesses desired to relocate to an area that was not zoned for commercial use, the Trinity County Planning Department would conduct a CEQA review prior to the County granting the rezone.

#### *Bicycle/Pedestrian Trail and Bridge*

Neither bridge Options A nor B would result in the need for relocation of homes or businesses. A narrow sliver immediately adjacent to Levee Road would be taken from the Trinity River Lumber Mill and/or Yingling Construction. This would not affect their operations, because this area is not useable due to the County's existing flood control easement along the east levee of East Weaver Creek. The Option B alignment would cross the bridge, and pass through the Weaverville CSD maintenance yard on the west side of the creek, taking some property from the CSD. But, the take of property would not be significant enough to cause the CSD to relocate their facility.

#### *No Project Alternative*

The No Project Alternative would not result in relocation impacts.

### **3.16.3 TEMPORARY (CONSTRUCTION PHASE) IMPACTS**

#### *POPULATION / DEMOGRAPHIC / WORKFORCE IMPACTS*

An estimated 2 to 25 seasonal workers would be required to construct the East Connector Roadway and proposed bike path over an 8-month period, spread over two construction seasons. Most construction-related workers are expected to be existing full-time employees of their respective firms. The project would not likely create new jobs in the area. The construction labor force typically follows job opportunities throughout a large geographic area while maintaining their principal place of residence in a single location. If this project did not require construction labor, they would likely find employment on other projects in the region. Therefore, it is probable that the project would result in no substantive changes in employment patterns, the unemployment rate, or the distribution of the present population and labor force. Some of the construction workers would come from out of town and use transient local housing, primarily RV parks. Since project construction is scheduled to take place during the peak tourist season, if construction workers elect to move to temporary housing in the Weaverville vicinity, they and possibly their families may compete with visitors and local residents for RV spaces, hotel rooms and

apartments in the Weaverville area. However, this short-term intermittent impact on the order of 2 to 25 temporary residences is not considered significant.

#### *CHANGES IN ACCESS*

Businesses located at the south end of the project, near the intersection of SR 299 and Glen Road would experience short-term disruptions and possible loss of some business during construction work at this intersection, due to less convenient access to these businesses during construction. However, there are additional access points to all of these businesses from SR 299 and/or Martin Road, which would be undisturbed. Neither Nugget Lane nor Glen Road would be completely closed at any time.

#### *TAXABLE SALES AND OTHER BUSINESS IMPACTS*

Construction of the proposed project would result in construction expenditures within Trinity County and specifically within the Community of Weaverville. Local construction-related businesses and skilled tradespeople that are available in Trinity County could benefit from contracts or special orders for construction work. There could be some increases in activity for local retail and service businesses such as fast-food restaurants, grocery stores, gasoline stations, RV parks, and the like, as workers purchased meals or other goods and services during construction. Any potential beneficial effect of the project on the economic base would be widely distributed and not of substantial magnitude for the local businesses, due to the limited scope of the proposed project. Most sales generated by directly and indirectly by project construction would be taxable. Sales tax revenues would accrue to local agencies. These beneficial impacts would be spread throughout the region and would not be substantial when compared to overall sales tax revenues.

### **3.16.4 CUMULATIVE IMPACTS**

#### *POPULATION / DEMOGRAPHIC / WORKFORCE IMPACTS*

The number of construction workers needed for the West Connector is expected to be roughly equivalent to the East Connector. According to the proposed Weaverville Airport Relocation EIR, construction of the proposed new Weaverville airport would employ up to 40 workers over a three-year period. Construction of the East Connector and the Airport could occur concurrently. The West Connector is not expected to be constructed until after these two projects are complete. The local and regional labor pool should still be adequate to cover construction needs of both the East Connector and the airport. Construction workers would compete with other visitors for local accommodations. On the other hand, local businesses would reap the cumulative benefits from direct and indirect construction-generated sales, including living accommodations.

*TAXABLE SALES AND OTHER BUSINESS IMPACTS*

If both the proposed East Connector and West Connector roadways are constructed, there may be a cumulative economic impact to the Weaverville business community as traffic is diverted away from the SR 299, SR 3, and downtown business districts. As mentioned in Community Mitigation-3, the County would not place signs directing traffic to Trinity Lake or the Trinity Alps via the East Connector. Similarly, the County will not place signs directing traffic to points east or west of Weaverville via the West Connector. Persons unfamiliar with the area (i.e. tourists) would tend to stay on the State Highways, which would route them through downtown. Residents and persons familiar with Weaverville would continue to go downtown to purchase goods and services that are provided there. Reduced congestion in the downtown area would make this area more attractive and safer for pedestrians, which may result in an overall benefit to the business community.

*FISCAL IMPACTS (RIGHT-OF-WAY ACQUISITION AND PROPERTY TAXES)*

The cumulative fiscal impacts from acquisition of new right-of-way, loss of property taxes, and changes to property values for all three proposed projects is unknown. However, acquisition costs would be funded by federal grants, from the FHWA in the case of the East and West Connectors, and by the FAA in the case of the Airport and Airport access road. Most of the land to be acquired for the airport is privately owned timberland zoned "Resource". Most of the land to be acquired for the West Connector is tax-exempt public lands. The cumulative loss in property tax revenues is not expected to result in a significant reduction in the property tax base.



## 3.17 PUBLIC SERVICES AND UTILITIES

### 3.17.1 AFFECTED ENVIRONMENT

#### *FIRE PROTECTION*

Fire protection services in the project area are provided by the Weaverville Fire Protection District (WFPD). The WFPD provides seasonal wildland, structural, vehicle and medical emergency response within the Weaverville area. Outside of Weaverville, the California Department of Forestry and Fire Protection (CDF) and the USFS provide fire protection. The WFPD employs a single full-time Fire Chief and a part-time administrative secretary. Additional staffing for the WFPD is provided by the Weaverville Volunteer Fire Department, which maintains a roster of up to 50 fully-trained and competent firefighters, or staff to meet the needs of a population of over 5,000. The WFPD operates two stations (one in the downtown area and one in the East Weaver Area) and owns a tract for a third station at the Trinity Alps Industrial Park. The Department maintains five structural fire engines (including one Office of Emergency Services engine), one structural/wildland engine, one rescue truck, one mobile air van, one water tender, and two utility vehicles. Two of the fire engines are older than would be acceptable in more urban communities. Emergency fire vehicles are maintained in safe operating condition through the efforts of the Chief, the volunteers, state correction facility programs, and a contract mechanic. The Weaverville Community Plan notes that major growth in the eastern portion of SR 299 may require construction of the station at the Trinity Alps Industrial Park. Revenues to the district come from annual property tax assessments. The Department is funded by a combination of funding sources.

Currently, the WFPD responds to an average of 350 calls per year, including fire, vehicle accidents, medicals, smoke checks, public assists, and manpower needs. Level of service provided by the Fire Protection District is dependent to a large extent upon the ability of the Weaverville CSD to provide adequate supplies of water. Distinct service level areas have been identified as follows:

- Areas with fire hydrants and adequate water supply
- Areas with fire hydrants and inadequate water supply
- Areas without fire hydrants

Because the community is evaluated as a whole for insurance purposes, development in areas without adequate water supply for fire protection could increase fire insurance costs for the entire community, and decrease fire protection capabilities. Water supply and fire pressure flows in some areas of the community are limited and need to be improved by increasing main size or capacity.

### *SANITARY SERVICES*

Most developed areas within the Weaverville Basin are within the Weaverville Sanitary District (WSD) boundaries and sphere of influence. Individual or on-site sewage disposal systems are the only method for sewage disposal on parcels outside WSD's boundaries. Sewage disposal is a major growth-limiting factor within areas not serviced by the WSD that are also severely restricted for on-site sewage disposal (Trinity County, 1990).

The existing collection system and treatment plant were constructed in three phases. The last major improvement phase was a treatment plant in 1974 with a designed population equivalent of 5,000 (and a built-in duplicating feature to reach a population equivalent of 10,000). A 1989 Master Sewer Plan for the WSD identifies improvements to the plan and collection system to reach the ultimate population within the sphere of influence and to accommodate increased flows. The plan identifies the need to correct excessive infiltration/inflow flows, to make remedial plant improvements, to parallel or replace some of the sewer mains, and to complete a major expansion of the existing treatment plant (Trinity County, 1990).

The WSD has recently constructed a new 200-mm (8-inch) sewer line extension to the Weaverville Transfer Station, Juvenile Hall, Department of Transportation Maintenance Yard and County offices at the existing Weaverville Airport. The sewer line parallels SR 3 along the east side and crosses the proposed East Connector Roadway alignment near the intersection of Five Cent Gulch Street and SR 3. This new sewer line will intersect the proposed roadway alignment and will be considered during final design, so that it will not be disturbed.

### *WATER SERVICE*

Although there are a number of residents who utilize individual wells, The Weaverville CSD supplies treated water to many of the residents within the Weaverville area and the Weaverville CSD boundaries and sphere of influence encompass most of the Weaverville Basin.

The East Connector is included in the Weaverville CSD's Master Water Plan (Pace Civil, Inc., 2002) for improvements to the Weaverville water supply system. As noted in Section 1.4.3 (*Other Project Components*), the Weaverville CSD proposes to install a water main within the new road right-of-way. For cost-efficiency and to avoid having to disturb the pavement of the newly constructed road, this water line would be installed during construction of the East Connector. The Master Plan does not propose any expansion of the CSD boundaries, or extension of service into currently unserved areas. The new line would loop sections of Weaverville together, giving the CSD the ability to supplement the system with Trinity River water from their existing diversion at Douglas City if the source at East Weaver Creek failed, or bypass the existing line from East Weaver Creek if the pipe failed. This would also connect the

existing systems on Martin Road and Brown's Ranch road. The purposes of these improvements are circulation, better gravity feed and redundancy rather than expansion.

The Master Plan also includes a new tank at the proposed new Weaverville Airport. The new tank would provide improved pressure and better distribution to Martin Road/Pioneer Heights, and Brown's Ranch Road. If the new tank is installed, a pressure pump would be placed at the intersection of the East Connector and Brown's Ranch Road, to fill the tank. An 8-inch high-pressure line would be installed along the East Connector north of Brown's Ranch Road, to supply the new tank from the East Weaver System. The new tank could also be supplied from the Trinity River System at Douglas City, so that water could be used to supply the Brown's Ranch, Martin Road/Pioneer Heights and SR 3 areas if the East Weaver System failed.

#### *STORM DRAINAGE FACILITIES*

The Community of Weaverville and Trinity County have no comprehensive storm water drainage system and no designated stormwater utility agency.

#### *SOLID WASTE*

The County's only landfill, located within the community of Weaverville adjacent to the existing Lonnie Pool Airport, has closed, and now operates as a transfer station. Solid waste is collected from transfer stations throughout the county, and transferred to the Weaverville facility. The waste is transported by truck from the Weaverville Transfer Station to the landfill in Anderson, California.

#### *ELECTRICITY*

Electrical service is supplied by the Trinity Public Utility District (TPUD) in the majority of the Weaverville Basin. Between 1982 and 1997, energy consumption in the Weaverville Basin increased over 50 percent, but peak demand increased by less than 30 percent. Efforts to underground existing facilities are ongoing, as funding and opportunities arise. Overhead utilities along SR 299 at the proposed intersection with the East Connector would be undergrounded as part of this project.

Power resources are provided by the Western Area Power Administration (WAPA). In 1985, the TPUD negotiated a formula with WAPA establishing the maximum power allocation available to Trinity County, which exceeds 100 megawatt of power. There are no known or foreseeable constraints in the TPUD's ability to continue to provide reliable low-cost electric utility service to the Weaverville area.

TPUD's facilities also supply television cables for Mark's Cable Vision. The TPUD provides street light operation and maintenance for the Highway Lighting District, which was formed in 1924.

*PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES*

*Trinity County General Plan*

The "Weaverville Policies" section in the Land Use Element of the Trinity County General Plan (Trinity County, 1988) contains the following policies regarding public services and utilities that relate to the proposed East Connector Roadway project:

- Provide adequate services. Do not allow growth to exceed service capacities.
- The County of Trinity will cooperate and coordinate its actions with the various special districts and utilities servicing Weaverville.
- Detailed plans should be prepared for the extension and improvement of services in the Weaverville area, including water supply, fire protection, sewage disposal, traffic circulation, education, and other essential services.
- New developments should be required to conform to the services, expansion, and improvement plans, and the project developer should pay the costs of the extensions and improvements necessary to service his development.
- The demands of new development should not be permitted to exceed the capacity of any essential service at any time.

The *Safety Element* of the *Trinity County General Plan* (Trinity County, 2002b) notes that all areas of Trinity County are at risk of wildland fire with much of the county having a high to extreme fire hazard severity. The *Safety Element* contains the following goals, objectives and policies relevant to the proposed East Connector Roadway project:

- **Objective S.5.1:** Ensure emergency accessibility to development through proper road construction and signage.
  - **Policy A:** Roads shall be constructed to provide adequate width, grade, and turn-around space for emergency vehicles by complying with appropriate federal, state and local adopted standards. Construction of roads shall protect water quality, slope stability and threat to natural and cultural resources.
- **Objective S.5.3:** Educate the community on proper procedures in case of a catastrophic fire.
  - **Policy B:** Evacuation routes and safety zone location shall be kept at the Office of Emergency Services, which is responsible for the evacuation process.

The following requirements of the *Trinity County Fire Safe Ordinance* (Ordinance No. 1162) (Trinity County 1992) Article 2 "*Emergency Access*" are also applicable to the project:

- Road and street networks, whether public or private, shall provide for safe access for emergency wildland fire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency.
- All roads shall be constructed to provide a minimum of two nine-foot traffic lanes providing two-way traffic flow.
- The surface shall provide unobstructed access to conventional drive vehicles, including sedans and fire engineers... and be capable of supporting a 40,000 pound load.
- The grade for all roads, streets private lanes and driveways shall not exceed 16 percent..
- No roadway shall have a horizontal inside radius of curvature of less than 50 feet and additional surface width of 4 feet shall be added to curves of 50-100 feet radius; 2 feet to those from 100-200 feet..
- The length of vertical curves in roadways, exclusive of gutters, ditches, and drainage structures designed to hold or divert water, shall be not less than 100 feet.

### *Weaverville Community Plan*

The Public Services and Facilities Element of the *Weaverville Community Plan* (Trinity County, 1997) contains policies regarding public services and utilities that relate to the proposed East Connector Roadway project as follows:

- **Goal #4:** Ensure that the development of future utility improvements generally enhance and do not significantly detract from the overall appearance of the community.
- **Objective 4.1:** Provide future street lighting services only where it is desirable to improve the safety of street intersections.
- **Objective 4.2:** Encourage the undergrounding of utility lines, especially when such undergrounding can be accomplished in conjunction with road construction or other improvements.

### 3.17.2 SIGNIFICANCE CRITERIA

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant floodplain impacts:

Would the project:

- Cause substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain

acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire protection?
- Police protection?
- Schools?
- Parks?
- Other public facilities?
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- Require or result in the construction of a new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- Require or result in the construction of a new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- Comply with federal, state, and local statutes and regulations related to solid waste?

Evaluation of the East Connector Roadway project with respect to these CEQA criteria leads to the conclusion that the project would not have a significant impact on public services and utilities. As discussed below, by improving circulation and therefore, emergency response times, by undergrounding existing overhead utilities within the project area of impact, and by incorporating a new water main in the roadway prism, the project will have a beneficial impact on public utilities and services. The East Connector project would include a roadside drainage system along the east side of the road. The new drainage system would not cause significant environmental effects, but remove an existing drainage problem from the mill property, resulting in a beneficial project impact. Mitigation is proposed for a

potential impact to the existing subsurface drainage system that conveys Lance Gulch beneath the Trinity Plaza Shopping Center. (see Section 3.2.3, *Hydrology, Water Quality, Stormwater Runoff*).

### 3.17.3 PERMANENT IMPACTS

#### *Impacts Common to All Alternatives*

The East Connector Roadway project would accommodate existing and projected future traffic conditions associated with current development and would not stimulate significant new growth (see Section 3.14, *Land Use and Growth*). Therefore, it is not anticipated that the proposed project would result in an increased need for potable water, electricity, telephone service, cable service, solid waste disposal and wastewater treatment services. Nor would the project result in an increased need for police protection services, fire protection services, and emergency response services. Buildout of a 2-acre parcel that would be rezoned for a maximum of four residential parcels in conjunction with this project would be adequately served by and would not put a strain on the capacity of existing public services and utilities.

The proposed project would reduce traffic deficiencies and refine the overall circulation in the Weaverville area. The operational efficiency of SR 299 and SR 3 would be improved as a result of the project. The relief of congestion and circulation problems provided by this project, and the addition of an alternate route and bridge, would result in improved conditions for police protection, fire protection and emergency response services. Therefore, the proposed project would result in a beneficial impact to these services.

Implementation of the proposed East Connector Roadway project will not require the relocation of sewer and water lines, with the exception of a single fire hydrant on Brown's Ranch Road that would be relocated under Alternative 2 only. The project would be designed to avoid relocating underground utility lines, including underground sewer and water lines in SR 299 and SR 3. A utility pole at the new intersection of the East Connector with SR 299 will have to be relocated. The *Weaverville Community Plan* encourages the undergrounding of utility lines, especially when such undergrounding can be accomplished in conjunction with road construction or other improvements. Therefore, the County prefers to underground the existing overhead utilities at this location for safety purposes and aesthetic reasons. Detailed project plans will be forwarded to affected utility companies for use in planning the undergrounding of overhead facilities in this area. In addition, the TCDOT and Caltrans meet monthly with local utilities to coordinate on projects. The opportunity to underground overhead utilities is considered a positive effect of this project.

The Weaverville CSD proposes to install a water main within the new road right-of-way during road construction (see Section 1.4.3). The CSD will be responsible for installing the line at the appropriate

time during construction. This opportunity for the CSD to install the main at minimum cost to them, and minimum disruption to the community, is a benefit of this project.

### *Alternative 2*

Benefits and impacts to public services and utilities would be mostly the same for Alternative 1 and 2. However, if Alternative 2 is selected, one fire hydrant on Brown's Ranch Road would have to be relocated. This will be done by the Weaverville Fire District or the CSD, and is not a significant impact.

### *Bicycle/Pedestrian Trail and Bridge*

Trail/bridge Option A would not result in impacts to public services and utilities. Option B would cross a portion of the Weaverville CSD yard, adjacent to East Weaver Creek. This will be a minor impact to the CSD operations area, but will not result in significant disruption of their operations or ability to serve the community.

### *No Project Alternative*

The No Project Alternative would not result in impacts to public services or utilities; however, beneficial impacts to utilities and services that are anticipated with implementation of the proposed East Connector roadway would not be achieved with the No Project Alternative. Project benefits that would not be realized include undergrounding of overhead utilities, construction of a water main within the new roadway prism, improvement of an existing stormwater drainage problem on the mill property, and improved access for police protection, fire protection and emergency response services resulting from improved traffic and circulation conditions and an alternative route and bridge.

**Public Services/Utilities Impact-1**      Implementation of the proposed East Connector Roadway project would require the relocation of a single fire hydrant on Brown's Ranch Road (Alternative 2 only).

**Significance:**                      Less than significant (no mitigation required).

## **3.17.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS**

### *Impacts Common to All Alternatives*

Construction activities associated with the East Connector project could result in short-term impacts to the response times of various emergency services. The project is construction of a new roadway, so the work would not generally affect existing transportation routes. The only construction work that may encroach onto presently used roads would be to build the intersections at SR 299, SR 3, Brown's Ranch Road and the intersection of Martin Road with the Pioneer Lane extension. This can be accomplished using lane



reductions and controlled traffic, rather than complete closures or detours. Construction will be scheduled to avoid lane closures during peak traffic times.

During construction in the vicinity of underground sewer and water lines in SR 299 and SR 3, there may be temporary disturbances and short interruptions in service, but underground utilities would not be relocated. TCDOT and Caltrans meet monthly with local utilities to coordinate on projects. The location of underground utilities will be identified on project plans and specifications, and marked in the field prior to construction. TCDOT will coordinate closely with utility companies during construction in the vicinity of underground utilities..

The Weaverville CSD proposes to install or water main within the new road right-of-way, which would be installed during road construction (see Section 1.4.3). Undergrounding of existing overhead utilities will also be done during construction. The utility companies will perform the work. TCDOT will coordinate closely with TPUD and Weaverville CSD to ensure that utility work is performed at the proper time during road construction. This will benefit all parties by minimizing the expense to the utility companies and the disruption to the County road system and the community.

#### *Alternative 1*

No additional utilities impacts will result from Alternative 1.

#### *Alternative 2*

If Alternative 2 is selected, one fire hydrant on Brown's Ranch Road would have to be relocated. Again, TCDOT will coordinate with the affected utility companies (Weaverville Fire District or CSD), to ensure the hydrant is moved to an appropriate location at the appropriate time.

#### *Bicycle/Pedestrian Trail and Bridge*

Construction of the Bicycle/Pedestrian trail and bridge will not result in impacts to public services and utilities.

#### *No Project Alternative*

The No Project Alternative would not result in temporary impacts to public services or utilities, since no construction would occur.

**Public Services/Utilities Impact -2** Construction activities associated with the East Connector Roadway project could result in short-term impacts to the response time of various emergency services.

**Significance:** Potentially significant, but mitigated (Public Services/Utilities Mitigation-1).

**Public Services/Utilities Mitigation-1** Public safety and emergency services will be kept informed of construction activities and schedules for use in planning emergency response routing, if necessary. No roads will be completely closed at any time during construction. Emergency response plans and drills should be revised accordingly to take advantage of the new route.

**Post-mitigation Significance:** Less than significant

### 3.17.5 CUMULATIVE IMPACTS

Since the project will not use or adversely affect services and utilities, and in some cases will be beneficial, no cumulative impacts associated with public services and utilities have been identified.

### 3.18 TRAFFIC AND TRANSPORTATION

This section describes the existing and proposed traffic and circulation conditions that occur and would occur in the project area. This section also describes existing transportation conditions within the community of Weaverville, including the existing public transit system and existing bicycle and pedestrian system. It presents traffic assumptions and methodologies used to conduct the transportation analysis for the proposed project, and submits results from the operational analysis at study intersections. The project traffic analysis was completed by Fehr & Peers Associates, Inc., Transportation Consultants.

#### *METHODOLOGY*

Level of Service (LOS) is a term used to describe the operating performance of an intersection or roadway. Service levels are measured on a scale from A to F, with "A" representing the best performance and "F" the worst. Project study intersections were analyzed using the methodology contained in the Highway Capacity Manual (HCM) (Transportation Research Board, 2000). The methodology determines the LOS by comparing delay for all vehicles passing through an intersection. Unsignalized intersections were analyzed using HCM 1994 methodologies by applying Highway Capacity Software (HCS) version 2.1g. This version of the HCM was used to match methodologies used in other studies involving the East Connector such as the *East Connector Project Study Report Traffic Analysis* (Fehr and Peers, 1999), the new *Weaverville Airport EIR Study* (Jim Wallace Environmental Consulting Services, 2002), and the *Weaverville Basin Traffic Circulation Study* (WBTCS; Trinity County, 1998).

Signalized intersections for the "with project" and "cumulative" conditions were optimized using SYNCHRO-5 computer software based on HCM 2000 methodologies. SYNCHRO-5 was chosen to analyze signalized project intersections because of its intersection timing and optimization capabilities. Intersection capacity analyses determine the LOS by estimating the average delay of all vehicles passing through an intersection during a specified period (see **Table 3.18-1**).

Traffic signal warrant analyses were performed for the "2020 with" and "2020 without" project conditions at major intersections using the Peak Hour Volume Warrant (Warrant 3) from *The Manual on Uniform Traffic Control Devices, 2000 Edition* (MUTCD).

**Table 3.18-1. Peak Hour Intersection LOS Thresholds**

LOS	Signalized Average Delay <sup>1</sup>	Unsignalized <sup>2</sup> Average Delay <sup>3</sup>	Description
A	≤ 10.0	≤ 5.0	Very low delay. Most vehicles do not stop (signalized).
B	10.1 to 20.0	5.1 to 10.0	Generally good progression of vehicles. Slight delays
C	20.1 to 35.0	10.1 to 20.0	Fair progression. Increased number of stopped vehicles.
D	35.1 to 55.0	20.1 to 30.0	Noticeable congestion. Large portions of vehicles stopped.
E	55.1 to 80.0	30.1 to 45.0	Poor progression. High delays and frequent cycle failure.
F	> 80.1	> 50.1	Over-saturation. Force flow. Extensive queuing.

<sup>1</sup> Highway Capacity Manual 2000 (Synchro 5)  
<sup>2</sup> Highway Capacity Manual 1994 (HCS 2.1g)  
<sup>3</sup> Delay in seconds per vehicle

### 3.18.1 AFFECTED ENVIRONMENT

#### *EXISTING ROADWAY SYSTEM AVERAGE ANNUAL DAILY TRAFFIC (AADT)*

The primary routes in the existing roadway system near the proposed East Connector are SR 299 and SR 3. Following are descriptions of SR 299, SR 3, and adjacent roadways (with references in parentheses):

- *State Route 299 (SR 299)* is a two-lane east-west state highway connecting Weaverville to Redding to the east and Eureka to the west. SR 299 carries about 11,300 vehicles per day AADT near the downtown area of Weaverville (Caltrans). Portions of SR 299 in Weaverville have center two-way left turn lanes.
- *State Route 3 (SR 3)* is a two-lane north-south state highway connecting Weaverville and Yreka. SR 3 carries approximately 4,100 AADT near downtown Weaverville with traffic volumes decreasing away from the downtown area (Caltrans).
- *Washington Street* is a two-lane collector road that carries approximately 2,700 AADT during peak season and connects SR 299 and SR 3 (WBTCs).
- *Glen Road* is a two-lane residential collector road terminating at SR 299. Glen Road carries approximately 1,600 AADT (WBTCs).
- *Five Cent Gulch Street* is a two-lane local street terminating at SR 3. Five Cent Gulch carries an estimated 120 AADT based on the number of residences on Five Cent Gulch Street (Fehr and Peers).

- *Nugget Lane* is a two-lane road that parallels SR 299 between Glen Road and Martin Road. This road serves as a frontage road and provides commercial/retail access.

### *EXISTING TRAFFIC OPERATIONS*

#### *Existing Traffic Volumes*

Fehr & Peers Associates performed PM peak-period turn-movement intersection counts on March 25, 2001 along SR 299 at the Trinity Plaza Shopping Center driveways and at Martin Road/Nugget Lane, to supplement counts contained in the *Weaverville Basin Traffic Circulation Study* (WBTCs) (Trinity County, 1998) and in the *Traffic Analysis for the East Connector Weaverville Project Study Report* (Fehr and Peers, 1999). **Figures 3.18-1 and 3.18-2** display PM peak-hour intersection volumes and **Figure 3.18-3** shows the AADT on state highways (Caltrans 2001) and on other local streets (Trinity County, 1998).

#### *Existing Lane Configuration and Traffic Control Devices*

These two figures also display existing lane configurations as marked on the pavement and traffic control devices present at each study intersection when field visits were conducted during March 2001. All study intersections were unsignalized as of March 2001.

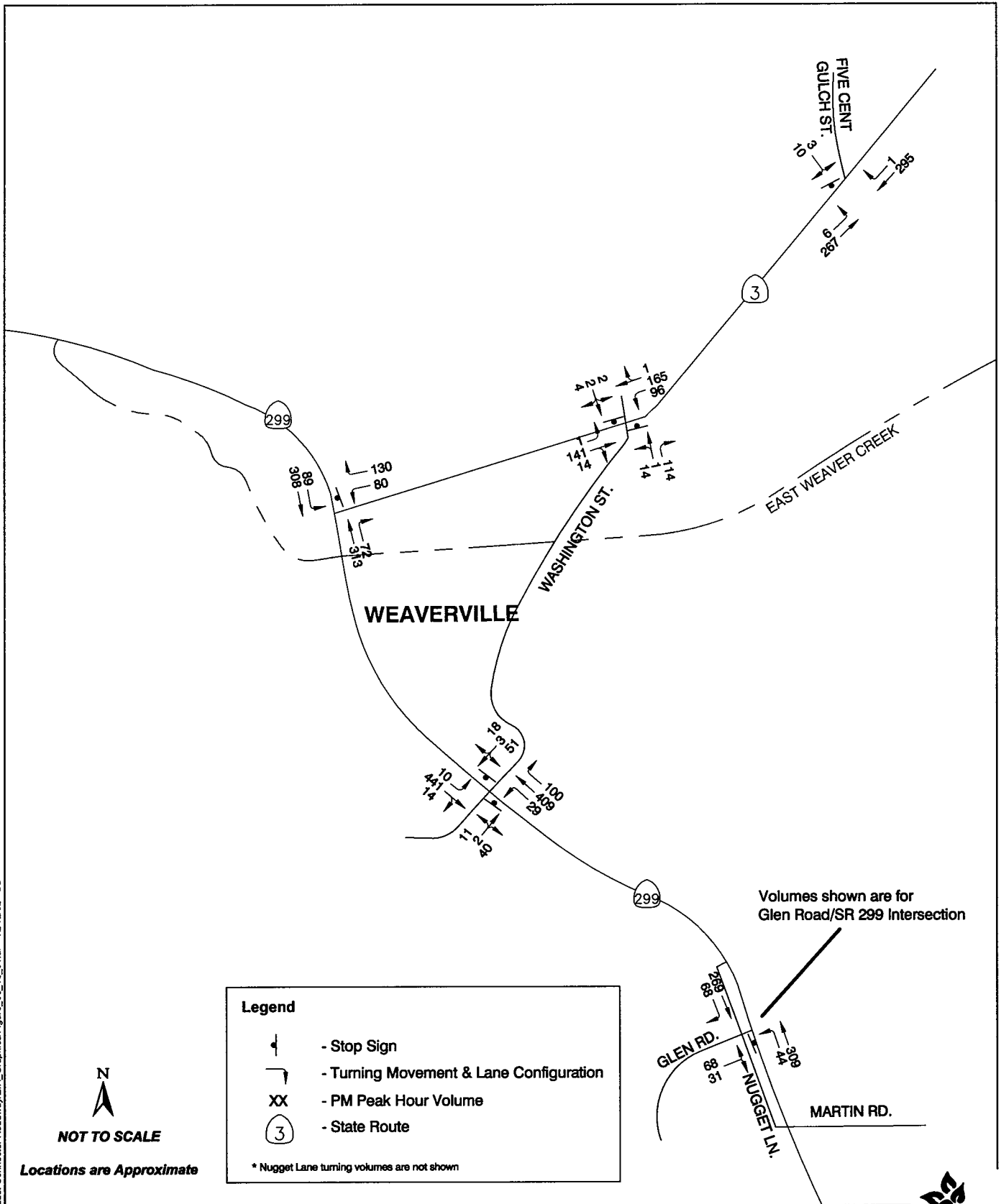
#### *Existing Intersection LOS*

Estimated LOS at the study intersections are presented in **Table 3.18-2** (see **Appendix D** for LOS calculations). The average intersection LOS is "A" during the p.m. peak hour at all study intersections. The Trinity County Regional Transportation Plans' (RTP) minimum LOS requirements applies to the overall average intersection LOS. However, individual approach LOS is helpful in the understanding of traffic patterns and operations. For example, the left turning movement from southbound SR 3 to eastbound SR 299 is shown to be LOS E. LOS E or worse for a left turning movement onto the major street is common at a two-way stop-controlled intersection when through traffic is unimpeded by upstream or downstream signals or has a high relative traffic volume. Left-turning vehicles have to yield to through traffic in both directions, causing long delays.

**Table 3.18-2. Existing PM Peak-Hour Intersection LOS in the Project Vicinity**

Location N/S = North/South Direction E/W = East/West Direction	Control	P.M. Peak Hour Operations	
		Delay (seconds)	LOS
1 SR 3 (N/S)/Five Cent Gulch (E/W)	Unsignalized	0.2 <sup>1</sup>	A <sup>1</sup>
Eastbound Left/Right		5.9	B
Northbound Left		3.4	A
2 SR 3 (N/S)/Washington Street (E/W)	Unsignalized	1.7 <sup>1</sup>	A <sup>1</sup>
Eastbound Left/Through/Right		6.7	B
Westbound Left/Through		9.1	B
Westbound Right		4.0	A
Northbound Left		2.8	A
Southbound Left		3.1	A
3 SR 299 (E/W)/SR 3 (N/S)	Unsignalized	3.6 <sup>1</sup>	A <sup>1</sup>
Southbound Left		30.4	E
Southbound Right		5.8	B
Eastbound Left		4.7	A
4 SR 299 (E/W)/Washington Street (N/S)	Unsignalized	2.0 <sup>1</sup>	A <sup>1</sup>
Northbound Left/Through/Right		9.4	B
Southbound Through/Right Left		22.4	D
Eastbound Left		4.5	A
Westbound Left		4.3	A
5 SR 299 (E/W)/Glen Road (N/S)	Unsignalized	1.6 <sup>1</sup>	A
Northbound Left/Right		11.4	C
Westbound Left		3.6	A
6 SR 299 (E/W)/Martin Road (N/S)	Unsignalized	1.3 <sup>1</sup>	A <sup>1</sup>
Northbound Left/Through/Right		5.4	B
Southbound Left/Through		7.6	B
Southbound Right		3.8	A
Eastbound Left		3.1	A
Westbound Left		2.6	A

1. Average intersection delay and LOS; Source: HCM 1994



N  
NOT TO SCALE

Locations are Approximate

**Legend**

- Stop Sign
- Turning Movement & Lane Configuration
- PM Peak Hour Volume
- State Route

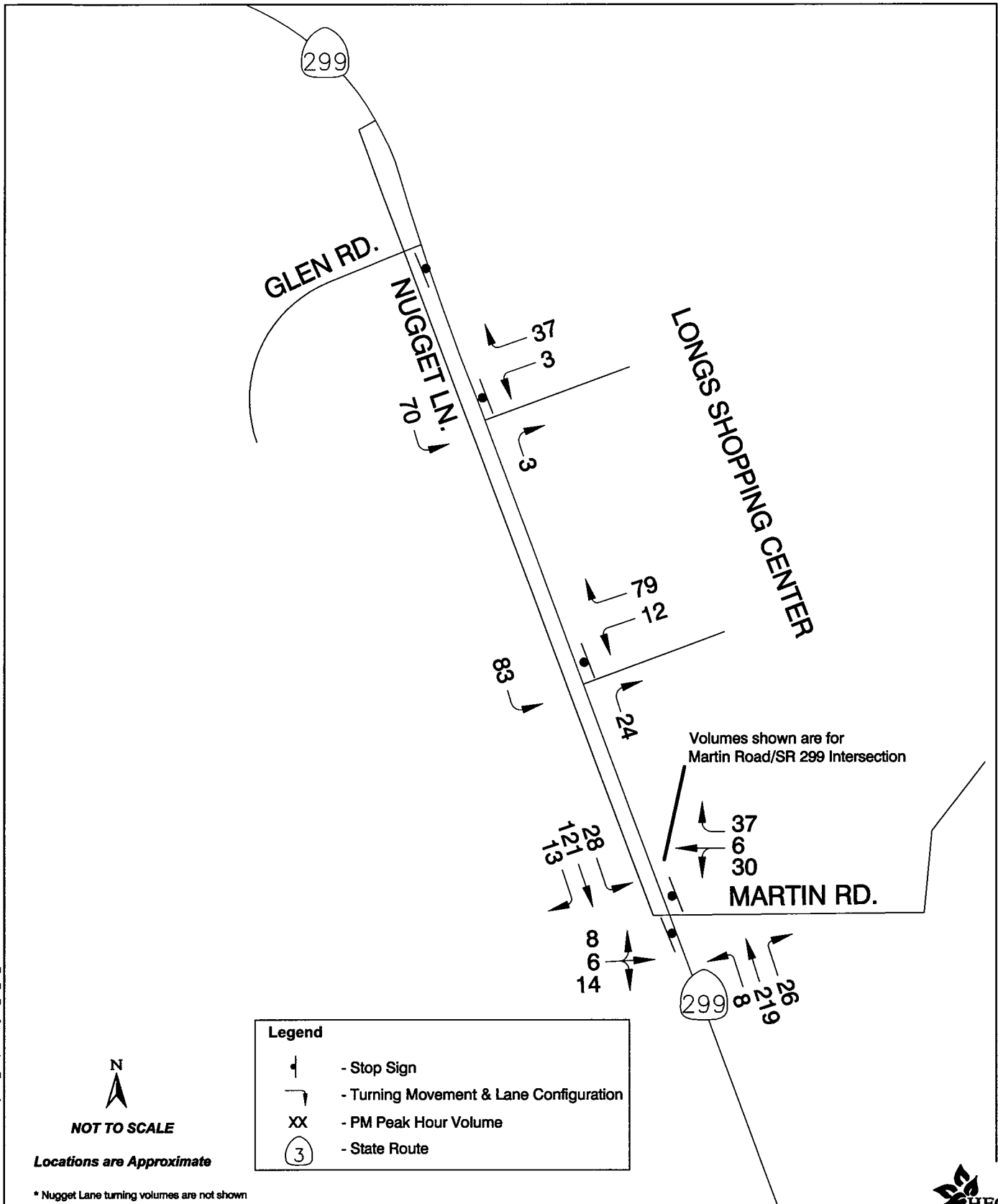
\* Nugget Lane turning volumes are not shown

Source: Fehr & Peers Associates, Inc., 2002



**Figure 3.18-1**  
Existing Conditions, Lane Configurations, and Peak-Hour Traffic Volumes  
East Connector Roadway Project

East Connector Roadway/EIR\_Graphics/Figure\_03\_18\_02.ai - 12/12/02 CS



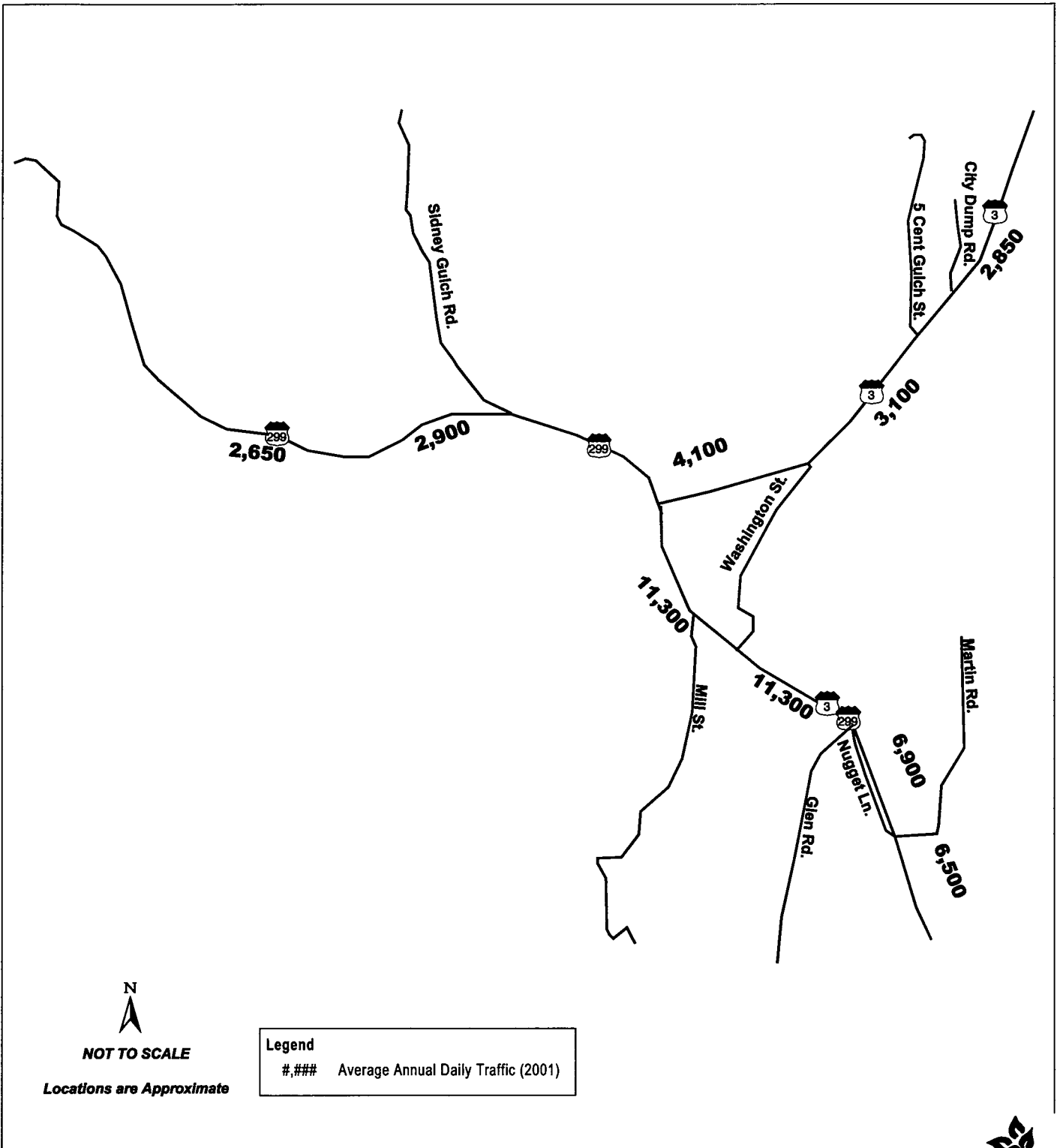
Source: Fehr & Peers Associates, Inc., 2002



Figure 3.18-2

Existing Conditions, Lane Configurations, and Peak-Hour Traffic Volumes  
East Connector Roadway Project





Source: Caltrans 2001 and Weaverville Basin Traffic Circulation Study  
Fehr & Peers Associates, Inc., 2002



**Figure 3.18-3**  
Existing Conditions, 2001 Average Annual Daily Traffic  
East Connector Roadway Project

**Existing Accident History**

Three-year accident data was obtained from Caltrans for the years of 1999 through 2001 and is summarized in Table 3.18-3. Four of the six study intersections have overall accident rates greater than the statewide average for similar facilities. The two remaining study intersections had either no reported accidents or rates below the statewide average during the three-year period. No fatalities were reported at any study intersection during the same period.

The high relative accident rates can partially be credited to the long delays for vehicles turning left from minor streets. Drivers will take more chances when delays are long and will pull out in busy cross-traffic. Accidents are often not head-on collisions and the injuries and property damage are often minor.

**Table 3.18-3. Accident Data for January 1999 through December 2001 in the Project Vicinity**

Intersection	Injury Accident			Accidents Per Million Vehicles	
	Crashes	Injuries	Fatalities	Accidents per Million Vehicles	Average for Similar Facility
SR 299 & Martin Rd/ Nugget Ln.	1	0	0	0	.33
SR 299 & Glen Rd.	4	1	0	.44	.22
SR 299 & Washington St.	5	1	0	.39	.33
SR 299 & SR 3	10	2	0	.81	.22
SR 3 & Washington St.	3	2	0	.69	.33
SR 3 & Five Cent Gulch	0	0	0	0	.22

Source: Caltrans

**EXISTING PUBLIC TRANSIT SYSTEM**

Trinity County Transit provides service along two routes: Weaverville/Hayfork and Weaverville/Lewiston. Each route provides two daily round trips to Weaverville, Monday through Friday. The Weaverville/Hayfork route leaves Hayfork for Weaverville at 6:45 a.m., returns to Hayfork, and provide a second round trip at 1:50 p.m. The Weaverville/Lewiston route leaves Lewiston for Weaverville at 7:00 a.m. (first round trip) and again at 2:45 p.m. (second round trip). There is also a "Let's Go" program that provides medical transportation to Redding twice a week (reservation only).

**EXISTING BICYCLE AND PEDESTRIAN SYSTEM**

The Weaverville Community Plan-1990 (Trinity County Planning Dept. 1990) states that the existing sidewalks and pedestrian/bicycle facilities are limited. Most of the sidewalks exist only in the downtown

area where there are shops and restaurants, whereas bicycle facilities exist as on-street bike lanes (Class II) primarily along SR 299, SR 3, and Washington Street, away from the downtown area.

One of the *Weaverville Community Plan's* goals is "to increase bicycle and pedestrian traffic by developing a safe convenient system of bicycle routes, trails, storage facilities, and pedestrian walkways."

There is discontinuity in the bike lane on SR 299 between Martin Road and Glen Road, with no bike lane striping on the northeast side of SR 299 in front of the Trinity Plaza Shopping Center.

The *Trinity County 2001 Regional Transportation Plan* also shows that future bikeways and pedestrian paths are to be mainly on SR 3, SR 299, and Washington Street.

#### *PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES*

##### *Trinity County General Plan*

The *Circulation Element of the Trinity County General Plan*, (Trinity County 2002a) and the *Trinity County Regional Transportation Plan*, (Trinity County 2001), both describe the East Connector in detail under their descriptions of the existing transportation system as an anticipated project currently in the planning phase. In addition, the *Circulation Element* contains the following findings, goals, objectives and policies that are relevant to the proposed project:

- Finding 1: Increasing seasonal traffic congestion in Weaverville creates potential safety issues and adverse impacts to the community.
- Finding 2: State Route 299 in Weaverville operates at level-of-service E during peak periods. During peak periods, vehicle movements along SR 299 are slowed, while movements onto the highway experience significant delay. Conflicting traffic movements (turn from side streets, parking ingress and egress, delivery vehicles, etc.) cause additional delays.
- Objective 1.6: Identify anticipated street and road congestion/capacity problems before they become critical in order to program preventative measures and reduce the cost of correction.
  - Policy 1.6.A: The minimum acceptable Level of Service (LOS) standard for roadway and intersection operation in Trinity County is "D". No public highway or roadway should be allowed to fall to or below LOS "E".
  - Policy 1.6.B: Traffic analysis, engineering judgement and/or special studies should be utilized to assess whether roadways or intersections are operating near or at LOS

“E”. If a roadway or intersection is at or near LOS “E”, improvements or other strategies to remedy the condition should be considered a priority.

- Objective 1.13: As feasible under financial constraints, expand the transportation system to accommodate and attract new businesses and visitors.
- Objective 1.14: Support and promote economic development through the efficient movement of freight and tourist travel to, and through Trinity County.
- Policy 1.14.A: Support efforts to maintain and improve Trinity County’s highway system as important inter-regional trucking routes, as well as connecting highways in adjacent counties.
- Objective 4.1: Increase the total mileage of safe bike routes, trails and pedestrian walkways.

### ***Trinity County Regional Transportation Plan***

The *2001 Regional Transportation Plan*, incorporates a series of county-wide goals for transportation and circulation purposes. The following goals, objectives, and policies from the *Trinity County Regional Transportation Plan* are relevant to the proposed project:

- **Goal #1.2:** To provide a streets-and-highways system (including bridges), which effectively, efficiently and safely serves the variety of transportation needs in Trinity County.
  - **Objective 1.2.3:** Identify anticipated street and road congestion/capacity problems before they become critical in order to program preventative measures and reduce the cost of correction.
    - Policy 1.2.3.A. The minimum acceptable level of service (LOS) standard for roadway and intersection operations in Trinity County is “D”. No public highway or roadway should be allowed to fall below this operating level.
    - Policy 1.2.3.B. Traffic analysis, engineering judgment and/or special studies should be utilized to assess whether roadways or intersections are operating near or at LOS “E”. If a roadway or intersection is at or near LOS “E”, improvements or other strategies to remedy the condition should be considered a priority.
- **Goal #2:** To assure the coordination of transportation facilities with adopted land use plans.
  - **Objective 2.1:** Design and construct future streets serving residential areas in keeping with the neighborhood existing characteristics and right-of-way conditions.

### ***Weaverville Community Plan***

The *Weaverville Community Plan* (Trinity County, 1990) identifies a series of traffic and roadway improvements intended to improve, or at least maintain, the basin’s circulation system with the least disruption of Weaverville’s neighborhoods. These included a “Brown’s Ranch/Airport Connector” and a

“Martin Road/Brown’s Ranch Connector,” which together make up the presently proposed East Connector. The Community Plan also contains general goals and specific objectives related to traffic and transportation impacts of the proposed East Connector Roadway project, including:

**Goal #1:** To provide a streets-and-highways system which effectively, efficiently, and safely serves the variety of transportation needs of the community.

- **Objective 1.1:** Improve the community’s circulation by implementation of the various roadway improvement identified on Exhibit “T-2.” (a map showing several “Potential New Roads” in Weaverville, including: “Brown’s Ranch/Airport Connector” and “Martin Road/Brown’s Ranch Connector” which together make up the presently proposed East Connector.)
- **Objective 1.2:** Plan for improved capacity and LOS of State Highway 299, which will not impact the historic nature of the downtown area. The Plan specifically rejects the implementation of four traffic lanes through this area. The Plan prepares for the possibility of an alternative route around the downtown area in the future. It emphasizes the importance of prohibiting commercial development along this route to insure that commercial-bound traffic goes through Weaverville. It recommends other roadway and transportation management proposals be pursued aggressively before the “bypass” is funded. It further recommends that voter approval be obtained prior to constructing the bypass.
- **Goal #2:** To assure the coordination of transportation facilities with adopted land use plans.
  - **Objective 2.1:** Design and construct future streets serving residential areas in keeping with the neighborhood existing characteristics and right-of-way conditions.
- **Goal #4:** To increase bicycle and pedestrian traffic by developing a safe convenient system of bicycle routes, trails, storage facilities, and pedestrian walkways. This goal notes that proposed improvements along the area’s creeks should be constructed out of materials and in a manner that is compatible with these areas. In general wooden walkways are preferred. Locate pedestrian and bicycle paths parallel, where possible, and off major arterials.
  - **Objective 4.1:** Increase the total mileage of safe bike routes, trails and pedestrian walkways by requiring paved shoulders on roads where pedestrian or bicycle usage is anticipated.

### 3.18.2 SIGNIFICANCE CRITERIA

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant transportation/traffic impacts:

Would the project:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
- Substantially increase hazards due to a design feature, (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- Result in inadequate emergency access?
- Result in inadequate parking capacity?
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Trinity County has established a local level of service standard of LOS "D" or better for intersection operation (see the *Circulation Element of the Trinity County General Plan*). The standard is applied to the overall average of all turning movements at the intersection, rather than individual turning movements. Projects that would cause an overall intersection LOS of "D" or worse are considered to have a significant traffic impact.

### 3.18.3 PERMANENT IMPACTS

#### *TRAFFIC VOLUME ANALYSIS*

##### *Base Year 2020 Volumes Without Project*

Base traffic volumes for the year 2020 were estimated using the *WBTCs*, the *Traffic Analysis for the East Connector Weaverville PSR*, and the *Airport EIR*. To best establish a 2020 base condition, modifications to 2020 peak hour model volumes were included in the analysis and described below. Figures 3.18-4 and 3.18-5 display the Year 2020 Without Project p.m. peak hour vehicle trips at study intersections derived from the above referenced sources with the following additions:

- Trip generation for the proposed hospital relocation (250 p.m. peak hour trips) was provided by Trinity County. Traffic from the relocated hospital was distributed to the study area road network based on existing traffic patterns.
- Institute of Transportation Engineers (ITE) trip generation was performed to account for the existing 20 homes that have direct access onto Five Cent Gulch, but were not included in the

WBTCs. Estimated p.m. peak hour vehicle trips from the 20 homes were added, and distributed to the road network.

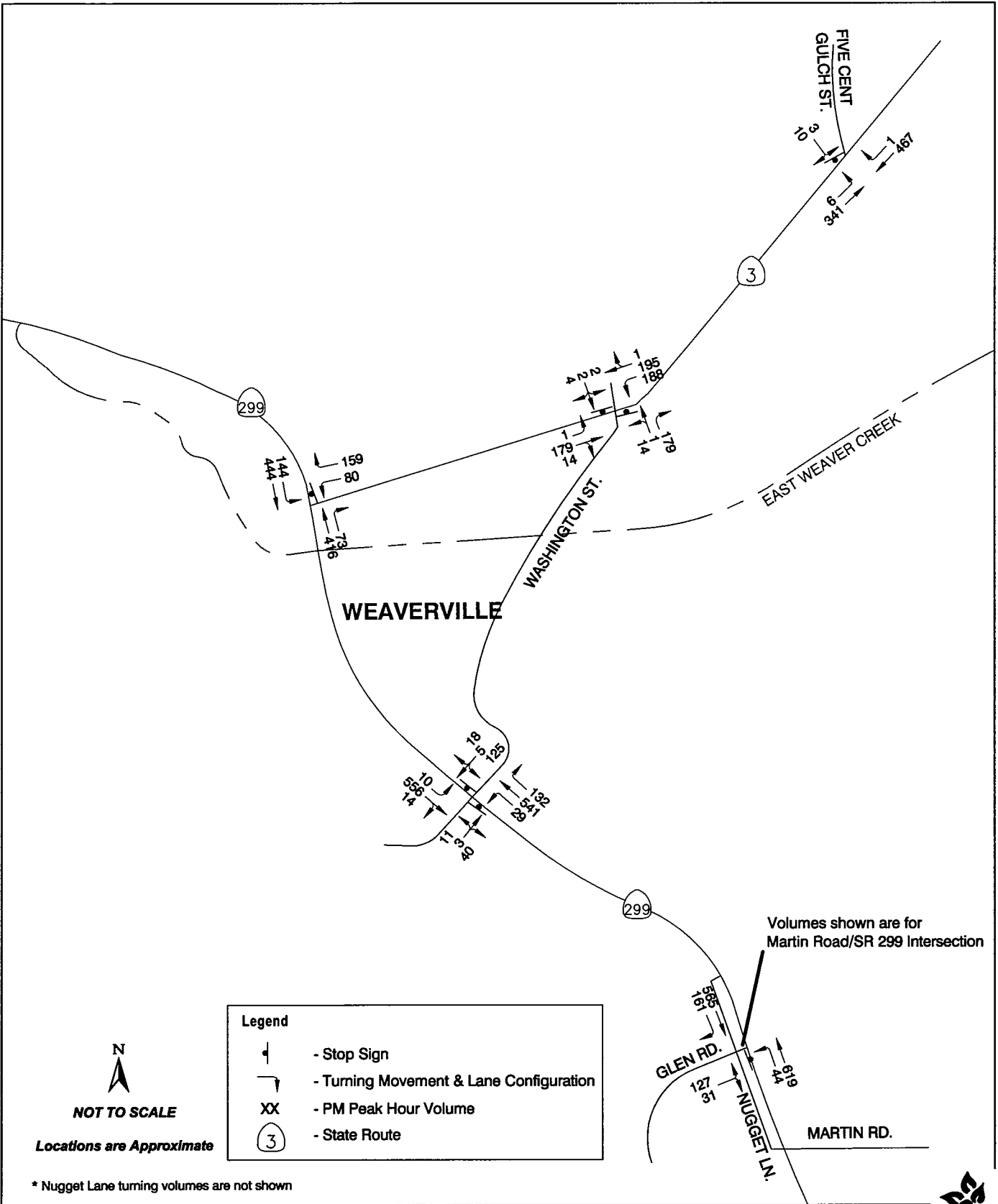
- Traffic from the County Building and a single home on the west leg of the intersection of SR 3 with Washington Street was added to the study area road network. County Building traffic was estimated based on the number of employees and the number of vehicles in the parking lot during business hours. Vehicle trips from the one home were estimated using the average trip generation rates for a single-family home in the Institute of Transportation Engineers *Trip Generation Manual* - 1998.
- Not all of the retail/commercial pads in the Trinity Plaza Shopping Center were occupied when the existing traffic count data on SR 299 was obtained. It was assumed that by the year 2020, all of the remaining vacancies would be occupied. Trip generation was performed using ITE rates to account for an estimated 13,300 square feet of retail and 3,000 square feet of fast food vacancies. This traffic was then distributed and added to the driveway counts on SR 299.
- The 2020 travel-demand model output shows some p.m. peak hour turning movement volumes to be *less* than existing turning movement counts. Variations in low-volume turning movements are understandable when forecasting future peak hour volumes. Some 2020 model output volumes were increased to be as much as existing turning movement counts. Each 2020 model volume adjustment was increased by not more than 20 vehicles. The average increase per adjustment was 12.5 vehicles.

#### *Base Year 2020 With Project Volumes*

The East Connector itself does not generate traffic. However, traffic model volumes show that traffic patterns change in the Weaverville area with the inclusion of the East Connector. **Figure 3.18-6** shows “2020 With Project” and “2020 Without Project” AADT road segment volumes near the study area. **Figures 3.18-7** and **3.18-8** display p.m. peak hour vehicle trips at study intersections. To establish a “2020 With Project” condition, modifications to the 2020 peak hour model volumes were included in the analysis and described below.

- P.M. peak hour traffic volumes on SR 299 were annually increased to provide balanced intersection and driveway volumes between Glen Road and Martin Road.

East Connector Roadway/EIR\_Graphics/Figure\_03\_18\_04.a1 12/12/02 CS



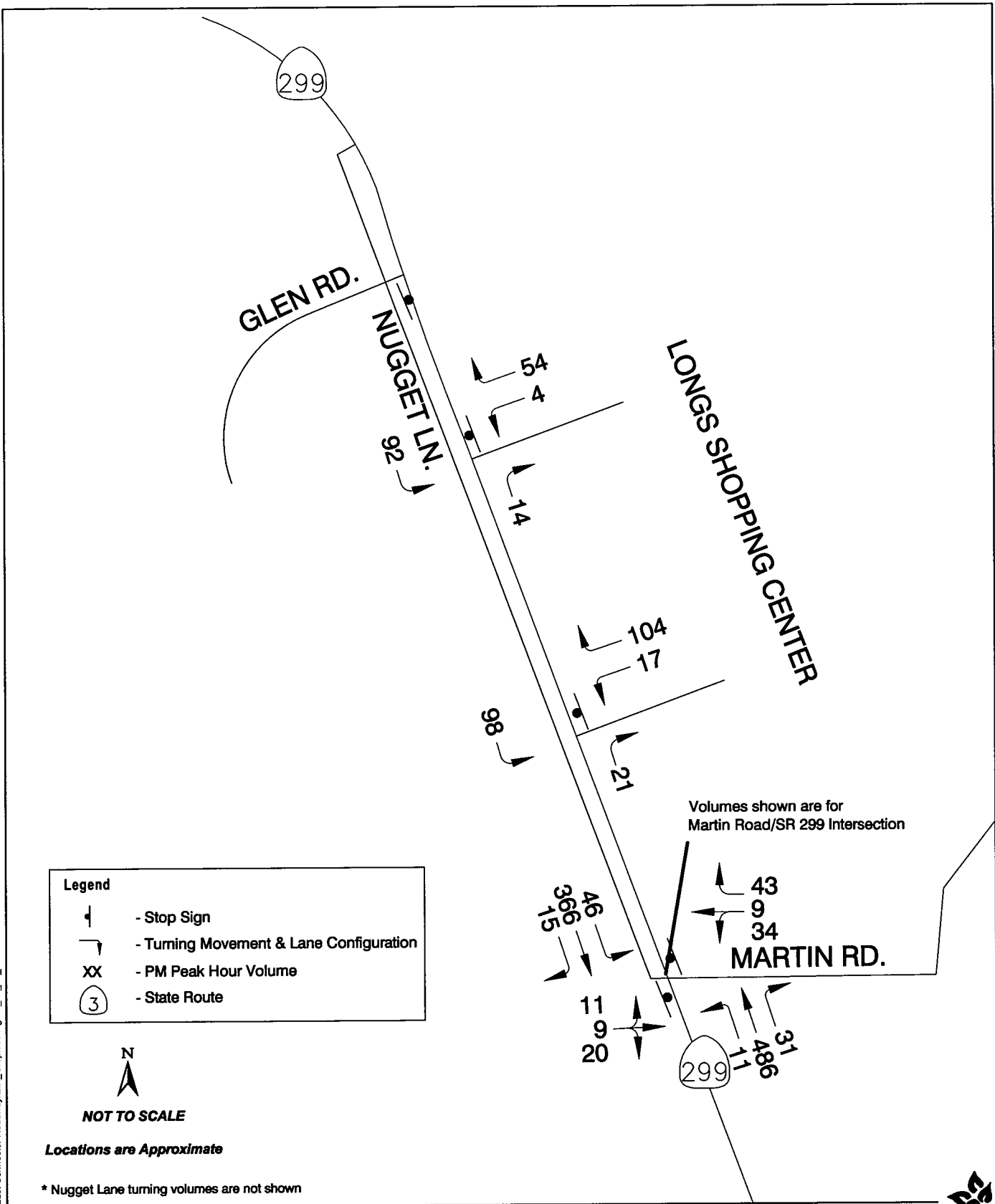
Source: Fehr & Peers Associates, Inc., 2002



**Figure 3.18-4**  
Year 2020 Without Project, Lane Configurations and Peak-Hour Traffic Volumes  
East Connector Roadway Project



East Connector Roadway/EIR\_Graphics/Figure\_03\_18\_05.a1 12/12/02 CS

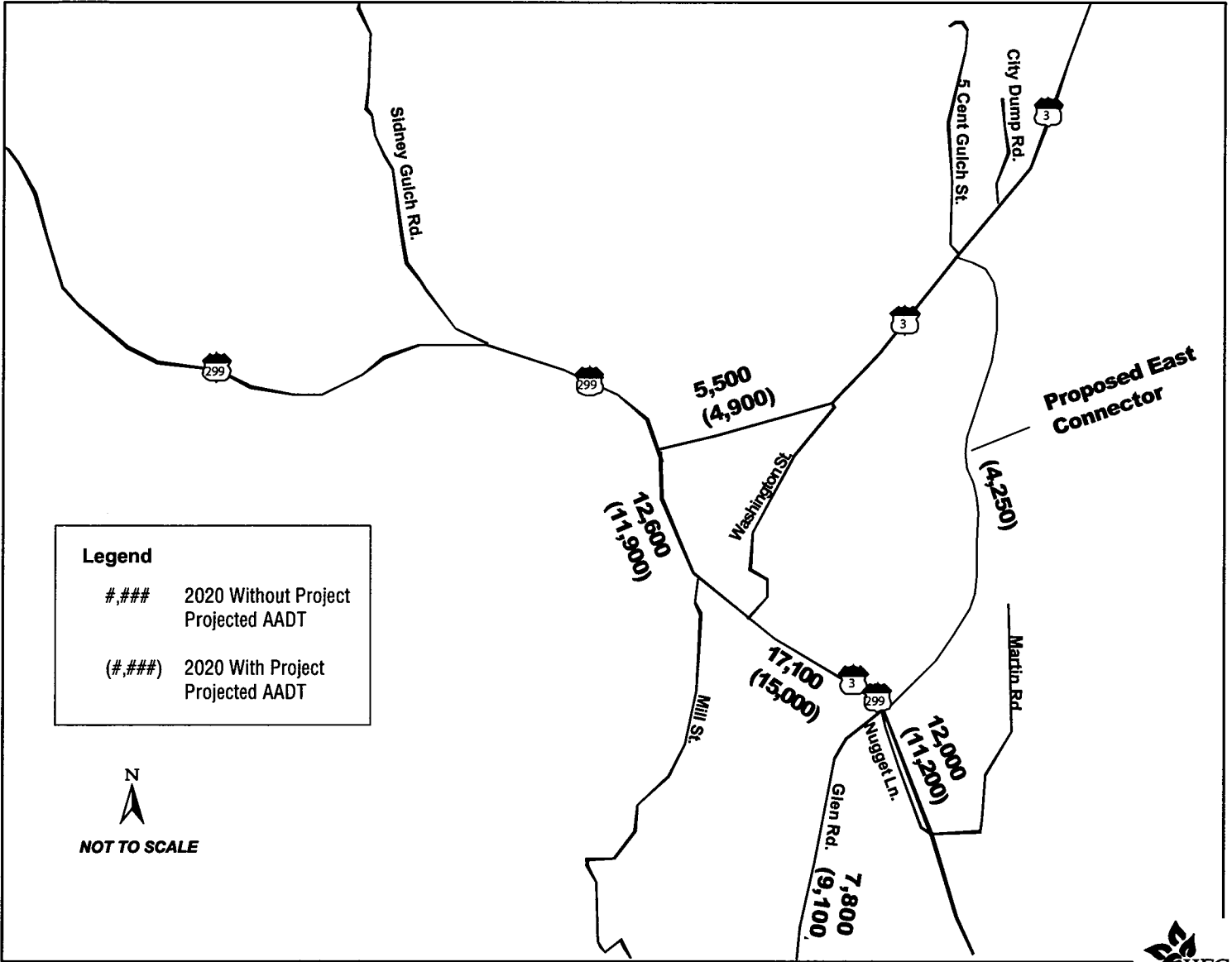


Source: Fehr & Peers Associates, Inc., 2002



**Figure 3.18-5**  
Year 2020 Without Project, Lane Configurations and Peak-Hour Traffic Volumes  
East Connector Roadway Project

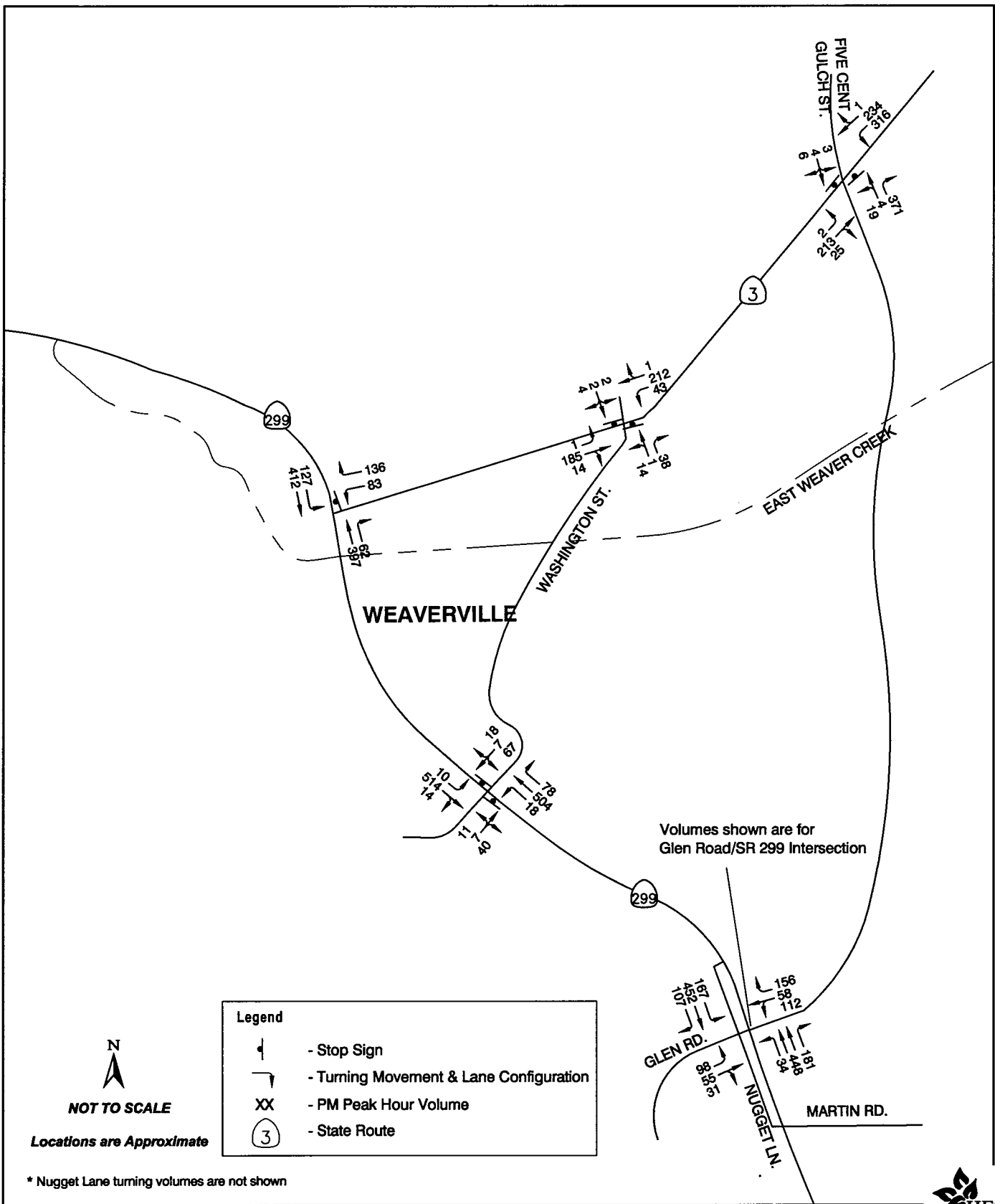




Source: Weaverville Master Circulation Study: Technical Memorandum Three, Alternatives Analysis, page 7 (1998)  
Fehr & Peers Associates, Inc., 2002



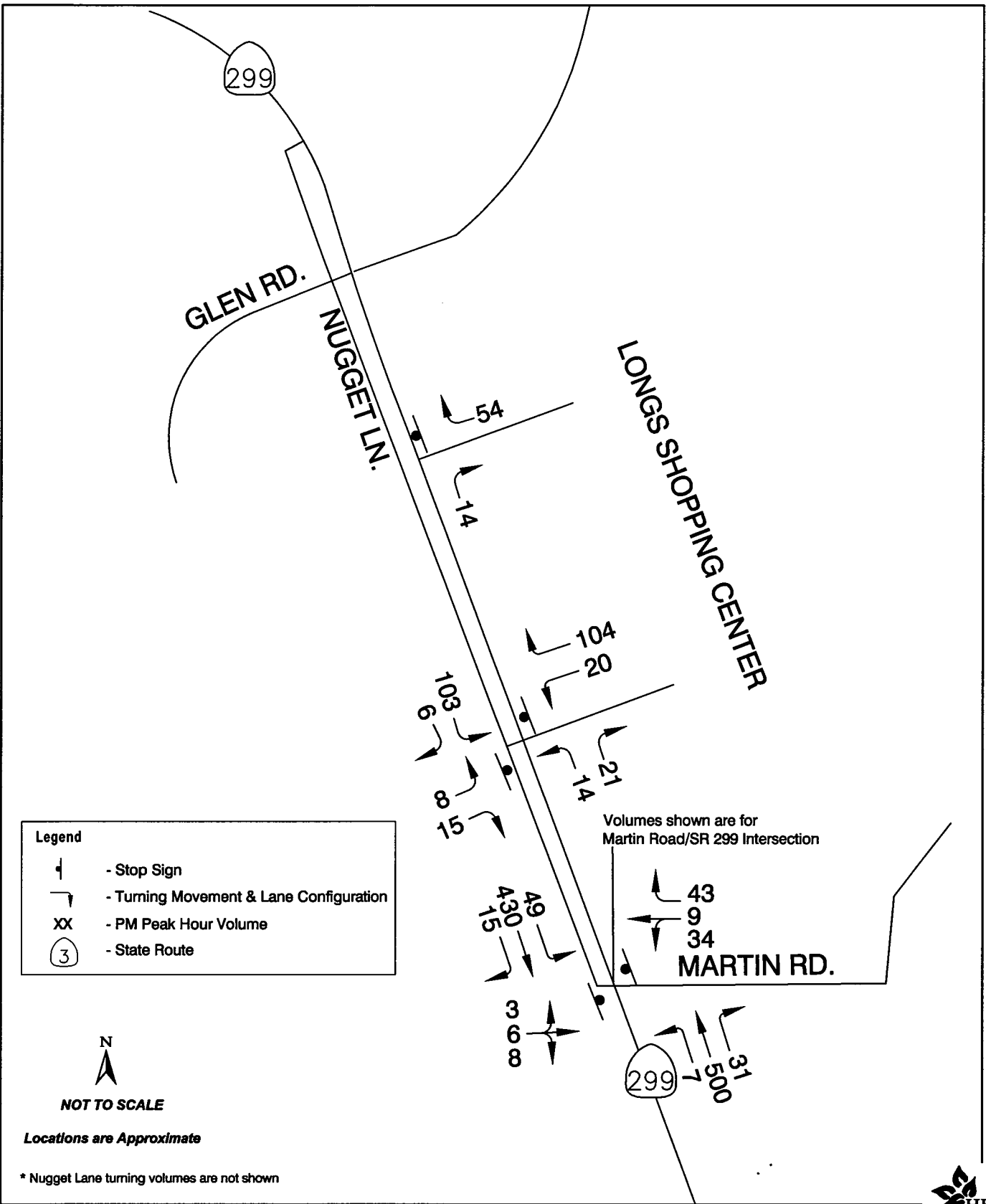
**Figure 3.18-6**  
Project Impacts and Mitigations, Year 2020 With and Without Project Average Annual Daily Traffic  
East Connector Roadway Project



Source: Fehr & Peers Associates, Inc., 2002



**Figure 3.18-7**  
Year 2020 With Project, Lane Configurations, and Peak-Hour Traffic Volumes  
East Connector Roadway Project



Source: Fehr & Peers Associates, Inc., 2002



**Figure 3.18-8**  
Year 2020 With Project, Lane Configurations, and Peak-Hour Traffic Volumes  
East Connector Roadway Project

RTP and Circulation Element policies, LOS D is acceptable. However, some individual turning movements are worse than LOS D, and the overall intersection LOS average is at the bottom of the acceptable range.

*Level of Service – Base Year 2020 With Project*

The “2020 With Project” condition analyzes the affects the East Connector has on the road network due to changes in traffic distribution. LOS and delay were then estimated and the results are shown in Table 3.18-5. Table 3.18-6 shows a comparison of LOS between the “With” and the “Without Project” conditions.

The LOS at the intersection of SR 299 with Glen Road is estimated to be worse than LOS D as a stop sign-controlled intersection. After signalization, the SR 299/Glen Road intersection is estimated to operate at LOS C. The overall intersection LOS of SR 299 with SR 3 improves from a C to a B. Although the left-turning movement from SR 3 to SR 299 remains at LOS F, the delay for this movement is reduced by nearly a minute.

The East Connector is also expected to reduce delays for the left turn movements onto SR 299 from Washington Street. The overall average LOS would improve from LOS D to LOS A. Although the letter grades for some specific movements do not change, the reduction in seconds of delay is significant. For example, the combined left/through/right turn movement from the single southbound Washington Street lane in the “2020 Without Project” condition is shown to have an average delay per vehicle of 217 seconds. Under the “2020 With Project” condition, the average delay per vehicle for the same movement is reduced to 49 seconds, nearly a three-minute per vehicle savings.

**Table 3.18-4. Base Year 2020 Without Project P.M. Peak Hour Intersection LOS**

Location N/S = North/South Direction E/W = East/West Direction	Control	P.M. Peak Hour Operations	
		Delay (seconds)	LOS
1. SR 3 (N/S)/Five Cent Gulch (E/W)	Unsignalized	0.2 <sup>1</sup>	A <sup>1</sup>
Eastbound Left/Right		8.7	B
Northbound Left		4.5	A
2. SR 3 (N/S)/Washington Street (E/W)	Unsignalized	2.4 <sup>1</sup>	A <sup>1</sup>
Eastbound Left/Through/Right		10.6	C
Westbound Left/Through		14.3	C
Westbound Right		4.9	A
Northbound Left		3.0	A
Southbound Left		3.7	A
3. SR 299 (E/W)/SR 3 (N/S)	Unsignalized	11.9 <sup>1</sup>	C <sup>1</sup>
Southbound Left		168	F
Southbound Right		8.0	B
Eastbound Left		6.6	B
4. SR 299 (E/W)/Washington Street (N/S)	Unsignalized	22.3 <sup>1</sup>	D <sup>1</sup>
Northbound Left/Through/Right		14.5	C
Southbound Left/Through/Right		217	F
Eastbound Left		5.7	B
Westbound Left		5.1	B
5. SR 299 (E/W)/Glen Road (N/S)	Unsignalized	25.3 <sup>1</sup>	D <sup>1</sup>
Northbound Left/Right		246	F
Westbound Left		6.7	B
6. SR 299 (E/W)/Martin Road (N/S)	Unsignalized	2.0 <sup>1</sup>	A <sup>1</sup>
Northbound Left/Through/Right		13.7	C
Southbound Left/Through		25.6	D
Southbound Right		6.1	B
Eastbound Left / Westbound Left		4.9	A
Westbound Left		3.8	A
1. Average intersection delay and LOS; Source: HCM 1994			

Table 3.18-5. Base Year 2020 With Project P.M. Peak Hour Intersection LOS

Location	Control	Delay (seconds)	LOS
SR 3 (N/S)/Five Cent Gulch & East Connector (E/W)	Unsignalized	4.0 <sup>1</sup>	A <sup>1</sup>
Eastbound Left/Through/Right		19.4	C
Westbound Left/Through		22.1	D
Westbound Right		7.2	B
Northbound Left		3.0	A
Southbound Left		4.5	A
2. SR 3 (N/S)/Washington Street (E/W)	Unsignalized	0.9 <sup>1</sup>	A <sup>1</sup>
Eastbound Left/Through/Right		6.5	B
Westbound Left/Through		9.4	B
Westbound Right		3.9	A
Northbound Left		3.0	A
Southbound Left		3.1	A
3. SR 299 (E/W)/SR 3 (N/S)	Unsignalized	8.9 <sup>1</sup>	B <sup>1</sup>
Southbound Left		109.7	F
Southbound Right		7.2	B
Eastbound Left		5.9	B
4. SR 299 (E/W)/Washington Street (N/S)	Unsignalized	4.2 <sup>1</sup>	A <sup>1</sup>
Northbound Left/Through/Right		13.7	C
Southbound Left/Through/Right		49.1	F
Eastbound Left		5.0	A
Westbound Left		4.7	A
5. SR 299 (E/W)/Glen Road (N/S) - Sub-Alt. A & C (Sub-Alt. B)	Unsig/Sig	37.2 <sup>1</sup> / 25.3 <sup>1</sup> (23.3)	E <sup>1</sup> / C <sup>1</sup> (C <sup>1</sup> ) (reversed?)
Northbound Left/Through - Sub-Alt A & C (Northbound Left - Sub-Alt B)		184 / 41.7 (33.8)	F / D (C)
Northbound Right - Sub-Alt A & C (Northbound Through/Right - Sub-Alt B)		24.2 / 28.9 (32.1)	D / C (C)
Southbound Left/Through - Sub-Alt A & C (Southbound Left/Through - Alt B)		219 / 46.3 (43.6)	F / D (D)
Southbound Right - Sub-Alt A & C (Southbound Right - Sub-Alt B)		5.4 / 19.8 (18.9)	B / B (B)
Eastbound Left - Sub-Alt A & C (Eastbound Left - Alt B)		5.8 / 31.1 (29.8)	B / C (C)
Westbound Left - Sub-Alt A & C (Westbound Left - Sub-Alt B)		3.8 / 29.9 (29.0)	A / C (C)
6. SR 299 (E/W)/Martin Road (N/S)	Unsignalized	1.8 <sup>1</sup>	A <sup>1</sup>
Northbound Left/Through/Right		13.7	C
Southbound Left/Through		29.5	D
Southbound Right		6.2	B
Eastbound Left		5.0	B
Westbound Left		4.1	A
1. Average intersection delay and LOS; Source: HCM 1994			



**Table 3.18-6. Base Year 2020 With and Without Project P.M. Peak Hour Intersection LOS Comparison**

Location	Control	LOS Without Project	LOS With Project
<b>SR 3 (N/S)/Five Cent Gulch &amp; East Connector (E/W)</b>	<b>Unsignalized</b>	<b>A<sup>1</sup></b>	<b>A<sup>1</sup></b>
Eastbound Left/Through/Right		B	C
Westbound Left/Through		N/A	D
Westbound Right		N/A	B
Northbound Left		A	A
Southbound Left		N/A	A
<b>2. SR 3 (N/S)/Washington Street (E/W)</b>	<b>Unsignalized</b>	<b>A<sup>1</sup></b>	<b>A<sup>1</sup></b>
Eastbound Left/Through/Right		C	B
Westbound Left/Through		C	B
Westbound Right		A	A
Northbound Left		A	A
Southbound Left		A	A
<b>3. SR 299 (E/W)/SR 3 (N/S)</b>	<b>Unsignalized</b>	<b>C<sup>1</sup></b>	<b>B<sup>1</sup></b>
Southbound Left		F	F
Southbound Right		B	B
Eastbound Left		B	B
<b>4. SR 299 (E/W)/Washington Street (N/S)</b>	<b>Unsignalized</b>	<b>D<sup>1</sup></b>	<b>A<sup>1</sup></b>
Northbound Left/Through/Right		C	C
Southbound Left/Through/Right		F	F
Eastbound Left		B	A
Westbound Left		B	A
<b>5. SR 299 (E/W)/Glen Road (N/S) - Sub-Alt A &amp; C (Sub-Alt B)</b>	<b>Unsig./Sig</b>	<b>D<sup>1</sup> / N/A (N/A)</b>	<b>E<sup>1</sup> / C<sup>1</sup> (C<sup>1</sup>)</b>
Northbound Left/Through - Sub-Alt A & C (Northbound Left - Sub-Alt B)		F / N/A (N/A)	F / D (C)
Northbound Right - Sub-Alt A & C (Northbound Through/Right - Sub-Alt B)		F / N/A (N/A)	D / C (C)
Southbound Left/Through - Sub-Alt A & C (Southbound Left/Through - Alt B)		N/A / N/A (N/A)	F / D (D)
Southbound Right - Sub-Alt A & C (Southbound Right - Sub-Alt B)		N/A / N/A (N/A)	B / B (B)
Eastbound Left - Sub-Alt A & C (Eastbound Left - Alt B)		N/A / N/A (N/A)	B / C (C)
Westbound Left - Sub-Alt A & C (Westbound Left - Sub-Alt B)		B / N/A (N/A)	A / C (C)
<b>6. SR 299 (E/W)/Martin Road (N/S)</b>	<b>Unsignalized</b>	<b>A<sup>1</sup></b>	<b>A<sup>1</sup></b>
Northbound Left/Through/Right		C	C
Southbound Left/Through		D	D
Southbound Right		B	B
Eastbound Left		A	B
Westbound Left		A	A
1. Average intersection delay and LOS; N/A = No comparison available.			
Source: HCM 1994 & HCM 2000			

The East Connector is also expected to reduce delays for the left turn movements onto SR 299 from Washington Street. The overall average LOS would improve from LOS D to LOS A. Although the letter grades for some specific movements do not change, but the reduction in seconds of delay is significant. For example, the combined left/through/right turn movement from the single southbound Washington Street lane in the "2020 Without Project" condition is shown to have an average delay per vehicle of 217 seconds. Under the "2020 With Project" condition, the average delay per vehicle for the same movement is reduced to 49 seconds, nearly a three-minute per vehicle savings.

#### SIGNAL WARRANT ANALYSIS

The MUTCD provides a national standard for signing, striping, and other traffic control devices. Included in the MUTCD are criteria for determining when a traffic signal is "warranted" at an intersection. Since one peak hour of data was available, Warrant No. 3 (*Peak Hour Vehicular Volume*) was considered to determine if signals are warranted at the three major study intersections during both the "2020 Without Project" and "2020 With Project" conditions. The results are shown in Table 3.18-7 and warrant calculations are included in Appendix D.

Table 3.18-7. Signal Warrant Analysis Results

Intersection	Base Year 2020 No Project Condition		Base Year 2020 With Project Condition	
		Warrant Met?		Warrant Met?
SR 3 / SR 299	1,077 <sup>1</sup> /80 <sup>2</sup>	No	998 <sup>1</sup> /83 <sup>2</sup>	No
SR 299 / Washington Street	1,282 <sup>1</sup> /130 <sup>2</sup>	Yes	1,138 <sup>1</sup> /74 <sup>2</sup>	No
SR 299 / Glen Road	1,389 <sup>1</sup> /127 <sup>2</sup>	Yes	1,086 <sup>1</sup> /170 <sup>2</sup>	Yes
Major Street <sup>1</sup> : Includes left, through, & right turning movement volumes of both approaches on major street. Minor Street <sup>2</sup> : Includes left and through volumes only of high volume approach of minor street.				
Source: MUTCD 2000				

Signal warrant analyses show that the intersection of SR 299/Glen Road (East Connector) warrants signalization after the project is complete. The SR 299/Washington Street intersection warrants signalization prior to the East Connector project, but the East Connector will draw traffic away from the SR 299/Washington Street intersection so that a signal is no longer warranted. The signalization of the SR 299/Glen Road intersection is included in the East Connector Project Description (see Section 1.4.3). A detailed intersection and signal design would have to be complete prior to signal installation.

### *Impacts Common to All Alternatives*

The East Connector project was developed and designed to help alleviate existing and projected future traffic and circulation problems in the Weaverville Basin. In addition, the project would add bicycle and pedestrian facilities, including Class I and II lanes along the East Connector and a proposed new bike/pedestrian path along Levee Road, in line with existing planning goals and objectives for the project area. Therefore, project traffic and transportation impacts would be largely beneficial.

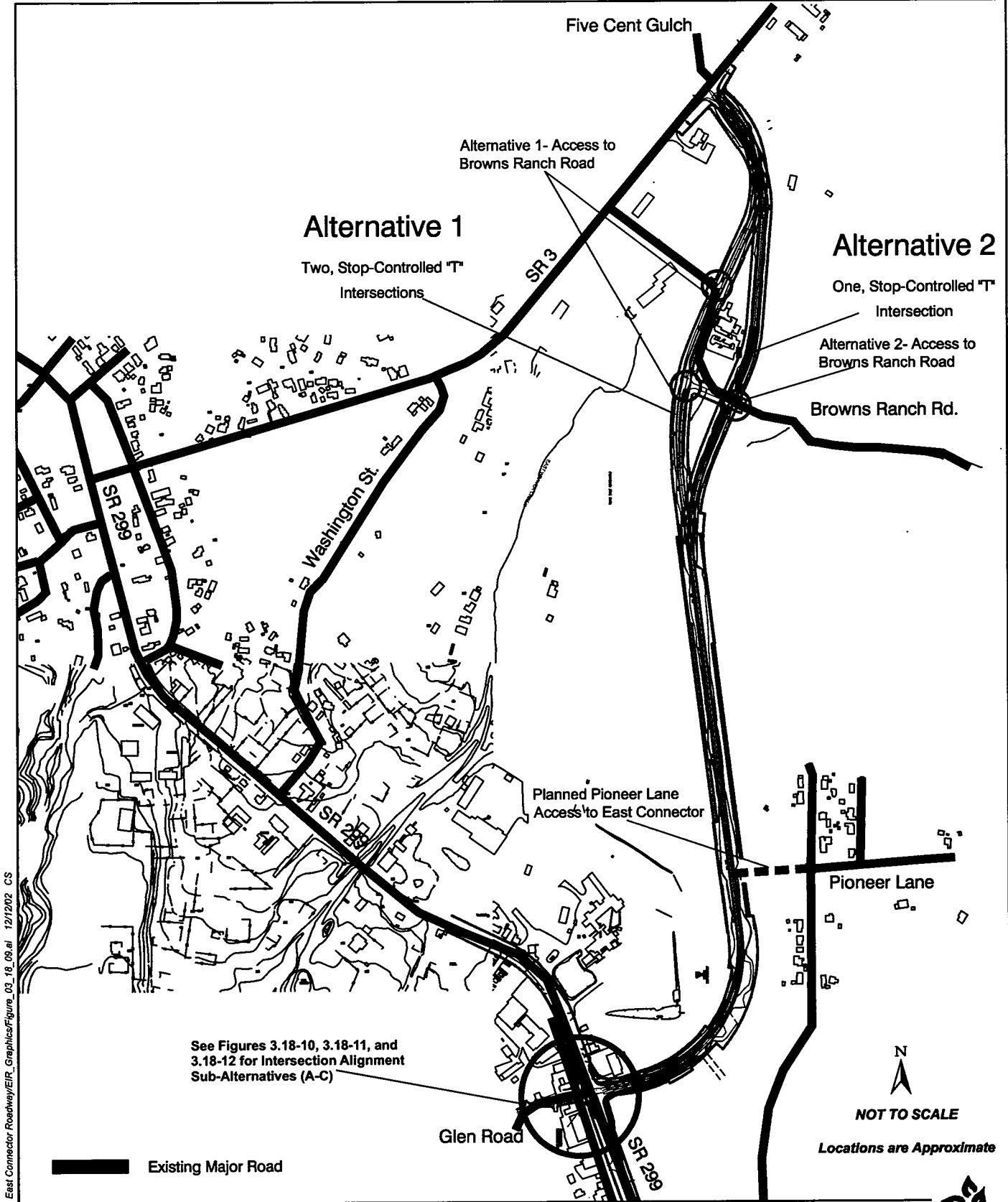
The exception is at the SR 299/Glen Road intersection, where the addition of vehicle trips from the East Connector would result in a deterioration in average LOS from D to E compared to that expected without the project (see discussion below). Therefore signalization of the intersection is included as part of the East Connector project. Installing a traffic signal at this intersection is expected to obtain an estimated LOS C.

In addition, the signal would increase the safety of pedestrians crossing SR 299 at this location. Pedestrian traffic is common between the Nugget Lane and Trinity Plaza Shopping areas, across four lanes of highway traffic. Also, the project would replace the two-way center left-turn lane with isolated left-turn pockets, reducing the chance of head-on collisions. The installation of the signal will necessitate elimination of traffic entering Glen Road from Nugget Lane. The intersection of Nugget Lane and Glen Road is too close to the intersection of Glen Road and SR 299. Queues of vehicles waiting at the signal on Glen Road would conflict with vehicles attempting to enter Glen Road from Nugget Lane. Therefore, access to existing businesses on Nugget Lane near Glen Road will be removed or changed after the construction of the East Connector. Various access alternatives were presented to stake holders and are discussed below.

Three alternatives were determined by Trinity County staff to be reviewed further: No Project, Alignment Alternative 1, and Alignment Alternative 2. Both Alignment Alternatives 1 and 2 connect SR 299 with SR 3 at Glen Road and Five Cent Gulch (see **Figure 3.18-9**). There are three sub-alternatives, independent of Alignment Alternatives 1 and 2, which address specific access configurations near Glen Road, SR 299, Nugget Lane, and Martin Road. **Figures 3.18-10, 3.18-11, and 3.18-12** display the three sub-alternative intersection configurations and roadway layouts. Detailed engineering drawings would be required prior to construction and should include items such as curb return radii, curb, gutter, and sidewalk locations, bike paths/lanes, specific roadway dimensions, signing, and traffic signal design at this signalized intersection.

### *No Project Alternative*

If the East Connector is not built, congestion levels in downtown Weaverville will continue to increase. As a result, LOS would continue to deteriorate, and vehicle delays for specific turning movements at the intersections of SR 3/SR 299, SR 299/Washington Street, and SR 299/Glen Road would continue to

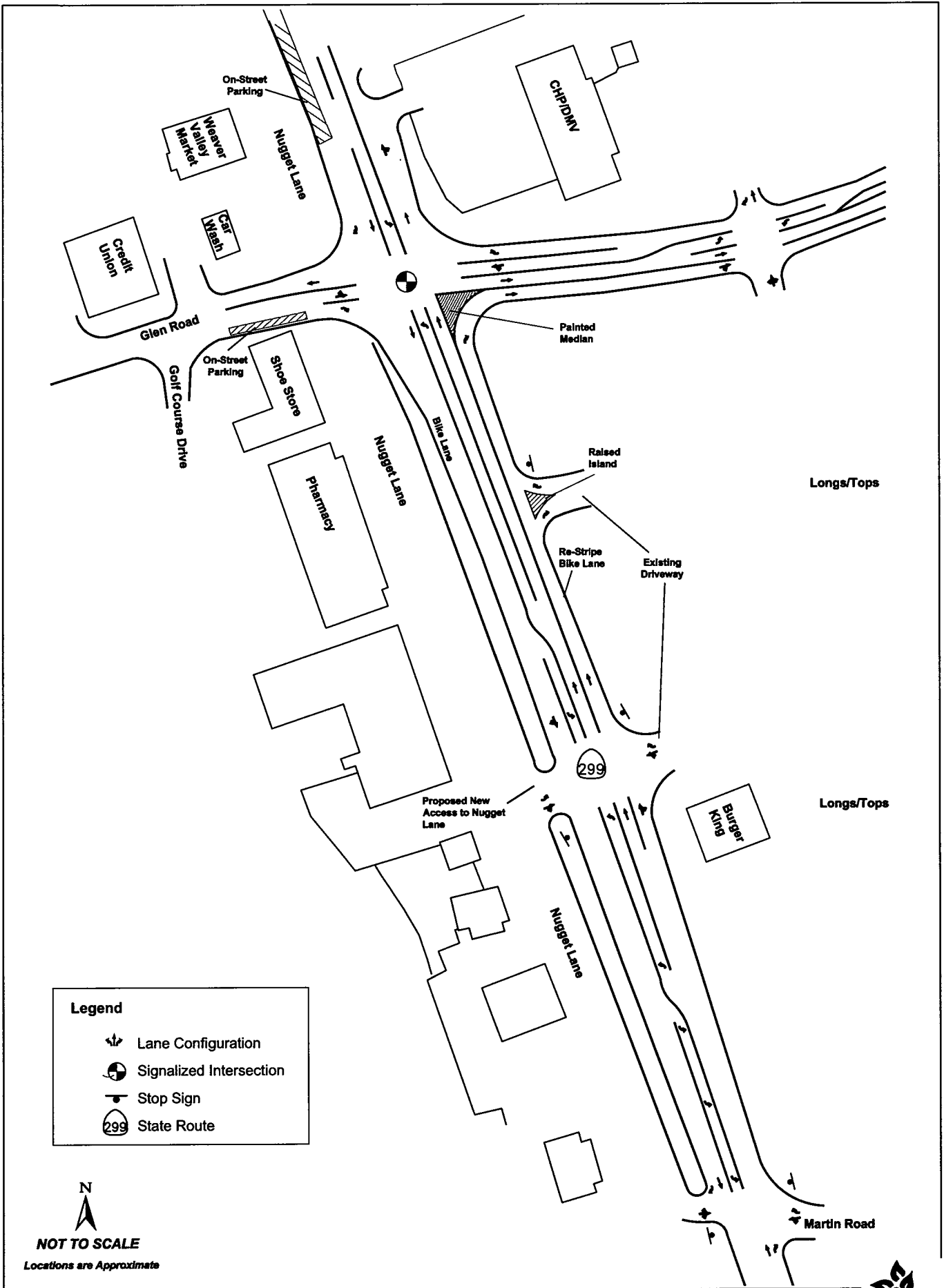


East Connector Roadway/EIR\_Graphics/Figure\_03\_18\_09.al 12/12/02 CS

Source: Fehr & Peers Associates, Inc., 2002



**Figure 3.18-9**  
2020 With Project Conditions Alignment Alternatives 1 and 2  
East Connector Roadway Project

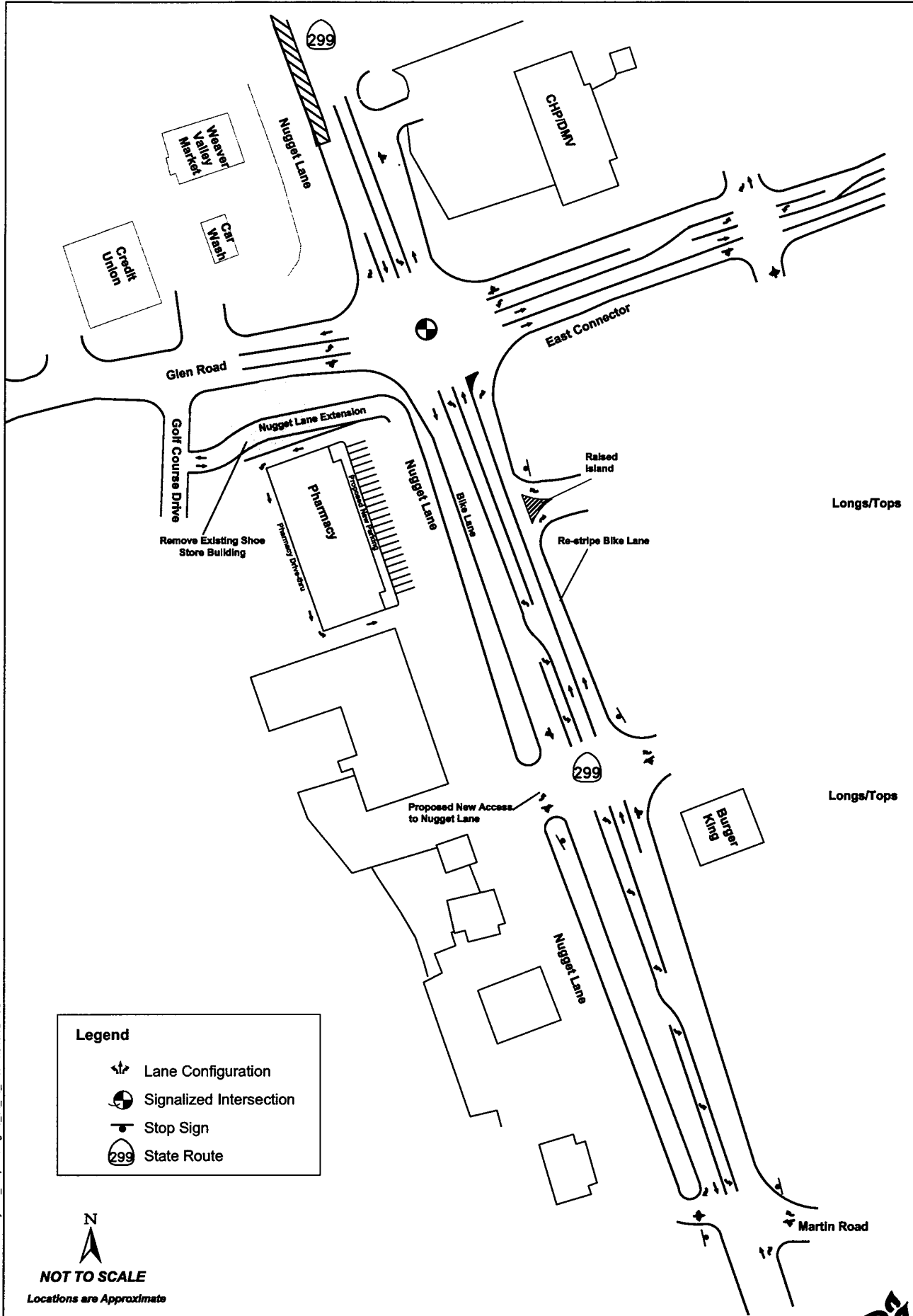


Source: Fehr & Peers Associates, Inc., 2002



**Figure 3.18-10**  
State Route 299/Glen Road Intersection Sub-Alternative A  
East Connector Roadway Project

East Connector Roadway/EIR\_Graphics/Figure\_03\_18\_11.plt 12/10/02 CS

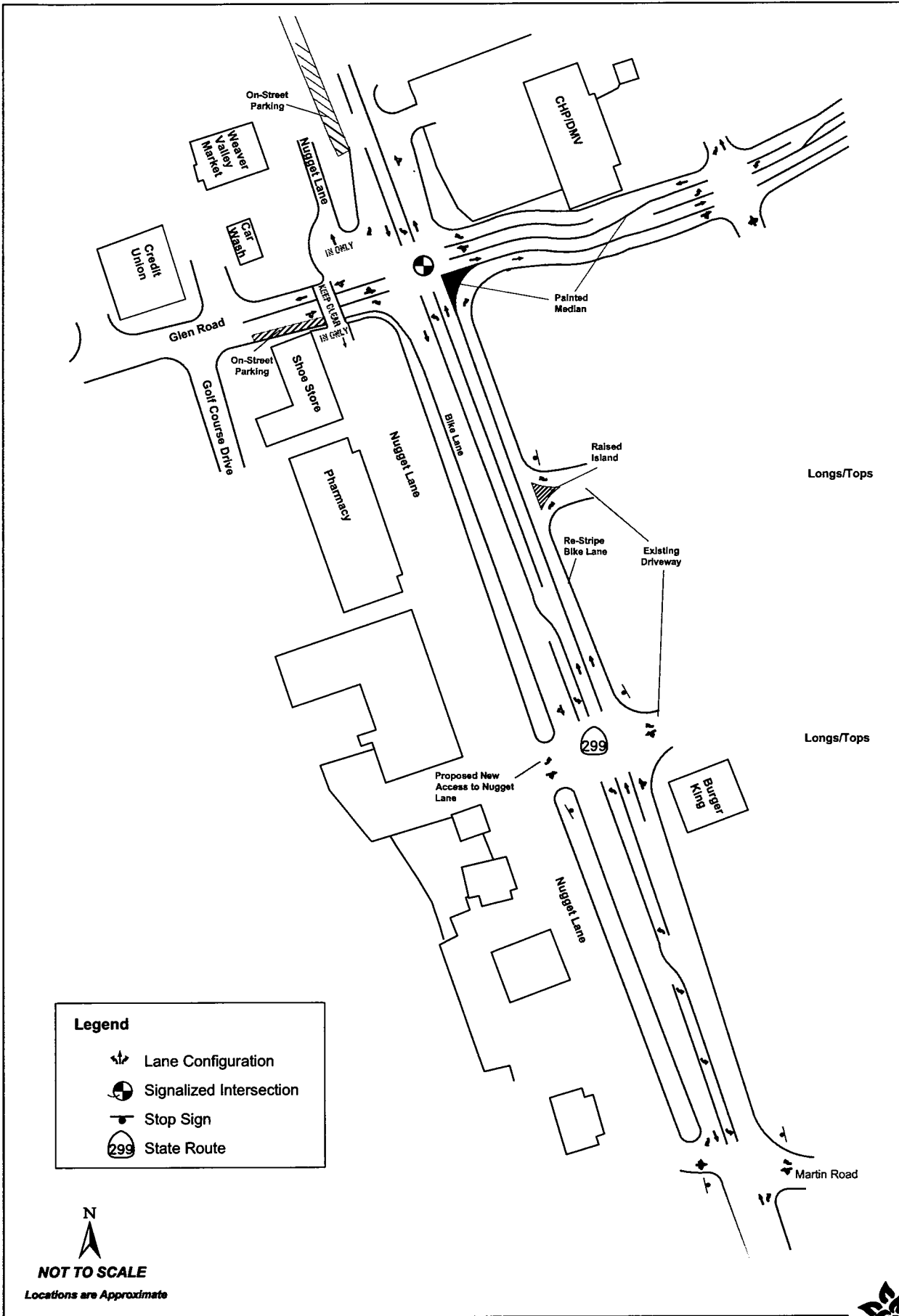


Source: Fehr & Peers Associates, Inc., 2002



**Figure 3.18-11**  
State Route 299/Glen Road Intersection Sub-Alternative B  
East Connector Roadway Project

East Connector Roadway/EIR\_Graphics/Figure\_03\_18\_12.dwg 12/10/02 CS



Source: Fehr & Peers Associates, Inc., 2002



**Figure 3.18-12**  
State Route 299/Glen Road Intersection Sub-Alternative C  
East Connector Roadway Project

increase. As indicated in Section 3.18.1 above, the SR 299/Glen Road intersection currently has an overall vehicle accident rate greater than the statewide average for a similar facility, which may be partly attributable to the existing two-way left turn lane along this stretch of SR 299. This location also presents an existing safety hazard for pedestrians crossing between businesses on the west side of SR 299 and the Trinity Plaza Shopping Center on the east side of SR 299. Under the No Project Alternative, there would be no improvement to the safety of this intersection.

#### *Alignment Alternative 1*

Alternative 1 is aligned to the west of the senior center along a portion of the existing Brown's Ranch Road alignment. This would require two "T" intersections with Browns Ranch Road, resulting in possible traffic operational and safety impacts. However, the spacing and sight distance between the two "T" intersections is adequate. The two legs of Brown's Ranch Road would be stop-controlled. This alignment alternative would increase traffic volumes and vehicle speeds on what is now Brown's Ranch Road in front of the Golden Age Senior Center. This presents a potential safety hazard for pedestrians traveling between the senior center and the senior apartments and Two Creeks Mobile Home Park. This is considered a significant impact.

#### *Alignment Alternative 2*

Alternative 2 will require only one intersection with Brown's Ranch Road. Brown's Ranch Road would be stop-controlled at this intersection, and the East Connector would be free-flowing, with a left-turn pocket to access Brown's Ranch Road. The East Connector would pass to the east of the Senior Center on a new alignment. West of the Center, Brown's Ranch Road would remain in its present condition. This alternative would not increase hazards for pedestrians crossing Brown's Ranch Road to access the Senior Center.

#### *Intersection Sub-Alternatives - SR 299/Glen Road*

The Sub-Alternatives are intersection design and access options for the intersection of SR 299 with Glen Road (East Connector). All alternatives at this intersection include a traffic signal with protected left-turn pockets on SR 299. All Sub-Alternatives have the same intersection turning lane configurations at the SR 299/Glen Road (East Connector) intersection except for the following:

- The northbound (Glen Road) approach at the intersection of Glen Road/East Connector with SR 299 was analyzed with two configurations. Sub-Alternatives A and C have a shared northbound left/through lane and a separate right turn pocket. Sub-Alternative B has a separate left turn pocket and a shared through/right configuration.



- Sub-Alternative B is the only alternative that removes the Shoe Store and the only alternative with a shared through/right lane at the northbound Glen Road/East Connector-SR 299 intersection approach.

Sub-Alternative A: SR 299/Glen Road

Glen Road would be slightly realigned at its terminus with SR 299 to line up with the new East Connector. The Nugget Lane frontage road access from Glen Road would be eliminated. The existing driveway between the car wash and Coast Central Credit Union would remain open to two-way in and out traffic. Separate turn pockets would not be provided on Glen Road for this private driveway, but left and right turns would be allowed. A limited number of parking spaces would be provided on the south side of Glen Road, adjacent to the shoe store (see **Figure 3.18-10**).

Sub-Alternative B: SR 299/Glen Road

Glen Road would be realigned further south at its terminus with SR 299 to line up with the new East Connector. This alignment requires the removal of the shoe store building on the south side of Glen Road. A new access to Nugget Lane would be provided from Golf Course Drive, through the area currently occupied by the shoe store building. Like Alternative A, the existing driveway between the car wash and Coast Central Credit Union on the north side of Glen Road would remain open to two-way, in and out, traffic. No turn pockets would be provided on Glen Road for this private driveway, but left and right turns would be allowed (see **Figure 3.18-11**).

Sub-Alternative C: SR 299/Glen Road

With Alternative C (see **Figure 3.18-12**), the East Connector curve at the CHP building would be tightened to minimize the skew of the intersection across SR 299, while allowing the shoe store to remain. As a result, the design speed along this segment of the East Connector would be reduced. An in-only access to Nugget Lane would be provided on both sides of Glen Road. "Keep Clear" striping would be provided across Glen Road at Nugget Lane to prevent eastbound traffic stopped at the signal from blocking entry to south Nugget Lane. Physical barriers would need to be provided to prevent traffic from entering Glen Road from westbound Nugget Lane. Northbound and southbound cars and trucks on SR 299 would be able to turn onto Glen Road and access Nugget Lane, both the north and south of Glen Road. The turn from southbound SR 299 to Glen Road and then to northbound Nugget Lane would be nearly a U-turn, but the turning radius would accommodate WB-50 trucks. However, southbound trucks could also enter at Ben Franklin or use the existing driveway between the car wash and Coast Central Credit Union, which would remain open to two-way in and out traffic. The Glen Road approach to SR 299 for Sub-Alternative C could be modified to provide a shared through/right lane and separate a left turn lane while maintaining LOS C.

**Traffic Impact-1** Alignment Alternative 1 would cause senior citizens traveling to and from the Golden Age Senior Center from the Senior Apartments, Twin Creeks Mobile Home Park or other locations on Brown's Ranch Road to have to cross a wider, busier street with potentially faster travel speeds than the existing crossing of Brown's Ranch Road in front of the Senior Center.

**Significance:** Significant, but mitigated (**Land Use Mitigation-2**).

**Land Use Mitigation-2** If Alternative 1 is selected, the northern intersection of the East Connector with Brown's Ranch Road would be all-way stop controlled. A pedestrian crossing would be provided at the all-way stop intersection. The pedestrian crossing will be clearly marked with "Pedestrian Crossing" signs and pavement striping.

**Post-mitigation Significance:** Less than significant

**Traffic Impact-2** Access to Nugget Lane at Glen Road would be closed (Alternatives A and B) or restricted to "in only" in both the north and south directions (Alt C).

**Significance:** Significant, but mitigated

**Traffic Mitigation-1**

**Sub-alternative A:** Allow on-street parking on the south side of Glen Road adjacent to the existing shoe store .

**Sub-alternatives A, B and C:** Add a new entrance to Nugget Lane from SR 299 approximately half way between Glen Road and Martin Road, across from the existing Burger King driveway.

**Community Mitigation-4:** If Alternative A is selected, the County will vacate their right-of-way on Nugget Lane across the properties that contain the Weaver Valley Market (APN 024-480-3100) and the On Your Feet Shoe Store (APN 024-500-4000). This will provide additional flexibility to the businesses to improve internal circulation and parking. If Alternative B is selected, the County will vacate only Nugget Lane north of Glen Road (APN 024-480-3100). South of Glen Road, Nugget Lane would continue to a new intersection with Golf Course Drive.

**Community Mitigation-5:** Under all three intersection alternatives, on-street parking would be provided on the west (eastbound) side of SR 299 adjacent to Weaver Valley Market. This would allow eastbound trucks to park on SR

299 and walk to the Market, without having to perform any tight-radius turns.

**Post-mitigation Significance:** Less than significant

### 3.18.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

Under the project alternatives, there would be temporary impacts to access to businesses near the SR 299/Glen Road/East Connector intersection during construction at that intersection. However, alternative entrances to Nugget Lane and the Trinity Plaza Shopping Center will be available at all times. The project is construction of a new roadway, so the work would not generally affect existing transportation routes. The only construction work that may encroach onto presently used roads would be at the intersections on SR 299, SR 3, Brown's Ranch Road and the intersection of Martin Road with the Pioneer Lane extension. This work can be accomplished using lane reductions and controlled traffic, rather than complete closures or detours. Construction will be scheduled to limit interruptions. Residents along Brown's Ranch Road and people accessing businesses near the SR 299/Glen Road/East Connector intersection may experience minor inconveniences and delays during construction at those intersections.

**Traffic Impact-3** Project construction may result in minor delays and inconveniences to traffic along Brown's Ranch Road and at the SR 299/Glen Road/East Connector intersection.

**Significance:** Less than significant (no mitigation required).

### 3.18.5 CUMULATIVE IMPACTS

The cumulative scenario analyzes two possible points on the proposed East Connector Roadway that would access a proposed new airport to the east of the East Connector project. Only one airport access road would be constructed. The Lance Gulch access would connect to Brown's Ranch Road near the East Connector and the Golden Age Senior Center. The Martin Road access would connect to the East Connector just north of Martin Road and would parallel Pioneer Lane. Any road connected to the East Connector would be stop controlled at the intersection. Left turn pockets would be provided on the East Connector, and traffic on the East Connector would not be stopped at the intersection.

#### *CUMULATIVE TRAFFIC VOLUMES WITH NEW AIRPORT ACCESS*

Airport traffic volumes were obtained from the working *Draft Weaverville Airport EIR Traffic Impact Analysis*. P.M. peak hour traffic volumes on SR 299 were manually increased to provide balanced intersection and driveway volumes between Glen Road and Martin Road. The proposed new airport is estimated to generate approximately 215 trips during the PM peak hour and nearly 1,200 ADT. The PM

peak-hour airport volumes were added to the Year 2020 With-Project scenario to formulate the cumulative traffic volumes shown in **Figures 3.18-13 and 3.18-14**.

*CUMULATIVE LOS WITH NEW AIRPORT ACCESS*

The cumulative scenario was analyzed for average delay and LOS. Traffic from the airport would contribute to the delay at study intersections and would increase the need for better circulation in Weaverville. LOS results are shown on **Tables 3.18-8 and 3.18-9**.

*Lance Gulch Airport Access Road*

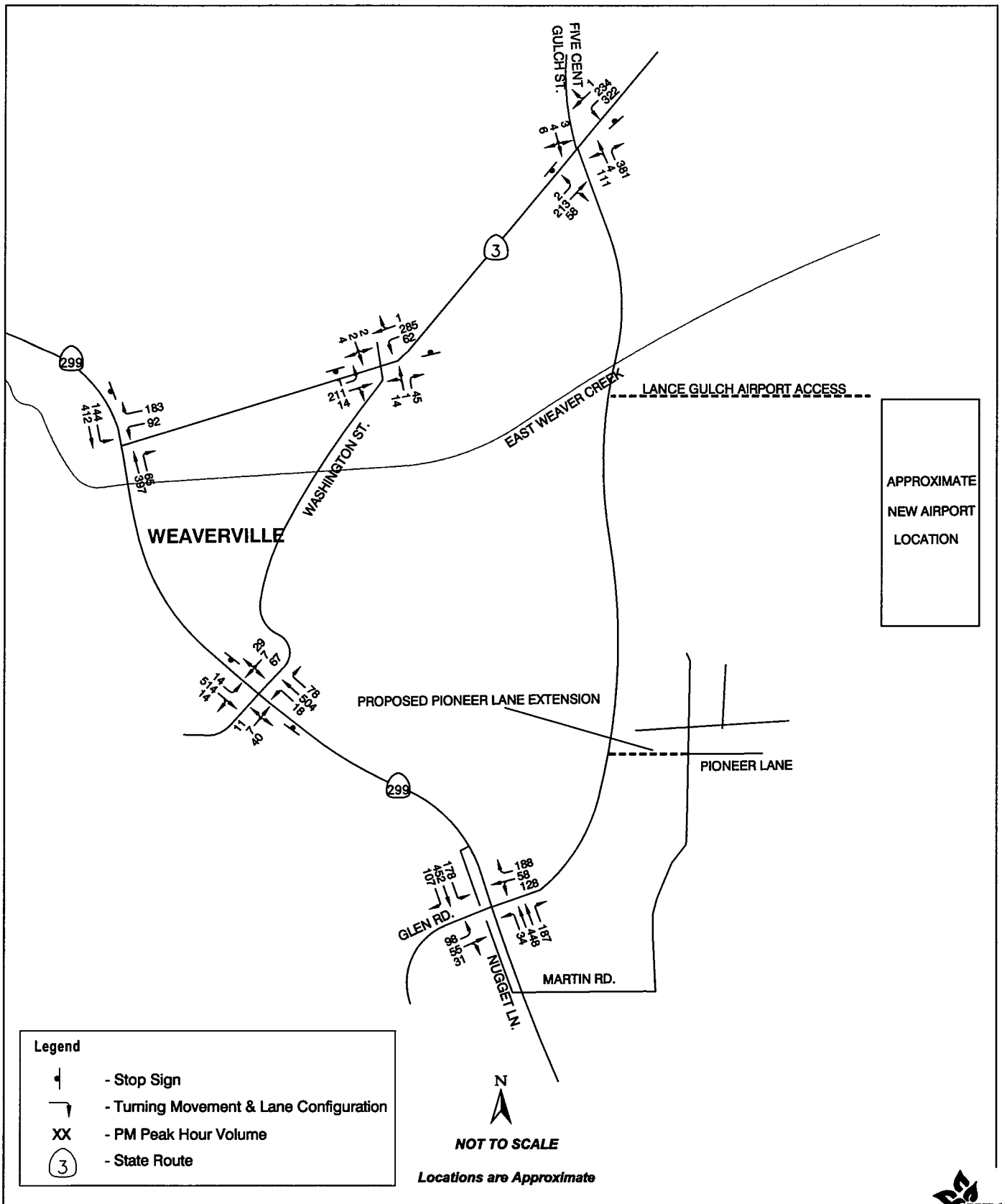
- The intersection of SR 3 with Five Cent Gulch drops from LOS A to B when adding airport traffic.
- The SR 299/SR 3 intersection drops from LOS B to C.
- All other intersections have no overall LOS change.

*Martin Road Airport Access Road*

- The SR 299/SR 3 intersection drops from LOS B to C.
- The SR 299/Washington Street intersection drops from LOS A to B.
- All other intersections have no overall LOS change.

**Table 3.18-8 - Cumulative P.M. Peak Hour Intersection LOS (Lance Gulch Access)**

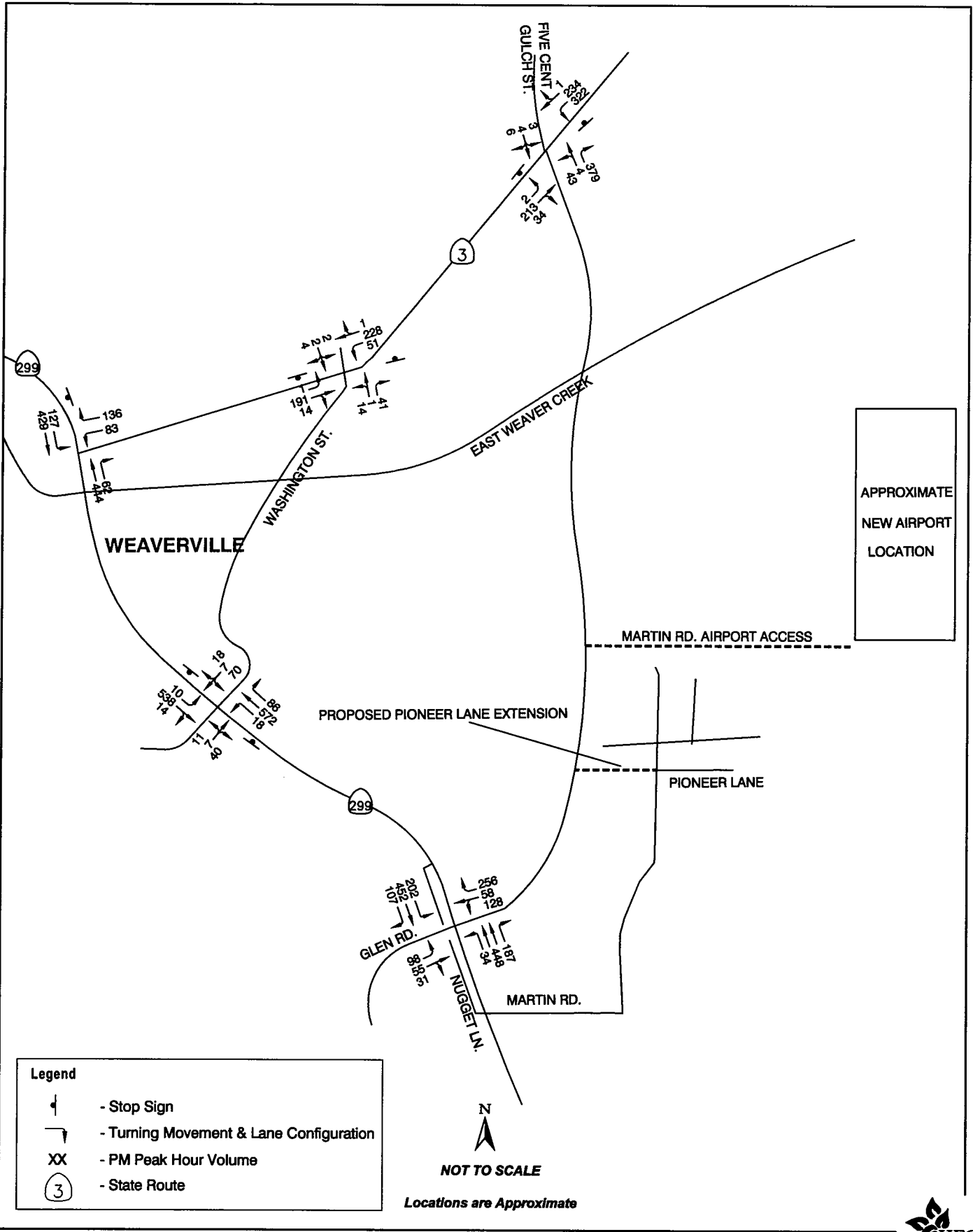
Location	Control	Delay (seconds)	LOS
<b>1. SR 3 (N/S)/Five Cent Gulch (E/W)</b>	<b>Unsignalized</b>	<b>9.3<sup>1</sup></b>	<b>B<sup>1</sup></b>
Eastbound Left/Through/Right		21.0	D
Westbound Left/Through		67.6	F
Westbound Right		7.5	B
Northbound Left		3.0	A
Southbound Left		4.9	A
<b>2. SR 3 (N/S)/Washington Street (E/W)</b>	<b>Unsignalized</b>	<b>1.0<sup>1</sup></b>	<b>A<sup>1</sup></b>
Eastbound Left/Through/Right		8.3	B
Westbound Left/Through		12.4	C
Westbound Right		4.2	A
Northbound Left		3.5	A
Southbound Left		3.4	A
<b>3. SR 299 (E/W)/SR 3 (N/S)</b>	<b>Unsignalized</b>	<b>13.5<sup>1</sup></b>	<b>C<sup>1</sup></b>
Southbound Left / Southbound Right		164	F
Southbound Right		8.2	B
Eastbound Left		6.2	B
<b>4. SR 299 (E/W)/Washington Street (N/S)</b>	<b>Unsignalized</b>	<b>4.6<sup>1</sup></b>	<b>A<sup>1</sup></b>
Northbound Left/Through/Right		14.0	C
Southbound Left/Through/Right		49.0	F
Eastbound Left		5.0	A
Westbound Left		4.7	A
<b>5. SR 299 (E/W)/Glen Road (N/S) - Sub-Alt A &amp; C (Sub-Alt B)</b>	<b>Unsig./Sig</b>	<b>52.4<sup>1</sup> / 26.5<sup>1</sup> (24.4<sup>1</sup>)</b>	<b>F<sup>1</sup> / C<sup>1</sup> (C<sup>1</sup>)</b>
Northbound Left/Through - Sub-Alt A & C (Northbound Left - Sub-Alt B)		250 / 42.6 (33.9)	F / D (C)
Northbound Right - Sub-Alt A & C (Northbound Through/Right - Sub-Alt B)		26.6 / 29.3 (32.3)	D / C (C)
Southbound Left/Through - Sub-Alt A & C (Southbound Left/Through - Alt B)		311 / 52.8 (49.8)	F / D (D)
Southbound Right - Sub-Alt A & C (Southbound Right - Sub-Alt B)		5.7 / 20.1 (19.2)	B / C (B)
Eastbound Left - Sub-Alt A & C (Eastbound Left - Alt B)		6.0 / 32.1 (30.7)	B / C (C)
Westbound Left - Sub-Alt A & C (Westbound Left - Sub-Alt B)		3.8 / 30.2 (29.2)	A / C (C)
1. Average intersection delay (all other LOS and delay values are for critical movements).			
Source: 1994 Highway Capacity Manual (unsignalized intersections) and 2000 HCM (signalized intersections).			



Source: Fehr & Peers Associates, Inc., 2002



**Figure 3.18-13**  
2020 Cumulative with Airport Access at Lance Gulch,  
Lane Configurations, and Peak-Hour Traffic Volumes  
East Connector Roadway Project



Source: Fehr & Peers Associates, Inc., 2002



**Figure 3.18-14**  
 2020 Cumulative with Airport Access at Martin Road,  
 Lane Configurations, and Peak-Hour Traffic Volumes  
 East Connector Roadway Project

Table 3.18-9 - Cumulative P.M. Peak Hour Intersection LOS (Martin Road Access)

Location	Control	Delay (seconds)	LOS
1 SR 3 (N/S)/Five Cent Gulch (E/W)	Unsignalized	4.7 <sup>1</sup>	A <sup>1</sup>
Eastbound Left/Through/Right		19.9	C
Westbound Left/Through		27.7	D
Westbound Right		7.2	B
Northbound Left		3.0	A
Southbound Left		4.6	A
2 SR 3 (N/S)/Washington Street (E/W)	Unsignalized	1.0 <sup>1</sup>	A <sup>1</sup>
Eastbound Left/Through/Right		6.9	B
Westbound Left/Through		10.1	C
Westbound Right		4.0	A
Northbound Left		3.1	A
Southbound Left		3.2	A
3 SR 299 (E/W)/SR 3 (N/S)	Unsignalized	11.7 <sup>1</sup>	C <sup>1</sup>
Southbound Left		158	F
Southbound Right		8.1	B
Eastbound Left		6.6	B
4 SR 299 (E/W)/Washington Street (N/S)	Unsignalized	5.9 <sup>1</sup>	B <sup>1</sup>
Northbound Left/Through/Right		16.0	C
Southbound Left/Through/Right		74.9	F
Eastbound Left		5.6	B
Westbound Left		4.8	A
5 SR 299 (E/W)/Glen Road (N/S) - Sub-Alt A & C (Sub-Alt B)	Unsig./Sig	69.7 <sup>1</sup> / 27.0 <sup>1</sup> (30.4 <sup>1</sup> )	F <sup>1</sup> / C <sup>1</sup> (C <sup>1</sup> )
Northbound Left/Through - Sub-Alt A & C (Northbound Left - Sub-Alt B)		456 / 43.0 (36.7)	F / D (D)
Northbound Right - Sub-Alt A & C (Northbound Through/Right - Sub-Alt B)		30.3 / 29.5 (34.7)	E / C (C)
Southbound Left/Through - Sub-Alt A & C (Southbound Left/Through - Alt B)		386 / 53.7 (54.1)	F / D (D)
Southbound Right - Sub-Alt A & C (Southbound Right - Sub-Alt B)		6.5 / 21.0 (23.3)	B / C (C)
Eastbound Left - Sub-Alt A & C (Eastbound Left - Alt B)		6.3 / 33.7 (35.5)	B / C (D)
Westbound Left - Sub-Alt A & C (Westbound Left - Sub-Alt B)		3.8 / 30.6 (24.0)	A / C (C)
1. Average intersection delay (all other LOS and delay values are for critical movements).			
Source: 1994 Highway Capacity Manual (unsignalized intersections) and 2000 HCM (signalized intersections).			



*INTERSECTION QUEUING*

The queuing of vehicles at the SR 299/Glen Road (East Connector) intersection was estimated for the “cumulative with project” conditions. **Table 3.18-10** displays the queuing results from Synchro-5 software that was also used to estimate delay and LOS.

**Figure 3.18-15** displays the recommended turning pocket lengths at the SR 299/Glen Road, SR 299/Burger King Driveway, and SR 299/Martin Road intersections based on 95th percentile queue, cumulative vehicle counts, and deceleration lane requirements.

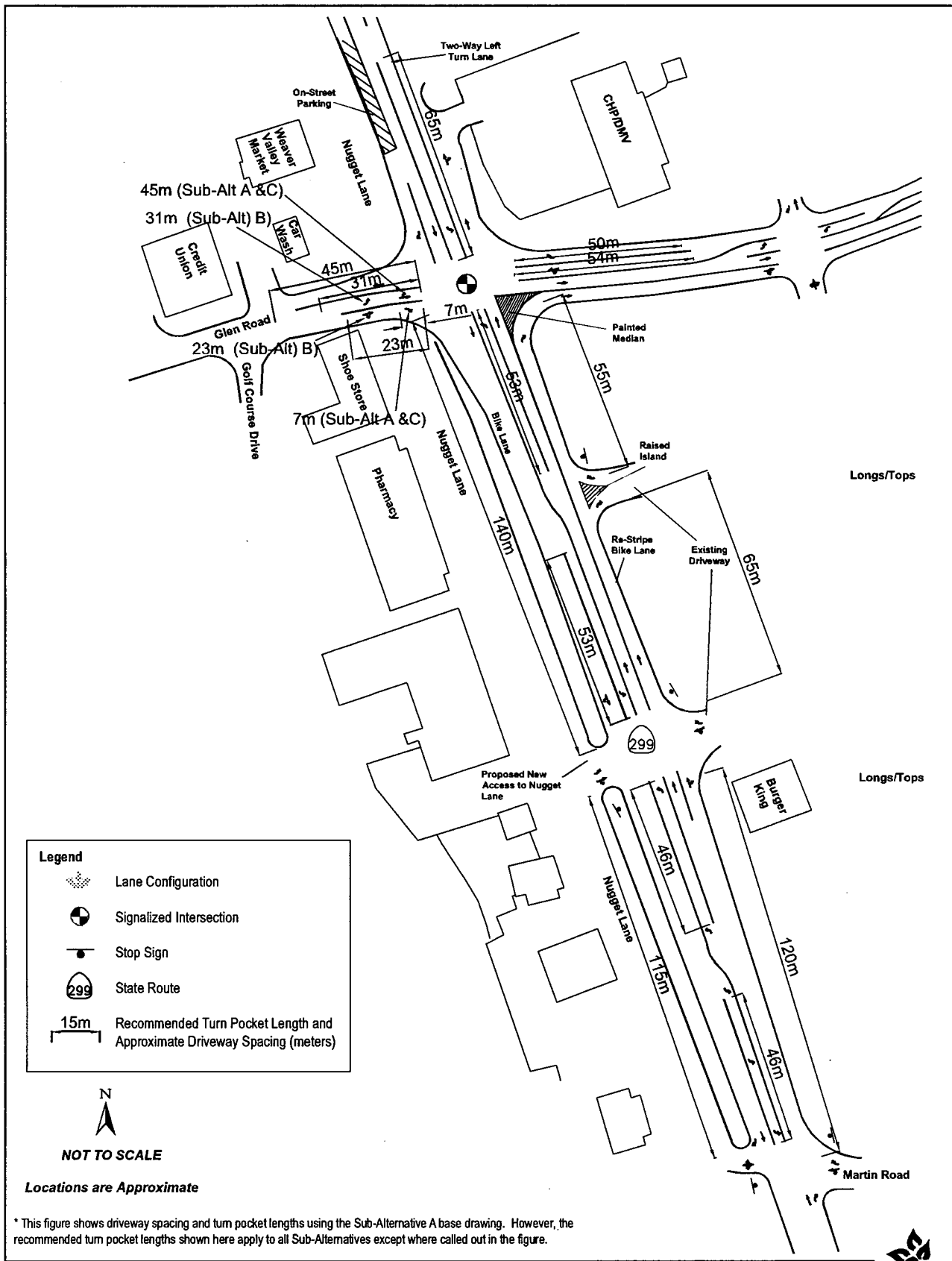
The shared northbound left/through in Sub-Alternatives A and C shows the 95th percentile queue to be 45 meters. This configuration may partially block the driveway on the north side of Glen Road at the Weaver Valley Market. The partial blocking of the driveway would only occasionally occur during p.m. peak hour and is considered insignificant.

**Traffic Impact-4** Traffic generated by the Weaverville Airport Project will contribute to congestion and intersection delays in Weaverville. The effects of the East Connector reduce the impact from the Airport Project, and therefore offset, rather than contribute to, this effect. Resulting LOS remains acceptable at the study intersections.

**Significance:** Less than significant (no mitigation required).

**Traffic Impact-5** Cumulative traffic generated by the Weaverville Airport Project will add to delays and queue lengths at the signalized intersection of Glen Road and SR 299. This may cause the Weaver Valley Market driveway to Glen Road to be partially blocked for short periods during the p.m. peak hour. Intersection LOS remains acceptable, with the proposed traffic signal.

**Significance:** Less than significant (no mitigation required).



Source: Fehr & Peers Associates, Inc., 2002

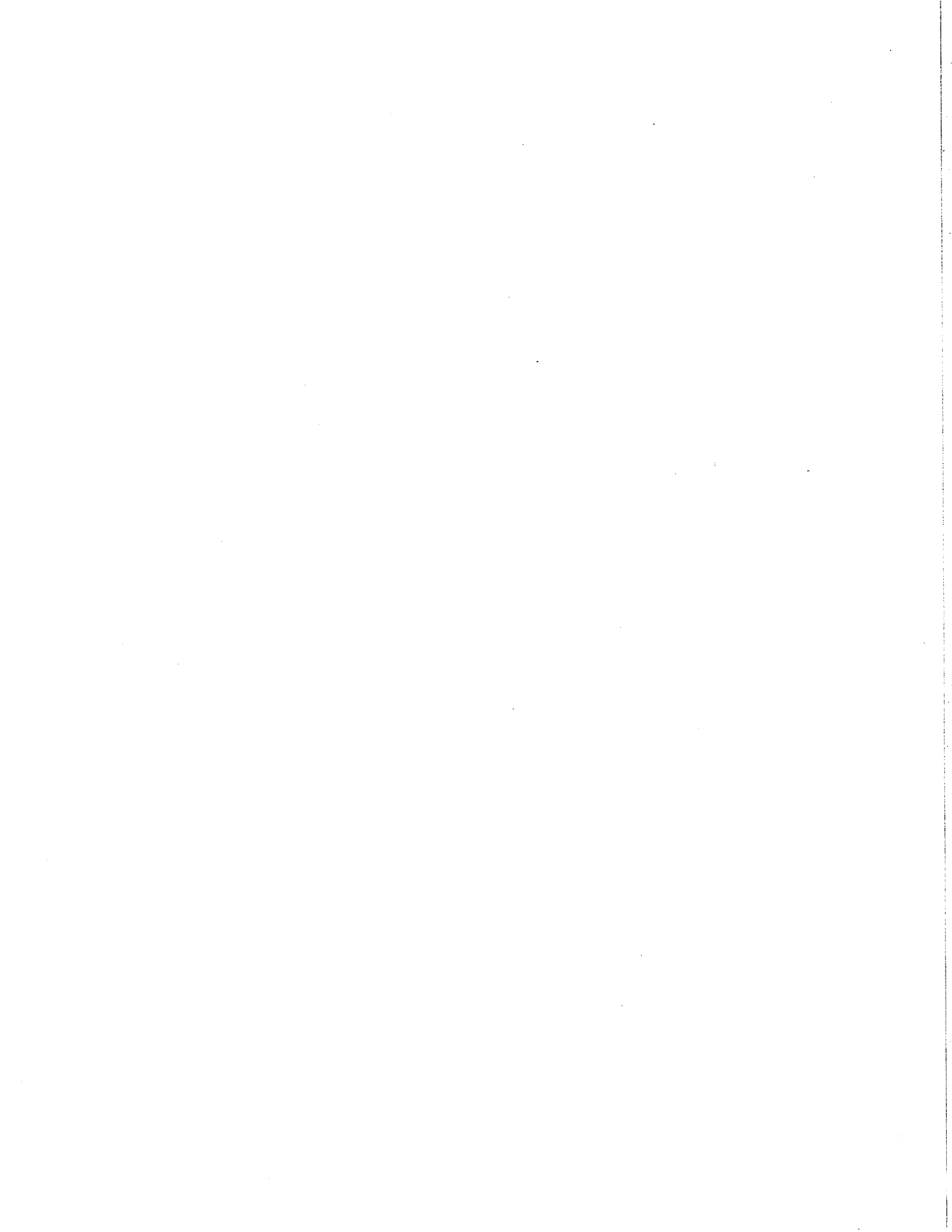


**Figure 3.18-15**  
 Recommended Turn Pocket Lengths, Approximate  
 Driveway Spacing Cumulative Conditions  
 Trinity East Connector Project

**Table 3.18-10 – Intersection P.M. Peak Hour Queuing at SR 299 / Glen Road (East Connector)**

Intersection Approach	Critical Movement*	95 <sup>th</sup> Percentile Queue (meters)	
		Sub-Alt. A & C	Sub-Alt. B
<b>SR 299/Glen Road (East Connector) With Lance Gulch Airport Access</b>			
<i>Northbound</i>	Left/Through	45m	N/A
	Right	7m	N/A
<i>Northbound (Sub-Alt b only)</i>	Left	N/A	31m
	Through/Right	N/A	23m
<i>Southbound</i>	Left/Through	54m	54m
	Right	12m	12m
<i>Eastbound</i>	Left	52m	52m
	Right	20m	20m
<i>Westbound</i>	Left	15m	15m
<b>SR 299/Glen Road (East Connector) With Martin Road Airport Access</b>			
<i>Northbound</i>	Left/Through	45m	N/A
	Right	7m	N/A
<i>Northbound (Sub-Alt b only)</i>	Left	N/A	31m
	Through/Right	N/A	23m
<i>Southbound</i>	Left/Through	54m	54m
	Right	14m	8m
<i>Eastbound</i>	Left	65m	64m
	Right	9m	22m
<i>Westbound</i>	Left	14m	13m

\*Movements were only included if a separate turning pocket was required and queue's were greater than zero.  
Source: 95<sup>th</sup> Percentile Queue from *Highway Capacity Manual 2000*.



## 3.19 VISUAL RESOURCES/AESTHETICS

### 3.19.1 AFFECTED ENVIRONMENT

This section describes the existing visual resources known to occur in the project area. Viewpoints along the proposed new roadway alignment are described and rated and the impact of the proposed road on these views is analyzed.

#### *VISUAL CHARACTER OF TRINITY COUNTY*

Trinity County offers a pleasing variety of steep slopes blanketed with rich forests and crisscrossed with swift cold streams draining to the west. A large percentage of the County is preserved as scenic land or recreation land by various public agencies (e.g., USFS, BLM, and state and county agencies). Over 70 percent of the County is controlled by the federal and state government. "Scenic land" is defined in Section 65561 of the Government Code of California as "open space land which possesses outstanding scenic qualities worthy of preservation." "Recreation land" is "any area of land or water designated on the state, or any regional or local open space plan, as open space land and which is actively used for recreation purposes and open to the public for such purposes with or without charge" (Trinity County, 1973).

Trinity County's natural beauty is often cited as a contributing factor to the high quality of life experienced by residents of the County, recreationists visiting the County, and small businesses seeking to relocate to the County. It is therefore important that the County develop in a manner that retains these characteristics (Trinity County, 2001). The importance of scenic lands to the County has been manifested by efforts to guard them through zoning, using the open space, scenic conservation district or recreational district zoning, or through conservation easements. A prime objective of the *Open Space Element* of the *Trinity County General Plan* is to "protect the scenic natural resources of Trinity County and preserve areas which are important as commercial natural resources for future generations." Another related prime objective is "to conserve, preserve, and maintain the scenic lands of Trinity County which include those precious mountains, trees, and water" (Trinity County, 1973).

A significant percentage of residents and non-residents alike experience some, if not most, of their scenic views of the Trinity County from the roads and highways. SR 299 is the primary east-west highway in Trinity County. It carries a variety of traffic including local (intra-regional), commuter, and commercial traffic, and it is an important inter-regional route (for both auto and truck traffic) between the Sacramento Valley and the North Coast of California. SR 299 is also heavily used by recreational traffic for access to and from the Trinity River, Trinity Alps Wilderness, Shasta-Trinity National Forest, and Six Rivers National Forest. SR 3 is the primary north-south link in the County and carries local (intra-county)

traffic, as well as recreational and commercial (primarily natural resource) traffic (Trinity County, 2001). Not only are these highways in themselves beautiful, but they traverse some of the most spectacularly scenic areas in the world. Much of the corridor through which these highways pass is guarded by zoning regulations, such as the Scenic Conservation District and the Recreation District. These districts regulate the placement of structures bordering on public and private roads so that the beauty and rural character will not be permanently destroyed and so that areas of unusual scenic beauty in Trinity County will be preserved (Trinity County, 1973).

The 1973 Open Space and Conservation Elements of the Trinity County General Plan recommended that the entire length of SR 299 in Trinity County and SR 3 from Weaverville north to the Siskiyou County line be considered eligible for official scenic highway designation (Trinity County, 1973). In 1974, the County adopted a Scenic Highways Element of the Trinity County General Plan and recommended that no highways be considered for Scenic Highway status. In 1986, the Scenic Highways Element was incorporated into the Trinity County Regional Transportation Plan and County Scenic Roadways were proposed that were less restrictive than official Scenic Highway status. A 50-foot-wide Scenic-Conservation (SC) overlay zone is assigned to designated County Scenic Roadways. To date, only four roads have been so designated: Trinity Dam Boulevard (Road 105), Rush Creek Road (Road 204), Canyon Creek Road (Road 401), and Dredger Camp Road (Road 412). None of these roads are within the project area viewshed. The Circulation Element of the General Plan and Regional Transportation Plan contain additional objectives and policies regarding the Scenic Roadway program (see *Planning Document Goals, Objectives, and Policies* below) and identify 10 additional County roads that are eligible for designation as County Scenic Roads, none of which is in the project viewshed, and all of which are outside Weaverville.

In 1990, the U.S. Forest Service adopted a National Scenic Byway system. In 1992, the California State Legislature passed AB 126, renaming SR 299 from Redding to Arcata (formerly the "Trinity Highway") the "Trinity Scenic Byway." SR 3 from Weaverville to the north has also been designated as a Trinity Heritage Scenic Byway. One other Forest Service road and four county roads have received the same designation to date (Trinity County, 2001):

- Rainer Road (USFS Road 35N23Y)
- Rush Creek Road (County Road 204)
- Trinity Dam Blvd (County Road 106)
- Wildwood Road (County Road 302)
- Guy Covington Dr (County Road 160)

#### *VISUAL CHARACTER OF THE PROJECT AREA*

Weaverville lies nestled at the base of the Trinity Alps, in the northeast-central portion of Trinity County, approximately 42 miles west of Redding, California. The Weaverville area can be characterized as

mountainous with the prevailing landscape consisting of moderate to steep hillsides and ridges vegetated with a variable mosaic of coniferous forest, oak woodlands and brush. To the north of Weaverville, Glenison Gap, Rocky Point, Weaver Bally, Monument Peak, and the forested slopes below these peaks are significant focal points. To the south and west, Timber Ridge and Oregon Mountain dominate the view. Views to the east are framed by Musser Ridge, with the higher Brown's Mountain in the background. Vegetation cover varies throughout the area, based on exposure, elevation, steepness of slopes, and soils. Musser Hill in the east rises to 3,121 feet above mean sea level (msl), Oregon Mountain to the west reaches 2,888 feet above sea level, and Monument Peak further to the north reaches 7,771 feet above msl. Other peaks in the Shasta-Trinity National Forest and Trinity Alps Wilderness to the north and northwest may be seen from Weaverville on a clear day.

The Weaverville Basin is divided by a number of creeks. Weaverville straddles East Weaver Creek, which flows out of the mountains northwest of Weaverville and joins West Weaver Creek as it flows into Weaver Creek less than one mile south of SR 299/SR 3. East Weaver Creek and the Trinity River Lumber Company property east of the creek create a physical and visual barrier between the east and west sides of Weaverville. Weaver Creek runs roughly south along SR 299/SR 3 to Douglas City, where the highways split and Weaver Creek joins the Trinity River. East and West Weaver Creeks are sources for domestic water and, with their riparian vegetation, are an important natural scenic resource in the community.

East Weaver Creek from 100 feet upstream of Brown's Ranch Road to 100 feet downstream of the SR 299 bridge is designated as a local flood protection project, constructed by ACOE in 1963. The flood control facility consists of a graded trapezoidal channel with levees on both banks. Trinity County is responsible for maintaining the channel, including keeping it "clear of debris, weeds, and wild growth" (ACOE, 1966). The County uses hand crews to trim and cut riparian vegetation in 100-foot sections on alternating banks each fall (October-December) in the section of East Weaver Creek between the Brown's Ranch Road bridge and the SR 299 bridge. The *Weaverville Community Plan* notes that further culverting or channelizing East Weaver Creek would radically alter the viewsheds of individual neighborhoods and the overall community and proposes that the creek and its riparian areas be preserved. The *Community Plan* also notes the recreational, aesthetic, and historical value of the community's network of old mining and other trails and proposes to recognize and protect these trails (Trinity County, 1990).

The Weaverville Basin is accessed via SR 299 or SR 3 and the views along these access routes are important since travelers into the area get their first visual impressions along these corridors. As noted above, both highways are designated Scenic Byways and are heavily used for recreational travel (Trinity County, 2001). Weaverville's commercial districts are also centered along SR 299 and SR 3. Businesses along the highway routes include a mix of retail stores, restaurants, light industry, and public services.

The Trinity River Lumber Mill is visible on the north side of SR 299 within the central portion of Weaverville and dominates much of Weaverville's developed landscape. The Trinity Plaza Shopping Center, also on the north side of SR 299 in Weaverville's southeast quadrant is another visually prominent feature in the community.

The historic downtown district, along SR 299 in Weaverville's northwest quadrant, is distinctive and gives substantial charm to the community. The downtown district is the visual hub of Weaverville and offers a number of attractions to visitors. The historic Joss House, the Jake Jackson Historical Park and Museum, and the Highland Art Center are all located within a very short walking distance and comprise a distinctive Community Cultural Center (Trinity County, 1990). Residences are clustered around the SR 299/SR 3 junction in Weaverville and creep into the hills on all sides of the community. Weaverville has a rural, small-town atmosphere with goals to preserve this feeling (Trinity County, 1990).

In general, human activities have successfully blended with the "natural" landscape of the project area. Maintaining the scenic quality of the area is economically and aesthetically desirable. As noted in the *Weaverville Community Plan*, road building, logging, and other activities on resources lands hidden from view can take place with minimal noticeable visual impacts. Even on slopes visible from the community, vegetation retention, obstacles (such as spur ridges), and topography can be used to minimize the visibility of such activities. Within these "shadowed" areas, management goals do not have to conflict with visual objectives (Trinity County, 1990).

#### *VISUAL CHARACTER OF THE PROPOSED EAST CONNECTOR ROADWAY ALIGNMENT*

Most of the proposed alignment is through undeveloped and forested areas, with approximately 60 percent in ponderosa pine or foothill pine forest and 5 percent comprising stream habitat and riparian forest. Developed areas of the project comprise the remaining 35 percent of the project site, as well as most of the surrounding areas. These biological communities are described in detail in the *Natural Environmental Study (NES)* report for the East Connector Roadway project (J & S 2002b) available for review at the TCDOT.

Commercial development, including a shopping center, other retail and office buildings, marks both ends of the proposed roadway alignment where it intersects SR 299 and SR 3. Most of the alignment traverses through an unused portion of the Trinity River Lumber Mill Property. The mill operates adjacent to the west side of the East Connector, from behind the Trinity Plaza Shopping Center to Brown's Ranch Road. This portion of the alignment is bordered to the east by residential development situated on top of a bluff that varies between 15 to 35 feet above the East Connector alignment. Lance Gulch flows along the base of the bluff through the northern half of this portion of the alignment.



North of Brown's Ranch Road, the East Connector alignment passes in close proximity to the Golden Age Senior Center. Alternative 1 passes in front of the center on the existing Brown's Ranch Road alignment. Alternative 2 passes behind the center, through Ponderosa Pine forest between the center and an ephemeral drainage channel at the base of the bluff, but is largely screened from view by forest, topography, and center outbuildings. The Alternative 1 alignment is partially visible from the Weaver Creek Senior Apartments and Two Creeks Mobile Home Park on Brown's Ranch Road. The alignment is largely screened from view from residences located further to the east on Brown's Ranch Road and from residences on Martin Road by large pine and fir trees, and by topography.

The project is not located in a Wild and Scenic River corridor and there are no unique or visually outstanding natural or manmade features within the project area. Scenic resources around Weaverville have not been formally classified; however, the project area landscape would generally be described as "common." That is, both its natural and manmade elements are prevalent and relatively uniform in the analysis area.

As noted above, SR 299 and SR 3 from Weaverville north are designated Scenic Byways. The proposed roadway project would be partially visible from portions of both highways. Although there are no special development requirements or restrictions associated with the Scenic Byway designation, aesthetic impacts of the project to SR 299 and SR 3 should be considered. The proposed vehicle bridge is largely screened from view from SR 3 by large pine and fir trees that will be retained south of the intersection of the East Connector Roadway and SR 3. Views of much of the alignment from SR 299 and SR 3 are largely obscured by the surrounding forested landscape and by land uses between the highways and the proposed alignment, such as the mill.

Both options for the proposed bicycle path and bridge are located within the flood control section of East Weaver Creek, described above. Maintenance requirements of the flood protection project reduce the aesthetic values of this particular segment of the creek. Although East Weaver Creek is neither unique as a visual resource nor preserved in its natural state, it remains an important visual resource to the local community. East Weaver Creek and the two optional bicycle bridge locations are visible from SR 299.

Views of the East Connector Roadway alignment from various viewpoints, roughly north to south, along the alignment, as well as views of the two proposed options for a pedestrian/bicycle bridge crossing of East Weaver Creek, are described below and are shown in the photographs provided in **Appendix G**. Viewpoint locations and the line of sight are indicated on the map in **Figure 3.19-1**. Numbers on the map correspond to the numbered photographs in **Appendix G**.

*VIEWS OF THE EAST CONNECTOR ROADWAY ALIGNMENT FROM SR 3*

*From Five Cent Gulch Street*

The view from Five Cent Gulch Street, across SR 3 is of the land parcel formerly owned by the BLM, and now owned by Trinity County (See **Appendix G**, Photo 1). Topography and the forest vegetation obscure the project site beyond the edge of SR 3. The County has plans to use the recently acquired parcel to expand the existing county maintenance station located directly to the north on SR 3. These plans include extensive grading and tree removal within the project corridor, exposing the north end of the East Connector to greater visibility from SR 3. These plans are unrelated to and independent of the proposed East Connector project. Proposed construction staging areas for the East Connector project would be located on either side of the roadway alignment and would also be visible from SR 3. South of the County's newly acquired parcel is a small medical center and beyond that is a small shopping strip ("Tops Mini Mart"; not shown in photo). South of the intersection of the East Connector and SR 3, the proposed road alignment and vehicle bridge is largely screened from SR 3 by commercial development and by the large pine and fir trees that will be retained in this area.

*North of Five Cent Gulch Street*

Approaching Weaverville from the north along SR 3, forest vegetation and topography shield the East Connector alignment from view (See **Appendix G**, Photo 2). The road alignment and two construction staging areas will become more visible once the County has executed its plans for grading and tree removal in this area.

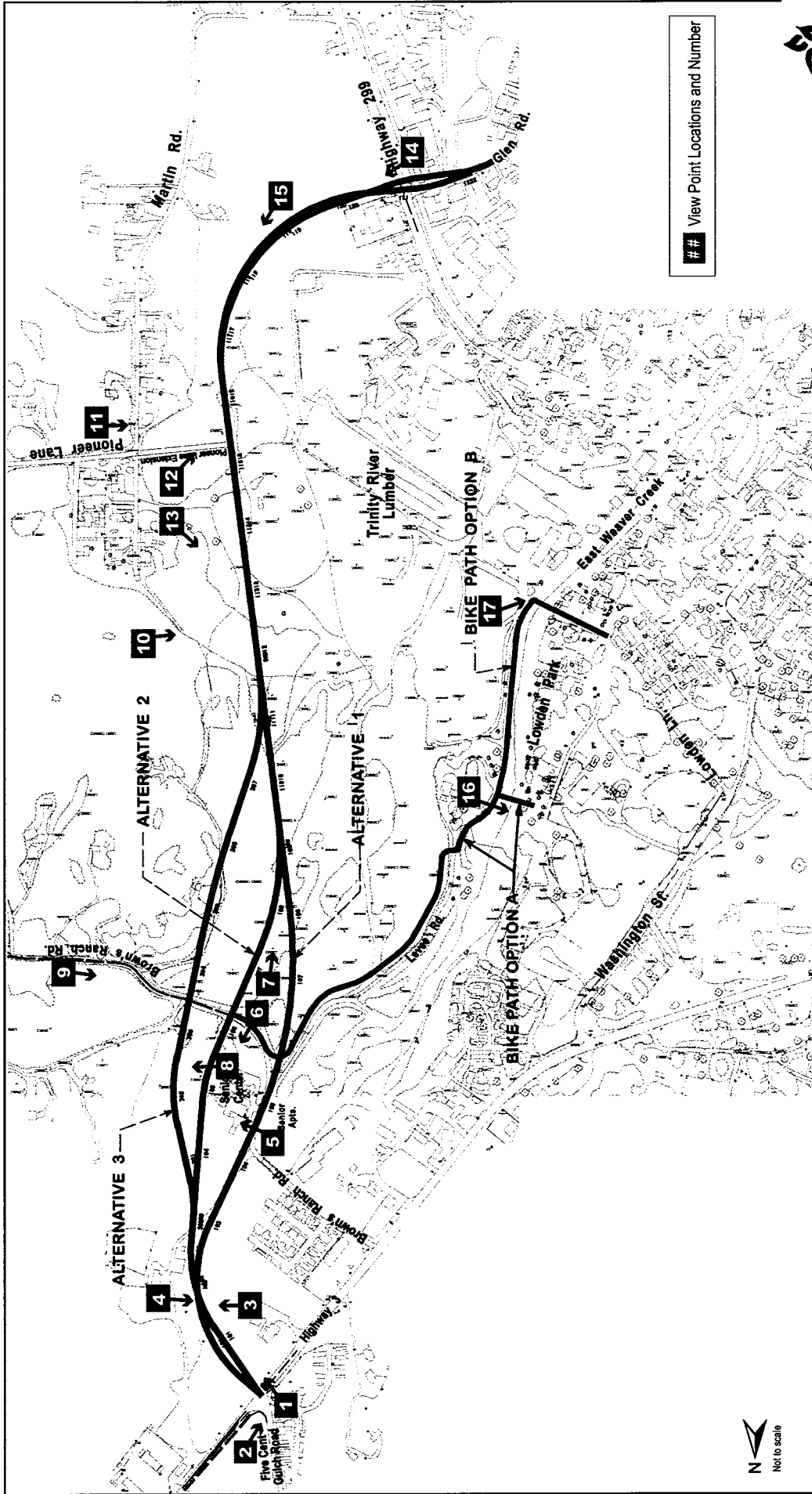
*VIEWS OF THE PROPOSED VEHICLE BRIDGE OVER EAST WEAVER CREEK*

*From the Medical Center on SR 3*

From the Medical Center, the view to the east towards the proposed vehicle bridge location is through a level area of partially cleared pine and fir forest, and beyond, the denser riparian vegetation marking the path of East Weaver Creek (See **Appendix G**, Photo 3). Buildings and equipment at the Pruett Logging Company yard on the opposite side of the creek are barely visible in the background. In the foreground is the location of one of the proposed project construction staging areas.

*From Pruett Logging Company Yard*

Looking west towards the location of the proposed vehicle bridge from the east side of the creek, the view is through moderately dense riparian vegetation lining the creek channel (See **Appendix G**, Photo 4). The roadway and bridge locations are partially screened by this vegetation, but remain visible in the background.



East Connector, Weaverville/EIR\_Graphics\Figure\_03\_19\_01.ai 12/12/02 CS

Source: Psomas



**Figure 3.19-1**  
Viewpoint Location Map  
East Connector Roadway Project

*VIEWS OF THE EAST CONNECTOR ROADWAY ALIGNMENT FROM BROWN'S RANCH ROAD*

*From the Weaver Creek Senior Apartments*

From the Weaver Creek Senior Apartments, the foreground view is of East Weaver Creek and the existing Brown's Ranch Road bridge over the creek. To the north, moderately dense riparian vegetation lining the creek screens the East Connector Roadway alignment from view (See **Appendix G**, Photo 5). The view is clear from the apartment complex and the Two Creeks Mobile Home Park across East Weaver Creek to the Golden Age Senior Center and Brown's Ranch Road (view not shown in photos). The Alternative 1 alignment is visible from this vantage point. The Alternative 2 alignment is not visible behind the senior center.

*Facing North from Brown's Ranch Road*

Facing north from Brown's Ranch Road towards the Golden Age Senior Center, the two proposed alternative alignments for the East Connector Roadway are at least partially visible (See **Appendix G**, Photo 6). The Alternative 2 alignment is partially screened by the dense pine forest east of the senior center. The peaks of Shasta-Trinity National Forest and the Trinity Alps Wilderness, north of Weaverville, form the background of this view.

*Facing South from the Senior Center*

The road alignment would be visible as it continues south onto Trinity River Lumber property and crosses a large cleared area adjacent to large composting mounds of wood waste (See **Appendix G**, Photo 7). Beyond the cleared area, forest vegetation at least partially obscures the roadway alignment. The Oregon Mountain ridge appears in the background.

*Facing East from the Senior Center*

The eastern edge of the Golden Age Senior Center is bordered by pine forest with a dense understory (See **Appendix G**, Photo 8). From here, the land slopes steeply to the east and visibility beyond the immediate line of trees is not possible. Although Alternative 2 of the East Connector Roadway would pass less than 50 feet east of the center, forest vegetation, topography, and outbuildings behind the center largely block the view of the road alignment.

*From Brown's Ranch Road East of the Senior Center*

From a roadside turnout uphill from the senior center (See **Appendix G**, Photo 9), the ground slopes steeply downwards and topography and forest vegetation obscure views beyond the edge of the slope. Oregon Mountain is visible in the background. Residential landowners along Brown's Ranch Road did not grant access to their properties for this study, but the view from this location is representative of views from adjacent residential properties along Brown's Ranch Road.

*VIEWS OF THE EAST CONNECTOR ROADWAY ALIGNMENT FROM MARTIN ROAD*

*From the North End of Martin Road*

Just beyond the north end of Martin Road, the foreground view is of a recently logged area that has begun to regenerate with scrub vegetation (See Appendix G, Photo 10). In the middleground is a sparse line of remnant ponderosa and foothill pines. The ground slopes steeply to the west toward the road alignment, which is largely screened from this viewpoint by the vegetation and topography. In the background is the Trinity River Lumber mill and, beyond that, Timber Ridge.

*From Pioneer Lane/Martin Road Intersection*

As shown from this viewpoint, which is representative of the view from many of the residences along Martin Road and Pioneer Lane, steep topography and pine/fir forest obscure views of the East Connector Roadway alignment (See Appendix G, Photo 11). Views from the western edge of residences along Martin Road could not be accessed; however, it appears that the topography and vegetation would largely block views of the roadway from these properties.

*From Northwest of Pioneer Lane/Martin Road Intersection*

The view is of the proposed East Connector Roadway alignment and one of the proposed construction staging areas (See Appendix G, Photos 12 and 13). The proposed roadway would cut straight across the middleground view here. In the background are the Trinity River Lumber mill and, beyond that, Timber Ridge.

*VIEWS OF THE EAST CONNECTOR ROADWAY ALIGNMENT FROM SR 299*

The proposed East Connector Roadway alignment would be visible as one enters into the southwest quadrant of Weaverville on SR 299. Views of the project site from SR 299, at the south end of the proposed project alignment, are dominated by commercial development and forested areas, with some industrial and residential uses (See Appendix G, Photos 14 and 15). Musser Hill ridge is in the background. The offices of the CHP and the Trinity Plaza Shopping Center straddle the proposed southern end of the alignment (See Appendix G, Photo 14). The view from the road alignment, across SR 299, is of retail and eating establishments along Nugget Lane. North of the CHP offices and shopping center, a moderately dense forest obscures the project alignment from view as it continues north along the east side of the lumber mill property (See Appendix G, Photo 15).

*VIEWS OF BICYCLE/PEDESTRIAN BRIDGE CROSSINGS FROM LEVEE ROAD*

*Option A Pedestrian/Bicycle Bridge*

This view shows the approximate location of the Option A pedestrian/bicycle bridge crossing (See Appendix G, Photo 16). In the foreground is East Weaver Creek with its constructed levees. In the middleground are a single-family residence and the fenced community gardens. In the background is the

adjacent Lowden Park, with the Trinity Alps just visible beyond the park. On the west side of the creek, the proposed bicycle trail would continue along the north edge of the private property shown in the photo. There are several mature pines along the edge of the community garden fence, adjacent to the proposed pathway.

### *Option B Pedestrian/Bicycle Bridge*

This southward-facing view has Levee Road and East Weaver Creek in the foreground, with the Trinity River Lumber mill and Weaverville CSD yard in the middleground on the east and west sides of the creek, respectively. In the background is the Oregon Mountain ridgeline. The Option B pedestrian/bicycle bridge crossing is located at the bend in the creek, directly opposite the CSD property (See Appendix G, Photo 17).

## *PLANNING DOCUMENT GOALS, OBJECTIVES, AND POLICIES*

### *Trinity County General Plan*

The *Open Space and Conservation Elements* of the *Trinity County General Plan* (Trinity County, 1973) address the treatment of scenic lands in the County and contain the following objectives and recommendations relevant to visual resources and the project:

- **Objective:** To conserve, preserve and maintain the scenic beauty of Trinity County.
- **Recommendations:**
  7. Adopt stringent regulations requiring the landscaping and maintenance of vegetation on cut and fill slopes as required by the appropriate agency.
  8. Control encroachment of cut and fill slopes into scenic easement areas or corridors along scenic highways, whether state or county.

The *Circulation Element* of the *Trinity County General Plan*, (Trinity County, 2002a) and the *Trinity County Regional Transportation Plan* (Trinity County, 2001) both describe the East Connector in detail under their descriptions of the existing transportation system as an anticipated project currently in the planning phase. In addition, the *Circulation Element* contains the following findings and goals that are relevant to the proposed project and aesthetics:

- **Finding 1:** Increasing seasonal traffic congestion in Weaverville creates potential safety issues and adverse impacts to the community.
- **Goal 1:** Provide for the long-range development of the county's roadway system that is consistent with adopted land use patterns, ensures the safe and efficient movement of the people and goods, minimizes impacts on the attractiveness of

the community, meets environmental and circulation objectives and implements funding strategies for construction, improvement, and maintenance of existing and new roadways.

The *Circulation Element* of the *Trinity County General Plan* (Trinity County, 2002a) proposes the following objectives and policies relevant to visual resources and the proposed project:

- **Objective 1.13:** As feasible under financial constraints, expand the transportation system to accommodate and attract new businesses and visitors.
  - **Policy 1.13.B:** Assess each project's contribution to the aesthetics of the area in which it is implemented and support those projects that enhance the visitor's experience in the region.
- **Objective 1.4:** Develop road systems which are compatible with the areas they serve.
- **Objective 1.5:** Utilize environmental protection/mitigation measures that consider environmental, social, and economic factors when designing, constructing and operating transportation facilities.
  - **Policy 1.5.E:** Ensure that social and economic issues are considered along with the natural and man made environments when environmental review is conducted for proposed projects.

The *Trinity County Regional Transportation Plan* (Trinity County, 2001) also contains the following goal relevant to visual resources and the proposed project:

- **Goal #5.2:** Preserve high quality viewsheds along State highways and County roads in an effort to improve visitor experience and economic enhancements.

In addition, the *Circulation Element* and *Regional Transportation Plan* both contain the following objectives and policies with respect to scenic roads:

- Achieve scenic roadway designation for appropriate State and County highways/roads (Objective 5.2.1 of the 2001 RTP, and Objective 1.15 of the 2002 Circulation Element)
- The County Scenic Roadways program will consist of specific right-of-way zoning per the County Scenic Conservation Overlay Zoning District. At the time that Community Plans or the General Plan Land Use Element are developed or updated, identify appropriate roads (or road segments) to be designated as County Scenic Roadways. Factors to consider include current viewshed condition, resource utilization needs and the

need for shaded fuel breaks (Policy 5.2.1.A of the Circ Element and Policy 1.15.A of the RTP).

The policies list 10 additional County roads that are eligible for designation as County Scenic Roads, none of which is in the project viewshed. All 10 eligible County roads are outside Weaverville.

### *Weaverville Community Plan*

The *Transportation* section of the *Weaverville Community Plan*, (Trinity County, 1990) contains the following goals relevant to the proposed project and aesthetic resources:

- **Goal #1:** To provide a streets and highways system which effectively, efficiently and safely serves the variety of transportation needs of the community.
- **Objective 1.2:** Plan for improved capacity and level of service of State Highway 299, which will not impact the historic nature of the downtown area. The Plan specifically rejects the implementation of four traffic lanes through this area.
- **Goal #5:** To preserve the historic nature and rural atmosphere of the County.

In addition, the *Land Use and Community Design Element* of the *Weaverville Community Plan* (Trinity County, 1990) contains the following goals and objectives regarding visual resources relevant to the proposed project:

- **Goal #3:** To incorporate special provisions to protect and enhance the appearance of the community along State Highways 299 and 3.
- **Objective 3.1:** Encourage the undergrounding of overhead utilities, especially when such undergrounding can be accomplished in conjunction with road construction projects or other improvements.
- **Objective 3.2:** Encourage the planting of deciduous trees with bright fall foliage along highway frontages, similar to those trees in the "downtown" area, both to visually enhance these areas as well as to compensate for removal of on-site trees during development.

### 3.19.2 SIGNIFICANCE CRITERIA

Visual impacts consist of negative changes from existing to post-project landscape character. These changes are the result of introducing foreign elements of line, form, color and texture to the existing landscape. New sources of light and glare are also considered aesthetic impacts. The magnitude of the



impact is usually related to the relative scale of the change, to the sensitivity of the viewing population, and to exposure time. The distinctiveness of an existing landscape contributes to sensitivity and impact significance.

Visual impacts must be evaluated from community perspectives. For instance, nighttime light or glare created by development set in an urban or suburban environment might not generate the same impact it would in a rural community. Impacts to viewsheds can differ significantly from urban and suburban environments to rural areas where vistas may be mostly undisturbed.

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant visual impacts:

Would the project:

- Cause a substantial adverse effect on a scenic vista?
- Substantially damage scenic resources (such as trees, rock outcroppings, and historic buildings within a State Scenic Highway)?
- Substantially degrade the existing visual character or quality of the site and its surroundings?
- Create a new source of substantial light or glare that would adversely affect day or nighttime views of the area?

Evaluation of the East Connector Roadway project with respect to these CEQA criteria leads to the conclusion that the project would not have a significant visual impact. Nevertheless, measures such as the planting of trees to screen the roadway and the use of colors and textures that blend rather than contrast with the natural environment in constructing the vehicle and bike/pedestrian bridges, would serve to further minimize the visual impact of the project. Undergrounding of overhead utilities as part of this project will enhance views at the south end of the road corridor.

### 3.19.3 PERMANENT IMPACTS

#### *VISUAL QUALITY ASSESSMENT*

The assessment of the potential visual effects associated with the East Connector Roadway project was based on review of the following information: aerial and ground-level photographs of the project area, project drawings and design information, and field observations of the project site and surroundings. The method of assessment utilized for this project and all highway impact projects is standardized by measuring the area for its existing scenic quality by the following suitability ratings:

- **Vividness:** the extent to which the landscape is memorable. A vivid landscape makes an immediate and lasting impression on the viewer.
- **Intactness:** the integrity of visual order in the landscape and the extent to which the natural landscape is free from visual intrusions.
- **Unity:** the extent to which development is sensitive to and in visual harmony with the natural landscape.

Intactness is measured by the degree of visual intrusion within the natural landscape as follows:

- **Minor intrusions:** those that are either complementary to the landscape or are of recognized cultural or historical significance.
- **Moderate intrusions:** those that are integrated into the landscape and do not obstruct the views or destroy the natural landscape.
- **Major intrusions:** those that dominate the landscape by blocking out their features.

The Visual Quality Assessment was prepared for views of the proposed roadway from SR 3, Brown's Ranch Road, Martin Road, and SR 299. Views of the proposed pedestrian/bicycle bridge over East Weaver Creek were also assessed. Table 3.19-1 identifies the existing and future (with project) quality of area views.

**TABLE 3.19-1**  
**VISUAL QUALITY ASSESSMENT SUMMARY<sup>1</sup>**

Views	Photos	Vividness	Intactness	Unity	Ave.	Vividness	Intactness	Unity	Ave.
		Existing Visual Quality				Visual Quality with Project			
SR 3 (at Five Cent Gulch Road)	1,2	fair	fair	fair	fair	fair	fair	fair	fair
Brown's Ranch Road (near Senior Center)	5,6,7,8	good	good	good	good	good	fair/good	fair/good	fair/good
Martin Road - north end	10	fair/good	fair/good	fair/good	fair/good	fair/good	fair/good	fair/good	fair/good
Martin Road/Pioneer Lane intersection	11	good	good	good	good	good	good	good	good
West of Martin Road/Pioneer Lane intersection	12,13	fair/poor	fair/poor	fair/poor	fair/poor	fair/poor	fair/poor	fair/poor	fair/poor
SR 299(at Glen Road)	14,15	fair/poor	fair/poor	fair/poor	fair/poor	fair/poor	fair/poor	fair/poor	fair/poor
Pedestrian/bicycle bridge (Option A)	16	good	good	good	good	good	good	good	good
Pedestrian/bicycle bridge (Option B)	17	fair	fair	fair	fair	fair	fair	fair	fair

<sup>1</sup> Ratings: poor, fair, good, excellent

*IMPACTS COMMON TO ALL ALTERNATIVES*

The project would not create a scale or degree of change that appears as a substantial, obvious, and disharmonious modification of the overall scene within the project area. The project would not alter the quality of views along SR 299 and SR 3, both of which are designated State Scenic Byways.

The proposed project is consistent with existing plans and policies regarding visual resources and aesthetics, including the *Trinity County General Plan*, the *Trinity County Regional Transportation Plan*, and the *Weaverville Community Plan*. The project would contribute significantly to meeting the local government's goals of reducing the traffic congestion on Main Street (SR 299) and in the downtown area. This would help reach the goal of making the downtown area more visually attractive for retail business, professional offices, and service business. In addition, undergrounding of utilities is included in the East Connector project description (see Section 1.4.3), consistent with local plans and policies. The reduction in overhead utilities would slightly improve the views from SR 299 at the southern end of the proposed road alignment.

Since no street lighting is proposed along the East Connector, the project would not create additional nighttime lighting, except for the proposed new traffic signal light at the intersection of SR 299, Glen Road and the East Connector, which will be located in an area that is already lit by streetlights and exterior lighting and illuminated signs at the Trinity Plaza Shopping Center. Headlights of night time traffic along the East Connector would bring a new source of light to the area along the project alignment. However, most residences are 15 to 35 feet above the elevation of the road, so headlights will not shine directly into windows. The only residences that are at the same elevation as the East Connector Roadway are separated from the alignment by East Weaver Creek and intervening vegetation.

As shown in **Table 3.19-1**, the proposed new roadway and increase in traffic would cause visual quality along Brown's Ranch Road, near the Golden Age Senior Center and Weaver Creek Apartments, to deteriorate from an overall rating of "good" to an overall rating of "fair/good." Elsewhere along the project route, the changes in visual quality would be slight, and the area would experience little visual disruption as a result of the project. Changes in visual quality along the project route are described in additional detail below.

The existing quality of views from SR 3, a State Scenic Byway, are considered "fair" and visual quality ratings along SR 3 would not be altered by the proposed project. Although views of the mountains in the distance are attractive and memorable, the near landscape may be described as common, with commercial development dominating the roadside entering Weaverville. The East Connector Roadway would not be inconsistent with the existing landscape and would not be visually intrusive. Trees already provide screening along SR 3. Use of appropriate tree screening along the East Connector would essentially preserve the existing views along SR 3. The location of the proposed vehicle bridge over East Weaver

Creek, at the north end of the East Connector alignment, is barely visible from SR 3 with existing trees and commercial development blocking views, and would not be visible if additional trees and shrubs were planted along the proposed roadway.

The views from SR 299 near the southern end of the project are of commercial and industrial development. Although SR 299 is listed a State Scenic Byway, the foreground view from SR 299 at this location is not distinctive or memorable, has little visual integrity, and contains development that is not particularly in harmony with the natural landscape, which is comprised of mixed conifer forest in the middleground and mountains in the background. Overall, the view has been rated "fair" to "poor." The East Connector, including the proposed traffic signal, would be consistent with the existing view and would not cause deterioration of visual quality here.

The existing quality of project area views from residences along Martin Road and Pioneer Lane range from "good" to "fair/poor." Views to the west from most of the residences along Martin Road and Pioneer Lane are of mixed conifer forest with Timber Ridge and Oregon Mountain in the background. Topography and vegetation shield most of these properties from views of the lumber mill and commercial areas further to the west. Although the view from this area is not particularly distinctive, it has good integrity, and the low-density residential development appears to be in harmony with the natural environment. The quality of views from residences in the area along Martin Road and Pioneer Lane would not be significantly impacted since in most cases, these views are screened by existing forest vegetation, or overlook the alignment location some 30 feet below them.

Several properties along Martin Road extend further to the west and downhill. For those properties, existing views are of the lumber mill and commercial areas along SR 299 and are already rated as "fair" to "poor" (see Section 319.1). The East Connector project would not cause deterioration in the visual quality of this already developed landscape. The planting of a tree/shrub screen between the East Connector and Trinity River Lumber mill would enhance the views in this area.

As noted in the Project Description (Section 1.4.3), a 2-acre parcel, APN 24-210-1000, at the end of Martin Road, owned by Trinity River Lumber, would be rezoned from industrial to residential (R-1A 1/2-acre minimum) as part of the project. The property is located in this area of "fair" to "poor" rated views of the mill and commercial developments, and is currently vacant. Therefore, the project could have the indirect effect of causing up to four residences to be built in the existing residential area of Martin Road, overlooking the mill and East Connector. The development of four residences would be consistent with surrounding land uses, and would probably be more desirable, from an aesthetic point of view, than development of the industrial use for which it is currently zoned.

The existing quality of project area views from Brown's Ranch Road are good, dominated by East Weaver Creek and conifer and riparian forests. Although the views in this wooded area are not particularly distinctive for the area, they are attractive, free from major visual intrusions and fairly representative of the natural landscape. The East Connector project would cause deterioration in the visual quality in this area from "good" to "fair/good". Additional truck and other vehicle traffic that would result from either road alignment alternative would also have a visual impact on this area.

The quality of views from the Golden Age Senior Center, Weaver Creek Senior Apartments, and Two Creeks Mobile Home Park along Brown's Ranch Road may be negatively impacted by the project to varying degrees, depending upon the alternative selected. However, this impact is considered less than significant for all alternatives.

#### *ALTERNATIVE 1*

Alternative 1 uses the existing Brown's Ranch Road alignment, so the visual impact at this location would be minor, from the existing, narrow two-lane road to a slightly wider two-lane road with fresh pavement and striping. The impact on the senior apartments and mobile park is further reduced by existing trees along East Weaver Creek, outside of the levees and the project cut and fill limits, which will not be disturbed.

#### *ALTERNATIVE 2*

Alternative 2 would result in a greater visual change, by converting ponderosa pine forest into a new road behind the senior center, while leaving the existing Brown's Ranch Road in front of the center. This alignment would not be visible from the senior apartments or mobile park. It would be closer to residences to the east on Brown's Ranch Road, but would not be prominent in their viewshed, because these residences are on a bluff, approximately 35 feet above the alignment, which would be close to the base of the bluff. The most significant change resulting from Alternative 2 would be to the back of the senior center. Most activities at the center are indoors. The views from the rear windows of the center are blocked by outbuildings in the center's back yard. The Alternative 2 alignment is also partially screened from the center by topography and pine, fir and deciduous trees. Existing trees that are not within the cut and fill limits would remain.

#### *BICYCLE/PEDESTRIAN BRIDGE*

The views from Levee Road at the two options for a pedestrian/bicycle bridge crossing of East Weaver Creek (Options A and B) are rated from "good" to "fair." The views along Levee Road of the creek and surrounding riparian forest and views across to Lowden Park are attractive and memorable. Areas along the creek that have recently been cut and cleared for required flood control maintenance are less

attractive. The visual integrity and unity is good at the north end of Levee Road (near Option A), but deteriorates toward the south end of Levee Road (approaching Option B) as the lumber mill, Weaverville CSD yard, automotive storage, and residential areas dominate views from East Weaver Creek. A pedestrian/bicycle bridge would not negatively impact the quality of views along Levee Road and would be consistent with the existing setting. The prefabricated bridge for the pedestrian crossing is available in a variety of appealing designs. Two of these designs were priced and evaluated in the PSR and can be seen in **Appendix G**.

Vegetation clearing along Levee Road that would be required to construct the proposed path would cause a temporary negative impact. In the long term, the proposed bridge and trail is most likely to enhance the aesthetic effect of the creek and levee road, creating a park-like setting.

**Visual Impact-1** Although most of the alignment is at least partially screened from views from SR 299 and SR 3 by existing vegetation, topography and development, the project would result in a minor loss of visual quality at locations adjacent to the new roadway.

**Significance:** Less than significant (no mitigation required). Although no mitigation is required for this impact, the County proposes mitigation (**Visual Mitigation-1**) to further reduce the visual impacts of the project.

**Visual Mitigation-1** Following project construction, the County will plant a screen of fast-growing evergreen trees and shrubs such as cypress, cedar and ceanothus between the East Connector and the Trinity River Lumber Company mill, and at other locations to screen or break up views of the roadway from adjacent land uses. Trees will only be planted outside the creek levees where space and solar exposure permit. Species that are fast growing and low maintenance and that have dense lower branches and foliage will be selected to establish a good screen as quickly as possible.

The trees will not necessarily block all views of the roadway, which is not inconsistent with existing views along much of the road corridor and will not cause significant visual impacts at adjacent residences. Rather, the County will aim to use trees to improve the visual corridor along the new road. Tree plantings would also help break up views of the roadway and the lumber mill from viewpoints east and west of the mill, such as Martin Road, East Weaver Creek, and SR 299.

**Visual Impact-2** The proposed bridge crossings of East Weaver Creek could impact visual resources in the area, such as East Weaver Creek.

**Significance:** Significant, but mitigated (**Visual Mitigation-2**)

**Visual Mitigation-2** The proposed roadway and bicycle/pedestrian bridges will be designed and built using colors and textures that blend, rather than contrast, with the surrounding natural environment.

**Post-mitigation Significance:** Less than significant

The prefabricated bridge for the pedestrian crossing is available in a variety of appealing designs. Two of these designs were priced and evaluated in the PSR and can be seen in **Appendix G**.

**Visual Impact-3** The project would result in indirect visual/aesthetic effects if a parcel rezoning, as proposed in conjunction with this project, leads to development of the parcel for residential uses. However, the rezoning from industrial to residential would result in potential for less aesthetically damaging residential uses, rather than industrial uses.

**Significance:** Less than significant (no mitigation required)

### **3.19.4 TEMPORARY (CONSTRUCTION PHASE) IMPACTS**

Some temporary visual impacts to land uses near the roadway, bridge, and bike path would result from tree and riparian vegetation removal prior to project construction. During site preparation, all shrubs and trees within the cut and fill limits will be cleared. This will result in a strip of 100 to 175 feet wide that is temporarily devoid of vegetation. Due to its short duration, this impact is considered less than significant.

**Visual Impact-4** Removal of existing trees and riparian vegetation in the project corridor prior to project construction would have a temporary visual effect on nearby land uses.

**Significance:** Less than significant (no mitigation required). Although no mitigation is required for this impact, the County proposes mitigation (**Visual Mitigation-1**) to minimize the visual impacts of the project.

**Visual Mitigation-1** Plant a screen of fast-growing evergreen trees and shrubs such as cypress, cedar and ceanothus between the East Connector and the Trinity River Lumber Company mill, and wherever needed at locations outside the creek levees where space and solar exposure permit (see discussion of **Visual Mitigation-1** above).

**Post-mitigation Significance:** Less than significant

### 3.19.5 CUMULATIVE IMPACTS

Grading and tree and vegetation clearing may have significant impacts on visual resources in the viewsheds of the proposed West Connector Roadway and new Weaverville Airport. In particular, the Draft EIR for the new Weaverville Airport acknowledges that significant and unavoidable visual impacts will result. The new airport would be at the top of Musser Ridge, between SR 299 and Brown's Mountain. It would be visible from several points along SR 299, from approximately East Weaver Creek through the Trinity Plaza Shopping Center (Trinity County and Federal Aviation Administration, 2002).

The East Connector would share this viewshed with the new airport. However, the East Connector would be at approximately the same elevation as the viewpoints along SR 299. The lumber mill, shopping center, and existing trees along East Weaver Creek screen the East Connector from view at most of these locations. The proposed landscaping between the East Connector and the mill (Visual Mitigation-1, above) would further screen views of the East Connector from these viewpoints. Therefore, the East Connector would not contribute significantly to the visual impacts of the airport project.

The replacement of non-roaded areas with roadways, such as the East and West Connectors, may have an overall impact on the scenic qualities of portions of the Weaverville community. However, the viewshed of the West Connector does not overlap with the viewsheds of the East Connector and airport projects. Therefore, the visual impacts of the two roadway projects will not be cumulative.

Temporary cumulative visual/aesthetic effects could result from the removal of existing trees along the proposed bike path and riparian vegetation for the bike bridge, in combination with ongoing removal of riparian vegetation along the flood control segment of the East Weaver Creek and at the SR 299 bridge over East Weaver Creek in conjunction with Caltrans' bridge widening project. This would result in removal of vegetation on both sides of Levee Road, and additional vegetation at the proposed bike bridge and existing SR 299 bridge. However, existing vegetation along the proposed bike path/bridge and SR 299 bridge is very sparse due to vegetation removal for flood control. In addition, vegetation along the bike path has been disturbed by industrial activities at the adjacent Yingling Construction yard and Trinity River Lumber mill. Mitigation to minimize the potentially significant visual impact from cumulative removal of riparian vegetation from these three projects along East Weaver Creek, proposed in Section 3.8, *Vegetation, Invasive Species and Wildlife*, is repeated below.

**Visual Impact 5** Temporary cumulative visual/aesthetic effects would result from the removal of existing trees and riparian vegetation along the proposed bike path and bike bridge, combined with removal of riparian vegetation within the adjacent flood



control maintenance segment of East Weaver Creek.

**Significance:** Significant, but mitigated

**Habitat Mitigation-6** The cumulative effects of vegetation removal will be minimized by timing vegetation removal for the proposed East Connector project to coincide with vegetation removal for flood control maintenance along East Weaver Creek. This will minimize the amount of vegetation that is removed and the duration of the disturbance and will help avoid tree removal during the nesting season. In the year the bicycle/pedestrian bridge is constructed, the vegetation removal for flood control will be adjusted to compensate for loss of vegetation from both sides of the creek for bridge construction, by leaving vegetation on both sides of the creek in the 100-foot sections upstream and downstream of the bicycle/pedestrian bridge.

**Post-mitigation Significance:** Less than significant

## **3.20 HISTORIC AND ARCHAEOLOGICAL RESOURCES**

### **3.20.1 AFFECTED ENVIRONMENT**

This section describes the existing cultural resources setting of the project area. The confidential Historic Properties Survey Report (HPSR), Archaeological Survey Report (ASR), Historic Resources Evaluation Report (HRER), and Historic Architectural Survey Report (HASR) for the proposed East Connector Roadway project, prepared by Jones & Stokes (J&S 2002a, d, e, f) are available at the Trinity County Department of Transportation in Weaverville for review by qualified individuals on an as-needed basis. These studies were conducted to determine whether properties which appear to meet the criteria for listing in the National Register of Historic Places (NRHP) or CEQA significance criteria exist within the proposed project's Area of Potential Effects (APE). Cultural resources studies have been submitted for review by the State Historic Preservation Office (SHPO) in accordance with Section 106 of the National Historic Preservation Act (NHPA). The Trinity County Planning Department, as CEQA Lead Agency, is responsible under Section 15064.5(a)(2)-(3) of CEQA for determining the significance of impacts on historical and unique archeological resources. The analysis in this EIR Section is done to fulfill this requirement.

#### *CULTURAL RESOURCES RESEARCH METHODS*

Because of the location of the proposed project and the historic resources in the APE, the contextual focus of archival research for the project was primarily the history of Weaverville and the East Weaver Creek region. Particular attention was given to the history of mining and logging and sawmill operations in and around the town of Weaverville.

All J&S cultural resources staff members involved in this study meet the Secretary of the Interior's standards (and Caltrans standards) for qualifications in archaeology, history, and architectural history.

#### *Records Search*

A records search of the proposed project area was conducted by the Northeast Information Center on June 29, 2001. The search area included the APE and a 0.5-mile radius around it. No properties within the project APE were found to be listed in, or previously determined eligible for, inclusion in the NRHP, the California Inventory of Historical Resources, or the California Historical Landmarks program.

Research for this project was conducted at various repositories within Weaverville and Sacramento. Repositories in Weaverville included the Trinity County Free Library, the Trinity County Historical Society, the J. J. "Jake" Jackson Memorial Museum and Research Center, the Trinity County assessor's office, and the Trinity County recorder's office. Additional research was conducted at the California State Library and the California State Mines and Geology Library in Sacramento.

### ***Intensive Archaeological Survey***

Nearly all the APE for the proposed project consists of private-property parcels, all of which were accessed during a pedestrian survey. The field survey of the APE was conducted systematically in 10-meter transects. Visibility ranged from excellent in open areas to poor in forested areas. Visibility between transects was occasionally obstructed by dense stands of manzanita and buck brush. The APE through the two parcels owned by the Trinity River Lumber Company was largely disturbed by blading and other lumber yard development.

Historic resources in the project APE were identified and recorded on July 17 and 18, 2001, by a historian and a historical archaeologist from J&S. California Department of Parks and Recreation (DPR) Primary Record forms were used to document identified resources in the current study area and are included in the HRER (J&S, 2002f).

### ***Architectural Survey***

All buildings and structures within the project APE were inventoried on July 17 and 18, 2001, by J&S architectural historians. The project APE includes 33 parcels with standing structures. Wherever accessible, buildings and structures on these parcels were photographed and their construction dates, as provided by the County Tax Assessor's Office, were verified visually during the field inventory. For buildings and structures more than 45 years old, data were collected to prepare DPR "Primary Record" and "Building, Structure, and Object" forms.

Although the field inventory was primarily conducted from the public right-of-way, two residences (not visible from the public right-of-way) could not be photographed or inspected because Trinity County was denied access to the parcels by the property owners. In both cases, the County Tax Assessor's information indicated that all buildings and structures on these two parcels were less than 45 years of age.

All properties less than 45 years of age were treated in accordance with the December 20, 1989, "Memorandum of Understanding (MOU) Regarding Evaluation of Post-1945 Buildings, Moved Pre-1945 Buildings, and Altered Pre-1945 Buildings [updated in 1997 to post-1950]." One property (the lumber mill) was constructed more than 45 years ago and thus required formal evaluation. This property was recorded through the use of photographs and written notes and was evaluated on the appropriate DPR forms, which are included in the HASR (J&S, 2002d).

## ***HISTORICAL BACKGROUND***

### ***Mining***

Encouraged by news of Major Pearson B. Reading's gold discovery on the Trinity River in 1848, miners began to arrive in the Weaverville Basin in 1849. The town of Weaverville was named for John Weaver, one of its first resident miners, and by the mid 1850s it boasted 22 stores, two banks, two drugstores, six

hotels, four restaurants, six saloons, three bakeries, and a highly transient population of approximately 1,500 persons, including many Chinese immigrants (Jones 1981:54). Located approximately midway between the Central Valley and the Pacific Coast, Weaverville became an important transportation center along the Trinity River trails and roads and was also known for many years as the hub for gold mining in the Klamath Mountains.

The earliest miners in the Weaverville area worked the creeks throughout Weaver Basin with pans and rockers, long toms, and by ground sluicing. Wingdams, flumes, and tunnels were constructed to control the flow of water while the gravel deposits along stream and river beds were mined. West Weaver Creek, East Weaver Creek, and smaller streams in McKenzie, Garden, Sidney, Five Cent Gulch, and Ten Cent Gulch all boasted claims (Hicks 1996:2). Ditches constructed on East Weaver Creek for mining were also used to supply the town with water (Jones 1981:54). Like all mining camps with wooden structures, fires were common in Weaverville, and by the end of the 1850s the town began constructing its main buildings of fire-resistant brick and stone and rammed earth.

In the 1850s Weaverville became the seat of Trinity County, which included portions of Del Norte, Humboldt, and old Klamath (created in 1851 and later abolished in 1874) Counties. As the town grew, distinct neighborhoods developed that were based primarily on the ethnicity of their residents (e.g., Chinatown, French Town, German Town). English Town was located east of what is now SR 3 and north of Lowden Park, near the current project APE, but was reportedly mined off during the 1930s by dragline dredging (Jones 1981:54).

Beginning in the 1860s, miners began to use hydraulic mining technology to access higher ground and to mine larger amounts of gravels in a shorter period of time. Water was procured from reservoirs, which provided a stream of pressurized water that was then directed at the gravel bank to wash the auriferous gravels into the riffled sluiceboxes that had been erected at the gravel base. The Hupp and McMurray mine, which was located south of the present Trinity River Lumber Company's mill on East Weaver Creek, was one of the first mining outfits in Weaverville to install a giant (monitor) and reported one cleanup of \$26,000 as a result (Jones 1981:54).

Individual miners formed partnerships or companies to acquire the manpower and capital necessary for large-scale hydraulic mining, and those who did not possess claims and investment capital often became employees for those who did. Dozens of new ditches and reservoirs conveying water from East and West Weaver Creeks were constructed during this period. The La Grange Mine, a few miles west of Weaverville, operated between 1862 and 1918 and, with total estimated production of \$8 million, it was one of the largest hydraulic mines in the state (Clark 1970:144; Hoover et al. 1990). Water for the enterprise was delivered from Stuart's Fork of the Trinity River, along a 19-mile system of canals, flumes, and tunnels (Jones 1981:176).

Hydraulic mining in the Coast Ranges was not affected by anti-debris legislation, such as the Sawyer Decision of 1884, and it continued in the Klamath Mountains well into the 20th century; it was replaced only by a more advanced form of placer mining that used dredges. The first steam-powered bucket dredge was put into service on Weaver Creek (south of Weaverville) in the 1890s (Jones 1981:57). Dragline dredges, which operated in the 1920s and 1930s along East Weaver Creek, are evidenced by their characteristic “doodlebug” debris piles that are still visible off SR 3 in the northern portion of the current project area. However, the most easily accessible gold deposits in the Weaver Basin were exhausted by the early 1900s, and many miners began to leave the area or turn to other occupations such as stock-raising and logging.

Because most of the dredging was accomplished by a few large (mostly absentee) conglomerates, Weaverville suffered an economic decline following World War I that only worsened during the Depression years. Following the overall decline of gold mining in California after World War II, lumber became the major industry in the region (Jones 1981:57). Although the town languished, Weaverville remained an important rest stop along SR 299, and with the construction of Trinity Dam in late 1950s and early 1960s, its population once again began to increase.

### ***Logging***

The project HASR contains an overview of the history of the logging industry in Northern California (J&S, 2002d). This section is limited to an historical overview specific to the region in which the proposed project is located.

Although a few small sawmills provided lumber for building construction and for the mining industry, logging did not become an important commercial industry in Trinity County until the 1940s. As mining decreased, stands of Douglas fir and pine throughout Weaver Basin were logged for profit and as a way to clear the land for further stock-grazing. One early sawmill near the current project area was George Jumper’s steam-powered sawmill, which was located near the intersection of Brown’s Creek and SR 3 (Belden Forestry 1981; Jones 1981:56–57).

### ***Transportation***

Although rich in gold, the rugged mountains and steep canyons of the Klamath Mountains presented many challenges to road builders. For decades, and in some areas well into the 20th century, mule trains were the most common method of transporting goods and people throughout Trinity County. In 1853, a single pack trail connected Union (Arcata) with “Weaver” in the Trinity gold fields (Bennion and Rohde 2000:3). Only five years later, however, William Spencer Lowden completed the Buckhorn (Grass Valley) Toll Road between Tower House (near Shasta) and Weaverville (Jones 1981:54; Hoover et al. 1990). This early wagon road, which featured an astounding 150 bridges, is partly followed by modern SR 299.

In the 1860s, the road over Buckhorn Summit was made easier by a partial reroute through Lewiston, providing travelers and freight wagons with a lower-elevation alternative for winter crossings. Although these early roads were difficult to maintain in passable condition, they provided a critical link between Weaverville and the population centers of the Central Valley. To the west of Weaverville, roads across Oregon Mountain and on to the coast were much slower to develop. Segment by segment, pack trails were converted to narrow wagon roads until only the stretch between Willow Creek and Helena remained unimproved. This segment was finally completed in the 1920s when SR 299 was constructed between Weaverville and Arcata (Bennion and Rohde 2000:65; Jones 1981:100). The completion of the new highway between Redding and the coast had a tremendous impact on the prosperity of Weaverville.

### *HISTORIC RESOURCES*

The following historic resources were recorded in the APE for the proposed project:

- Historic dragline dredging tailings
- Historic small-scale hydraulic mining tailings
- Historic debris scatter
- Ditch segment
- State Route 299 and State Route 3

These resources are described below. Location-specific information has been removed from the descriptions, but is available in the confidential HRER (J&S, 2002f), available for review by qualified individuals on an as-needed basis at the Trinity County Department of Transportation. The mine tailings, debris scatter, and ditch segment were evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. None of the historic resources recorded in the project APE appear to be historical resources or “unique archaeological resources” for the purposes of CEQA (see Section 3.20.2 below).

#### *Dragline Dredge Tailings*

Five linear mounds of dragline dredge tailings are located along a former channel (now a shallow swale) of East Weaver Creek. The rock mounds are approximately 12–15 feet in height and range from 25-55 feet in length. The rock mounds have the characteristic “doodlebug” formation that is typical of dragline dredge operations. Other than the old creek channel, there are no additional features associated with the tailings piles.

While the historical record indicates that intensive dragline dredging was conducted in the 1930s at East Weaver Creek and Five Cent Gulch (Jones 1981:54), similar tailings are not currently visible in proximity to the five linear piles in the APE. It is unlikely that any dredging operation would only produce five relatively small mounds of tailings; therefore, it is probable that more dredging debris was present in this

area and was removed (recycled) or disturbed by subsequent road building and residential and commercial development along SR 3. Unless mine tailings are part of an intact mining district or landscape able to convey its significance under the CEQA criteria, they are rarely considered historically significant as individual or isolated historic resources. The dredge tailings located in the project APE do not qualify as historical resources or "unique" archaeological sites (see Section 3.20.2 below). Therefore, they are not considered significant, and need not be considered further in the CEQA process. .

### *Hydraulic Mine Tailings*

A cluster of rock tailings piles, cut banks, and old channels associated with ground-sluicing or small-scale hydraulic mining cover an area of approximately 10 acres. Approximately 7 acres, consisting only of tailings piles and old sluice channels, are located within the project APE. Historical records suggest that hydraulic mining along the upper terrace of East Weaver Creek occurred between 1880 and 1900 (Trinity County 1900), and was undoubtedly preceded by earlier ground-sluicing and hand-placering throughout Lance Gulch. A reconnaissance study of the areas along both East and West Weaver Creek indicates that tailings and other evidence of hydraulic mining (e.g., ditches, sluice channels, cut banks, grizzlies) are located in profusion around Weaverville. It appears that East Weaver Creek has been subsequently developed to a greater degree than has West Weaver Creek. In the 1960s, ACOE evidently recycled tailings for use in constructing a levee along East Weaver Creek. Other historically mined areas in and adjacent to the APE have been developed as residential lots, park facilities (Lowden Park), and a lumber mill.

Unless mine tailings are part of an intact mining district or landscape able to convey its significance, they are rarely considered historically significant. Although East Weaver Creek was most likely an intact historic mining district at one time, subsequent land use and the growth of Weaverville in an easterly direction have significantly altered its historic appearance. The hydraulic mining debris in and adjacent to the APE does not qualify as an historical resource or "unique" archaeological site (see Section 3.20.2 below) nor does it appear to contribute to a larger historic district or mining landscape along East Weaver Creek. Therefore, this site is not considered significant, and need not be considered further in the CEQA process.

### *Historic Debris Scatter*

A small scatter of domestic artifacts within the APE consists of approximately 20 fragments of bottle/container glass (green, clear, aqua, and amethyst), several hole-and-cap cans (condensed milk), three square cans with a stamped label that reads "Borden Eagle Brand, bottle crown caps, and several pieces of semi-porcelain dinnerware (a coffee mug handle and plate fragments). The range of available manufacturing dates for the artifacts is estimated to be circa 1900–1910. The artifacts are distributed over an area approximately 12.6 meters (east-west) by 7.4 meters (north-south). No associated features are apparent, and the artifacts appear to be scattered on the surface only. The debris may be the result of a

temporary mining or logging campsite at this location, or the result of incidental roadside dumping from either Brown's Ranch Road or a secondary dirt road located directly west of the scatter. Because this small scatter of artifacts cannot be conclusively associated with a particular historic event or person, it does not qualify as an historical resource or "unique" archaeological site (see Section 3.20.2 below). Therefore, this site is not considered significant, and need not be considered further in the CEQA process.

### *Ditch Segment*

This water-ditch segment is located in very dense vegetation in an area that was partly blocked by dense stands of manzanita. It appears that the ditch segment has been obliterated at both its northern and southern ends by grading or other land-moving activities. The estimated length of the ditch segment is 40–50 meters. The abandoned water ditch measures 2.5 meters from berm to berm, and is approximately 1 meter deep. A (circa) 1900 map of mining claims in this area suggests that this feature may be the remains of the Cooper and Watson Ditch, the lowest in elevation of the three ditches that supplied water to hydraulic mining claims along the east side of East Weaver Creek (Trinity County 1900).

Although the ditch segment is most likely a remnant of late-19th- or early-20th-century mining activities, it may also have been constructed later to supply the sawmill (circa 1940s) with water from the creek. At any rate, this feature has been severely impacted by grading activities associated with the Trinity River Lumber Company mill property. This resource does not qualify as an historical resource or "unique" archaeological site (see Section 3.20.2 below) and is therefore not considered significant, and need not be considered further in the CEQA process.

### *State Route 299 and State Route 3*

Two other historic resources, SR 299 and SR 3, are also located within the APE at either end of the proposed Trinity East Connector Roadway. Although both are modern highways, the routes followed by SR 299 and SR 3 in the study area are approximately the same as earlier wagon roads, including the approach of SR 299 to Weaverville's historic Main Street district and the intersection of SR 299 and SR 3 (Trinity Lakes Boulevard) in the center of this district. Like most of the major historic transportation corridors located throughout the state of California, the historic routes of SR 299 and SR 3 undoubtedly played a very significant role in regional development and economy. However, because they have been widened and paved and their surroundings have also been modernized by development, the portions of SR 299 and SR 3 in the project impact area lack sufficient integrity to convey their historic significance. As such, these portions or segments of SR 299 and SR 3 do not qualify as historical resources (see Section 3.20.2 below) and are therefore not considered significant, and need not be considered further in the CEQA process.



### *ARCHITECTURAL RESOURCES*

The APE for this project includes 33 parcels containing buildings and/or structures. The majority of the proposed project passes through areas of more recent residential and commercial development. Of the 33 studied parcels, only the Trinity River Lumber Company parcel contains buildings and/or structures constructed in 1956 or earlier. The mill complex retains little integrity to its 1954 construction date. The removal of key components such as the “beehive” wood burner, log ponds and original equipment, and the widespread introduction of new buildings and structures has compromised the complex’s “design, materials, feeling and association.” The buildings and/or structures on other parcels within the APE are less than 45 years old (many are less than 20 years old). The properties within the APE were evaluated in accordance with Section 15064.5(a)(2)-(3) of the *CEQA Guidelines*, using the criteria outlined in Section 5024.1 of the California Public Resources Code. All properties within the APE were determined not to be historical resources for the purposes of CEQA (see Section 3.20.2 below).

### *PLANNING DOCUMENT GOALS, OBJECTIVES AND POLICIES*

#### ***Trinity County General Plan***

The *Land Use Element* of the *Trinity County General Plan* (Trinity County, 1988) does not contain specific goals, objectives, and policies related to the cultural resources; however, the General Plan does recognize that the history of Trinity County is a valuable community cultural asset and should be preserved. At the same time, this heritage must be integrated with the needs of the present population. As a step towards this integration, Trinity County conducted a Historical Survey of the county in 1978. The survey established the location of historically significant trails, ditches, buildings, sites, and districts. Classifications were assigned to these locations. The General Plan maps have been annotated to locate places and buildings of historic significance, and the General Plan recommends that specific guidelines and standards be established for development within established historic districts.

#### **Weaverville Findings:**

- Ordinances and standards should be developed to assure the enhancement of Weaverville’s appearance. Special attention should be paid to areas with historical character and to the area along the two state highways (SR 299 and SR 3).
- Assure new commercial development is consistent with Weaverville’s historic character and adds to, rather than detracts from, the existing historic feeling.

#### **Implementation:**

- The 1978 study identified five potential Historic Districts in Weaverville, including the downtown Historic District, which is now listed on the National Register of Historic Places (NRHP).
- Trinity County Ordinance now requires an Architectural Review Committee to evaluate all development proposals within Historic Districts.

No portion of the proposed East Connector project is within an Historic District or Area of Historic Significance.

### ***Weaverville Community Plan***

The *Weaverville Community Plan* policies regarding cultural resources that relate to the proposed East Connector Roadway project are contained in the *Land Use and Community Design* section of that plan and are as follows (Trinity County, 1990):

- **Goal #2:** To recognize the importance of, and provide for, the protection and enhancement of the community's historical character
- The Weaverville Community Plan contains maps, descriptions, and evaluations of the Historic District and Areas of Historic Significance
- Zoning overlays in the Historic District requires Architectural Review Committee review of all development proposals in the District.

### **3.20.2 SIGNIFICANCE CRITERIA**

Appendix G of the CEQA *Guidelines*, the CEQA Environmental Checklist, poses the following questions to be considered in determining whether the project would cause significant cultural resource impacts:

Would the project:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?
- Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?
- Disturb any human remains, including those interred outside of formal cemeteries?

Additional explanation of the first two questions is needed here. A project may have a significant effect on the environment if the project could result in a substantial adverse change in the significance of an historical resource (California Code of Regulations (CCR) Section 15064.5[b]). The *CEQA Guidelines* (Section 10564.5[c]) also require consideration of potential project impacts to "unique" archaeological sites that do not qualify as historical resources. Impacts to resources that do not qualify as historical resources or "unique" archaeological sites are not considered significant, and need not be considered further in the CEQA process. (Public Resources Code (PRC) Section 21083.2)

CEQA establishes statutory requirements for establishing the significance of archaeological sites in PRC Section 21083.2 and historical resources in PRC Section 21084.1. Section 21083.2 defines a “unique archaeological resource” as “...an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- It has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event.”

Section 21084.1 defines historical resources as those listed on or eligible for listing on the California Register of Historical Resources (California Register). The California Register establishes a second set of criteria for determining the significance of historical resources, which by definition includes both prehistoric-era and historic-era resources (PRC Section 5020 et. seq.). The California Register establishes 50 years as the period in which sufficient time has passed to allow a scholarly perspective in understanding the historic importance of a resource. An historical resource must be significant at the local, state, or national level under one or more of the following four criteria:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States:
- It is associated with the lives of persons important to local, California, or national history:
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

An historical resource must also retain the integrity of its physical identity that existed during the resource’s period of significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

The two PRC sections operate independently to ensure that significant potential effects on archaeological and historical resources are considered as part of a project’s environmental analysis. CEQA and the *CEQA Guidelines* also recommend provisions be made for the accidental discovery of archaeological

sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) CCR Section 15064.5[d and f]).

In addition to the criteria listed above, CEQA Guidelines Section 15065 contains the following relevant mandatory significance threshold, which should also be considered in determining whether the project would cause significant impacts to cultural resources:

Would the project:

- Eliminate important examples of the major periods of California history or prehistory?
- Cause a substantial adverse change in the significance of an historical resource. (where “substantial adverse change” means “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired)?

As discussed below, the East Connector Roadway project not cause a significant impact to cultural resources, as defined by the significance criteria above. Mitigation is proposed for unanticipated discoveries of cultural resources during project construction. This mitigation will be incorporated into Project Plans and Specifications.

### **3.20.3 PERMANENT IMPACTS**

None of the properties within the project APE qualify as historical resources or unique archaeological resources for the purposes of CEQA. Therefore, impacts to the properties would be considered less than significant.

The archaeological investigations focused on identifying surface manifestations of cultural resources within the APE. There is the possibility of buried or otherwise obscured cultural resources being within the project area. In the event that such resources are encountered during project construction, work in the immediate area of any find should be terminated until a qualified archaeologist is able to determine the nature and importance of the finds. These finds may include, but are not limited to chert, basalt, or obsidian chipping debris and tools, ground or pecked stone tools, thermally altered rock and charcoal concentrations (hearths), locally darkened soil (midden) containing shell, faunal bone, charred seeds, and thermally altered rock, historic trash dumps, or other historic features. Additional archaeological survey would be required only if development plans change to include unsurveyed areas.

**Cultural Resource Impact-1** Construction of the East Connector Roadway project would result in the disturbance of recorded historic archaeological sites.

**Significance:** Less than significant (no mitigation required).

### 3.13.3 TEMPORARY (CONSTRUCTION PHASE) IMPACTS

#### *IMPACTS COMMON TO ALL ALTERNATIVES*

Excavations associated with project construction would occur in areas with potential to contain buried prehistoric and historical resources, or Native American human remains that have not been identified. If such resources were encountered during construction, the project could result in a substantial adverse change to unique archaeological sites, significant historical resources, or sensitive resources such as human remains.

**Cultural Resource Impact -2** Excavations associated with the East Connector project could result in the accidental destruction of previously undiscovered archaeological or historical resources, or could result in the uncovering of Native American human remains.

**Significance:** Potentially significant, but mitigated (**Cultural Resource Mitigation-1**)

**Cultural Resource Mitigation-1** Contractors and construction personnel involved in any form of ground disturbance (i.e., trenching, grading, etc.) shall be advised of the possibility of encountering subsurface cultural resources or human remains. If such resources are encountered or suspected, work within 100 feet of the discovery shall be halted immediately and the Trinity County Planning Department shall be notified. In accordance to CCR Section 15064 (f) and PRC Section 21083.2(i), a qualified professional archaeologist shall be consulted, who shall assess any discoveries and develop appropriate management recommendations for treatment of the resource. If bone is encountered and appears to be human, California Law requires that potentially destructive construction work is halted and the Trinity County Coroner is contacted. If the coroner determines the human remains are of Native American origin, the coroner must contact the Native American Heritage Commission. The Native American Heritage Commission will attempt to identify the most likely descendant(s), and recommendations will be developed for the proper treatment and disposition of the remains in accordance with CCR Section 15064.5(e) and PRC Section 5097.98. A note

to this effect shall be included on all construction plans and specifications.

**Post-mitigation Significance:** Less than significant

### **3.13.4 CUMULATIVE IMPACTS**

The project would not result in a significant adverse effect on cultural resources, and therefore would not contribute to cumulative effects.

### 3.21 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

CEQA requires that a lead agency neither approve nor carry out a project unless significant environmental effects have been reduced to an acceptable level, if possible. However, CEQA also requires that decision-makers balance the benefits of a proposed project against its unavoidable environmental risks. Section 15093(a) of the CEQA *Guidelines* allows the decision-making body of the lead agency to determine if the benefits of a proposed project outweigh the unavoidable adverse environmental impacts of implementing the project. If environmental impacts are identified as significant and unavoidable, a lead agency may still approve the project if it believes that social, economic, or other benefits outweigh the unavoidable impacts. If Trinity County determines that the East Connector Roadway project would cause significant unavoidable adverse impacts, and the County approves the project with those impacts, the County would then be required to state in writing the specific reasons for approving the project based on information in the EIR and other information in the public record as a "statement of overriding considerations."

In light of this EIR and supporting technical studies, the County has not identified any significant unavoidable adverse impacts resulting from the proposed project.

### **3.22 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

The No Project alternative would not directly involve the use of resources or cause significant irreversible environmental effects.

The project alternatives would involve the commitment of natural, physical, human, and fiscal resources. Labor, fossil fuels, and construction materials would be required to construct the East Connector roadway. Labor and natural resources are also used in the fabrication and preparation of bridge and roadway construction materials. Workers for the project would be drawn from the regional labor pool. Fuels and materials that would be consumed in constructing the East Connector are generally not retrievable. However, they are not in short supply, and the material requirements for this project would be relatively minor compared to the overall demand for such materials. The use of such materials for the project would not have a significant adverse effect upon their continued availability. The project alternatives would also require a substantial expenditure of funds, which would not be retrievable. Funding for the design, right-of-way acquisition, construction, and maintenance of this project comes from local, state, and federal transportation funds which are derived primarily from road and fuel taxes. These funds are specifically designated for road construction or maintenance and cannot be used for other purposes. No county or state General Funds will be used for design, right-of-way, construction, or maintenance of the East Connector Roadway. The commitment of these resources is based on the concept that Weaverville community would benefit from improved traffic and circulation within the community and that the benefits obtained would outweigh the commitment of resources.

In addition to the labor, fuel, and material requirements of the East Connector, the project would result in the following significant irreversible environmental effects:

- Grading and paving of approximately 6 acres of land and grading of additional lands that would not be paved, including the construction staging areas (all project alternatives)
- Conversion of existing land uses (residential, commercial, industrial) to roadway use and conversion of one industrial-zoned severed parcel to residential zoning (all project alternatives)
- Placement of fill in "waters of the U.S." including partial filling of one jurisdictional wetland (all project alternatives; Alternative 2 would have a greater impact)
- Loss of riparian and upland pine forest habitat, with potential irreversible impacts to wildlife using this habitat (all project alternatives; Alternative 1 and Option A would have a greater impact on riparian habitat; Alternative 2 would have a greater impact on upland forest habitat)



- Changes in access to businesses at the SR 299/Glen Road/Nugget Lane intersection (all project alternatives; intersection Alternatives A and B would have the greatest impact; impact from Alternative C would be reduced)
- Modification or destruction of one commercial building at the SR 299/Glen Road/Nugget Lane intersection (Alternative B only)

Mitigation measures proposed for the above significant irreversible environmental impacts reduce these impacts to less than significant. Although mitigated, the impacts remain irreversible. For example, the placement of fill in a jurisdictional wetland would be mitigated by the development of compensatory replacement wetlands along a portion of Trinity River Lumber Company property that would be severed by the proposed project. However, the partial loss of the jurisdictional wetland would remain a significant irreversible impact.

# CHAPTER 4.0

## SUMMARY OF PUBLIC INVOLVEMENT PROCESS

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### 4.1 PUBLIC SCOPING PROCESS

Trinity County initiated the environmental review process for the EIR with the circulation of a Notice of Preparation (NOP) dated March 15, 2001, pursuant to Section 15082 of the CEQA Guidelines. The NOP was available for public and agency review and comment for a 30-day period, which began March 15, 2001 and ended April 13, 2001. A distribution list for the NOP is included in **Appendix A**. The NOP included a summary of probable effects of the proposed East Connector Roadway Project. The NOP and public and agency scoping comments received are included in **Appendix A**.

Individual scoping meetings were held with responsible agencies and other potentially affected parties on April 3 and 4, 2001, including representatives from Trinity River Lumber Company, Weaver Valley Market, the California Highway Patrol, Yingling Construction, Golden Age Senior Center, Trinity Plaza Shopping Center, Weaverville CSD, as well as residents on Brown's Ranch Road (Al and Marilyn Wilkins), and the owners of the building at Glen Road and Nugget Lane that would be disturbed or removed under Alternative B (Joseph Bower and Bob Morris).

Additionally, a public scoping meeting was held on April 4, 2001 from 5 to 8pm at the Trinity County Board of Supervisors Meeting Room in the Trinity County Library, located at 211 North Main Street in Weaverville. The purpose of the meeting was to solicit public input on concerns and issues associated with the proposed project. These concerns and issues are summarized in the Executive Summary of this EIR and are addressed in greater detail in Chapter 3.0. The list of public meeting attendees and written scoping comments are included in **Appendix B**.

### 4.2 DRAFT EIR

This document constitutes the Draft EIR. It discusses the project purpose, need, and background; describes the project alternatives (including a "No Project" alternative); and identifies the affected environment, project effects, and mitigation measures for significant adverse effects.

The Draft EIR will be circulated for a 45-day public and agency review period. Copies of the document have been made available to applicable local, state, and federal agencies and to interested organizations and individuals wishing to review and comment on the report. The distribution list for the Notice of

Completion (NOC) and Draft EIR is included in **Appendix A**. 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:

Attention: East Connector Comments  
Trinity County Department of Transportation  
Engineering Division  
303 Trinity Lakes Blvd.  
Weaverville, CA 96093-2490

NOTE: PLEASE SEND U.S. MAIL TO P.O. BOX, NOT THE STREET ADDRESS.

### **4.3 FINAL EIR AND CERTIFICATION**

Written and oral comments received in response to the Draft EIR will be addressed in the Final EIR, which will include Response to Comments and a Mitigation Monitoring Reporting Program (MMRP). After reviewing the project and the Final EIR, the TC Planning Commission, in a public hearing, will recommend to the Board of Supervisors whether to certify the EIR and approve or deny the proposed project, and recommend which alternative(s) should be implemented. The County Board of Supervisors will then review the project, the EIR, the Planning Commission's recommendations, and public testimony and will decide whether to certify the EIR and approve or deny the project, and select an alignment Alternative (1 or 2), a bike path option (A or B), and an intersection alternative (A, B, or C). The Board may also select the "No Project" alternative.

### **4.4 MITIGATION MONITORING AND REPORTING PROGRAM**

CEQA Section 21081.6(a) requires lead agencies to "adopt a reporting and mitigation monitoring program for the changes to the project which it has adopted or made a conditions of project approval in order to mitigate or avoid significant effects on the environment." The Mitigation Monitoring and Reporting Program (MMRP) required by CEQA need not be included in an EIR. However, throughout this EIR, measures have been clearly identified in order to facilitate establishment of an MMRP. Any mitigation measures adopted by the County as a condition of approval of the project will be included in the project MMRP to verify compliance.

The following agencies have been informally consulted during the preparation of this EIR, either directly by Trinity County's staff or consultants, or through the Caltrans District 2 Office of Local Assistance or FHWA:

- U.S. Fish and Wildlife Service (USFWS)
- National Oceanic and Atmospheric Administration Fisheries (NOAA; formerly NMFS)
- U.S. Army Corps of Engineers (ACOE)

- State Historic Preservation Office (SHPO)
- Caltrans/FHWA
- California Department of Fish and Game (DFG)

Formal consultation with NOAA Fisheries and SHPO is being conducted by FHWA.

# **CHAPTER 5.0**

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**Natural Environmental Study (NES), Biological Assessment (BA), Wetlands Delineation, Archaeological Survey Report (ASR), Historic Properties Survey Report (HASR), Historic Architectural Survey Report (HASR), Historic Resources Evaluation Report (HRER)**

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# CHAPTER 6.0

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