

3.8 Recreation

This section summarizes information about the recreational resources and uses within the project area and the potential impacts to recreation associated with implementation of the No-Action Alternative, the Proposed Action, and Alternative 1. The project's conformance with the federal and state Wild and Scenic Rivers Acts (WSRAs) are also evaluated. The following evaluation is based on a review of local land use plans and policies specific to recreational uses and field reconnaissance to identify potential recreational opportunities in the project area.

3.8.1 AFFECTED ENVIRONMENT/ENVIRONMENTAL SETTING

Regional Setting

Trinity County has a vast array of recreational resources, such as rivers, lakes, wildernesses, and scenic byways. The major rivers within Trinity County are the Trinity River, South Fork Trinity River, North Fork Trinity River, New River, Mad River, and Eel River. These rivers provide recreational opportunities such as fishing, kayaking, rafting, recreational mining, and camping.

The Trinity River was designated as a National Wild and Scenic River in 1981 by the Secretary of the Interior. The designated reach extends from Lewiston Dam downstream to Weitchpec. Two tributaries to the Trinity River are also designated as Wild and Scenic Rivers: the New River and the North Fork Trinity River. These tributaries enter the Trinity River downstream of the rehabilitation sites.

The TRD includes two large impoundments, Trinity Lake and Lewiston Reservoir. These lakes provide recreational opportunities, such as boating, fishing, and camping. Trinity Lake is situated in the northeast section of Trinity County and has a surface area of approximately 16,400 acres. Lewiston Reservoir is immediately downstream of Trinity Dam and is operated as a re-regulation facility that provides water to Whiskeytown Reservoir.

There is one congressionally designated wilderness area in the Trinity River basin. The Salmon-Trinity Alps provides recreational opportunities such as hiking, backpacking, horse packing, hunting, and angling. The wilderness area is located in the northern part of Trinity County and is the primary watershed for the Trinity River.

Two scenic byways cross Trinity County: the Trinity Heritage Scenic Byway (SR 3) and the Trinity Scenic Byway. These byways provide a scenic travel route through Trinity County for residents and visitors. The Trinity Heritage Scenic Byway includes 120 miles of road from south of Hayfork, north past Trinity Lake to Edgewood at Interstate 5 (I-5). The Trinity Scenic Byway follows SR 299 between Redding and Arcata, California. This byway is approximately 140 miles long and bisects Trinity County as it parallels the Trinity River.

The federal government manages about 72 percent of the land in Trinity County. BLM is the primary land manager for public lands between Lewiston Dam and the confluence of the North Fork Trinity River and the mainstem Trinity River. The STNF manages the majority of federal land between the confluence of the North Fork Trinity River and the mainstem Trinity River and the confluence of the New River and

the Trinity River. Six Rivers National Forest manages federal lands within a basin between the New River and the Hoopa Valley Indian Reservation. The HVT manages lands within the Hoopa Valley Indian Reservation.

The Trinity River provides year-around recreation opportunities. These opportunities include boating, kayaking, canoeing, rafting, inner-tubing, fishing, swimming, wading, camping, gold panning, nature study, picnicking, hiking, and sightseeing. In addition, fishing for Chinook salmon, steelhead, and rainbow and brown trout are major recreational activities on the Trinity River throughout the year. With the development and implementation of the TRRP, the type, location, and timing of recreational activities continues to evolve.

Developed recreation areas along the Trinity River consist of private campgrounds, resorts, and lodges; public campgrounds and picnic areas; and fishing access sites. Approximately 35 developed recreation sites are located within along the Trinity River corridor. More than 200 river access sites were inventoried in 1979 between Lewiston Dam and Weitchpec.

Local Setting

There is a variety of residential subdivisions and commercial enterprises along the river corridor. All of the rehabilitation sites include residential developments, and the Valdor Gulch and Elkhorn sites have some degree of commercial development (e.g., campgrounds, boat launches). Much of the private land in this region was subdivided in the early 1970s, and the area has been developed with numerous residences since that time. Lands within the project area continue to be developed because of the availability of developable lands in close proximity to SR 299, and a locally recognized mild micro-climate within easy commuting distance of Weaverville. Factors contributing to this growth have included availability of private land on relatively level floodplains now somewhat protected from flooding by the dams, County zoning practices, abundant water from the river, and the attractive recreational/environmental setting.

Despite the presence of roads and development, public river access opportunities are limited in the vicinity of the rehabilitation sites. Currently, there are three developed river access points and five undeveloped (dispersed) recreation sites between Junction City and Helena. Table 3.8-1 provides a summary of these sites, and Figure 3.8-1 shows recreation areas in the general vicinity of the rehabilitation sites. These recreation areas provide a variety of recreation opportunities such as fishing, whitewater rafting, picnicking, and wildlife viewing.

As the manager of public lands along the Trinity River corridor between Lewiston and Helena, BLM is responsible for monitoring recreation visitor use within the Trinity River Special Recreation Management Area. Monitoring data indicate approximately 80,000 Recreational Visitor Days (RVDs) were spent on Trinity River recreation in 2005. Of these RVDs, the Junction City Campground and Bagdad boat launch received approximately 25 percent of this use. Recent estimates of recreational use of the Trinity River and Trinity Lake suggest that \$13 million is spent by recreational users in Trinity County, with non-county residents accounting for about 75 percent of this total.

TABLE 3.8-1.
RECREATION WITHIN THE VICINITY OF THE CANYON CREEK REHABILITATION SITES

Developed Recreation	
Junction City Campground and River Access	BLM-managed campsite that provides overnight and day-use facilities. River access is via a gravel bar located across SR 299 from the campground.
Big Foot Campground	Privately owned facility that provides overnight and day-use accommodations, a guide service, boat launch, and convenience store
Bagdad boat launch	BLM-managed boat launch site and day-use facility for whitewater recreation and drift boats
Dispersed Recreation	
Cooper's Bar	A private gravel bar used by nearby residents for various recreational activities
County-owned boat launch	County property commonly used as boat launch site
Lime Point and Lime Point Road	Lime Point is a gravel bar located on the left side of the river which provides for river access. Lime Point Road is an unimproved road on the right side of the river which provides access from SR 299 to the County property commonly used as a boat launch site.
Raft launch site used by a commercial outfitter	A raft launch site that is accessible from SR 299 and is commonly used by a commercial outfitter as raft launch site
Pear Tree Gulch	A gravel bar accessible from SR 299 that is used for pedestrian river access

3.8.2 RELEVANT PLANS AND POLICIES

Federal

Wild and Scenic Rivers Act

Congress enacted the National WSRA in 1968 in an effort to protect free-flowing rivers with “outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values.” The entire mainstem of the Trinity River was designated as a National Wild and Scenic River by the Secretary of the Interior in 1981, primarily because of the river’s anadromous fishery. Approximately 97.5 miles of the river are also classified as recreational under the National WSRA. BLM is the river management agency from Lewiston to Helena, and the STNF is the river management agency

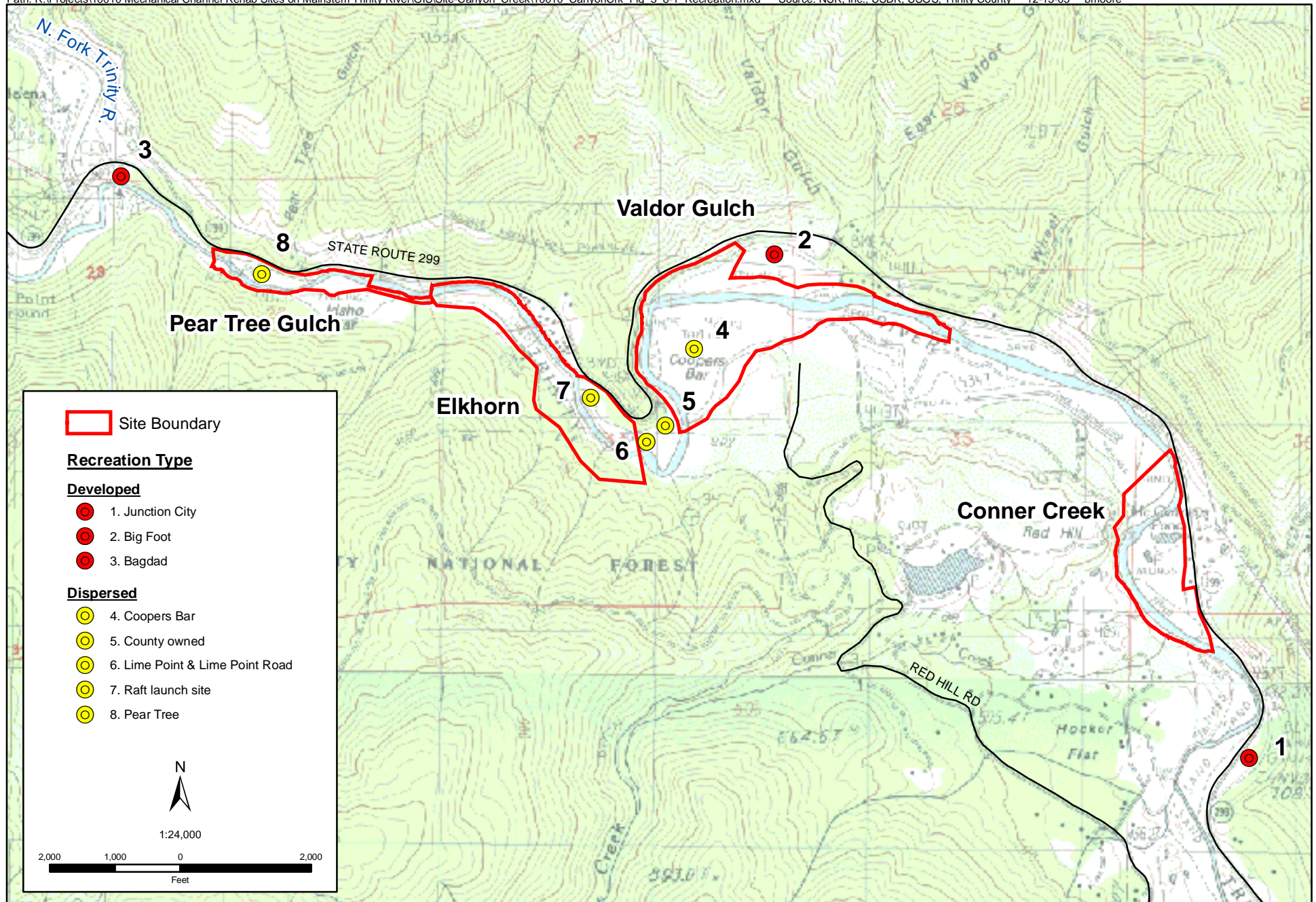


Figure 3.8-1
Recreation Areas

from Helena to the boundary of the Hoopa Valley Indian Reservation. The BLM classifies the mainstem Trinity River from 100 yards below Lewiston Dam, downstream past the rehabilitation sites to Cedar Flat (an area located approximately 17 miles west of the Pear Tree Gulch Site), as recreational. The BLM's management objectives are to:

- enhance recreation opportunities related to use of the Trinity River, including mineral collection;
- maintain scenic quality along the river corridor; and
- protect and enhance the anadromous fisheries of the Trinity River.

The federal WSRA designates qualifying free-flowing river segments as wild, scenic, or recreational. The WSRA establishes requirements applicable to water resource projects affecting wild, scenic, or recreational rivers within the National Wild and Scenic Rivers System, as well as rivers designated on the National Rivers Inventory. Under the WSRA, a federal agency may not assist in the construction of a water resources project that would have a direct and adverse impact on the free-flowing, scenic, and natural values of a wild or scenic river. If the project would affect the free-flowing characteristics of a designated river or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area, such activities should be undertaken in a manner that would minimize adverse impacts and should be developed in consultation with the administering agency. The Trinity River was designated a Wild and Scenic River due in part to its "outstandingly remarkable resource," the fishery (P.L. 90-542). Consultation required under Section 7 of the WSRA was prepared to specifically address requirements under the federal WSRA and is provided as Appendix D.

State

Wild and Scenic Rivers Act

Under the California WSRA, the segment of the Trinity River that encompasses the Proposed Action is designated as "scenic" and "recreational." These classifications were designated in 1980, a year prior to the federal designation. The Public Resources Code (5093.53[b]) defines "scenic rivers" as being "those rivers or segments of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads." "Recreational rivers" are defined in the Public Resources Code (5093.53[c]) as being "those rivers or segments of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past. There are no permits required under the State WSRA.

Local

Trinity County General Plan Goals and Objectives

The Trinity County General Plan contains goals and policies designed to guide the future physical development of the County, based on current conditions. The General Plan contains all the state-required elements, including community development and design, transportation, natural resources, health and

safety, noise, housing, economic development, public facilities and services, air quality, and recreation. The following goals and policies related to recreation issues associated with the project area were taken from the applicable elements of the General Plan (Trinity County 2001), including the Junction City Community Plan (Trinity County 1987).

County Wide Goals and Objectives

General Plan Goals

1. To retain the mountain beauty, the vast wilderness areas and the open character of Trinity County
2. To provide additional facilities for camping, picnicking, boating, and sightseeing, both public and private
3. To encourage recreation as the primary economic resource of the County

Land Use Element Goals

Cultural

Retain the rural character of Trinity County by:

- Encouraging uses that fit with the land
- Considering the “rights” of the individual when making decisions as well as the “rights” of the community
- Seeking information and cooperation from state and federal agencies within Trinity County

Economic

Maintain and enhance a viable economic base for Trinity County by:

- Encouraging tourism

Junction City Community Plan Goals and Objectives

The Junction City Community Plan covers the area centered on the Trinity River from Maxwell Creek to slightly downstream of Helena.

Economic Development

Goal: To encourage recreation development as a viable sector of the local economy

- Develop and service publicly owned access areas to the river to meet the needs of visitors

Parks and Recreation

Goal: To provide access to the Trinity River in a manner that recognizes and respects existing developments

- Ensure that future access areas or sites are designed and located so as to avoid potential conflicts with private development

Goal: To ensure that recreational uses of the Trinity River do not result in degradation of this valuable resource

- Continue to monitor recreational use of the river to ensure that additional use or access does not result in degradation of the river environment
- Utilize the BLM quarter mile corridor boundary on the Trinity River to review projects for their potential impact on recreational use of the Trinity River

Trinity County Subdivision Ordinance

The Trinity County Subdivision Ordinance, Section 16.08.130, identifies the Trinity River below Lewiston Dam as a “Public Waterway.” This ordinance requires “reasonable public access” for subdivisions on public waterways if no existing reasonable public access exists, as determined by the Planning Commission or Board of Supervisors. Reasonable public access includes access to or along a river, stream, or reservoir by highway, foot trail, bike trail, horse trail, or other means. In determining what constitutes “reasonable public access,” many factors are considered, including the type of riverbank; the various appropriate recreational, educational, and scientific uses that are possible; the likelihood of trespass on private property and reasonable means of avoiding such trespass; public safety; and other such information.

“Reasonable public access” on a public waterway pursuant to the Trinity County Subdivision Ordinance and the California Subdivision Map Act is not required for the project. However, the concept of reasonable public access is being considered because there have been trespass issues identified within the boundaries of the rehabilitation sites.

Project Consistency with the Trinity County General Plan and Community Plans

This section compares the goals and objectives of the Proposed Action to the relevant local planning policies (i.e., Trinity County General Plan and Junction City Community Plan) to determine if there are any inconsistencies.

The goals and objectives described in Chapter 1 are generally compatible with the applicable General Plan goals and policies summarized above. The overall goal of the Proposed Action is to rehabilitate the sites so that they function in a manner that is closer to historic conditions (e.g., pre-Lewiston Dam). Although there will be excavation of alluvial materials along the Trinity River that would result in temporary and short-term interruption of public and private access to the river within each of the rehabilitation sites, the project would be temporary and will include mitigation measures intended to reduce impacts to recreational values during project implementation.

In the long-term, opening of the floodplain may allow for increased public use of the river at some rehabilitation sites. Additionally, placement of excavated materials at the Pear Tree Gulch site will facilitate BLM’s long-term goal to provide recreational access at this location.

3.8.3 ENVIRONMENTAL CONSEQUENCES/IMPACTS AND MITIGATION MEASURES

Methodology

The analysis consists of identifying recreational resources (parks and recreation facilities) in or near the site boundaries and determining whether implementation of the Proposed Action would have an impact on these resources. This analysis is a qualitative assessment of the impacts to potential recreational uses associated with this segment of the Trinity River.

In addition to evaluating the impacts on recreation opportunities, the project was evaluated for consistency with Trinity County recreation objectives and both State and Federal Wild and Scenic River designations. The WSRA Section 7 Determination for the Canyon Creek Rehabilitation Project is included as Appendix D.

Significance Criteria

Impacts associated with recreational uses are considered significant if the project would:

- conflict with established or planned recreational uses within the project area;
- substantially affect existing recreational opportunities; or
- result in an increase in the use of the existing neighborhood, regional parks, public lands in general, or other recreational facilities such that substantial deterioration of these facilities would occur or be accelerated.

The following criteria were also used to determine significant impacts to riverine recreation:

- substantial increase in turbidity so as to negatively affect recreation aesthetics;
- incompatibility with the Federal or State Wild and Scenic River designation, defined as jeopardizing the river's anadromous fishery resources or scenic and recreational qualities; or
- non-compliance with Trinity County recreation resource objectives.

Impacts and Mitigation Measures

Table 3.8-2 summarizes the potential recreation impacts resulting from implementation of the project.

TABLE 3.8-2.
SUMMARY OF RECREATION IMPACTS FOR THE NO-PROJECT ALTERNATIVE, PROPOSED ACTION, AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
1. Construction associated with the project could disrupt recreation activities in the Trinity River.	All sites	NI	LS	LS	N/A ¹	N/A ¹

TABLE 3.8-2.

SUMMARY OF RECREATION IMPACTS FOR THE NO-PROJECT ALTERNATIVE, PROPOSED ACTION, AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
2. Construction of the project could result in an increased safety risk to recreational users.	All sites	NI	LS	LS	N/A ¹	N/A ¹
3. Construction associated with the project could lower the river's aesthetic value for recreationists by increasing turbidity levels in the Trinity River.	All sites	NI	S	S	LS	LS
4. Implementation of the project could affect Wild and Scenic River Values.	All sites	NI	LS	LS	N/A ¹	N/A ¹

Notes:

LS = Less than Significant S = Significant SU = Significant Unavoidable
 NI = No Impact B = Beneficial N/A = Not Applicable

¹Because this potential impact is less than significant, no mitigation is required.

All Sites (Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch)

Impact 3.8-1: Construction associated with the project could disrupt recreation activities (boating, fishing, and swimming) in the Trinity River. ***No Impact for the No-Action Alternative; Less- than-Significant Impact for the Proposed Action and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, there would be no disruption to boating, fishing, and swimming activities within the Trinity River because construction would not occur.

Proposed Action and Alternative 1

As previously discussed, the Trinity River supports in-stream recreational uses, primarily whitewater recreation and fishing. These in-stream recreational activities take place throughout the year, but are more prevalent between the months of April and December. Access to the Trinity River is available on public and private lands, including undeveloped foot paths and improved access points. Some of these access points prohibit public use. Public access is provided on lands owned by Trinity County and BLM

lands. Where available, access to the river provides a variety of water-based recreational activities (e.g., boating, fishing, swimming).

During implementation of either the Proposed Action or Alternative 1, there would be construction equipment and activity within the floodplain and immediately adjacent to the river bank. Activities within the rehabilitation areas described in Chapter 2 may result in short-term interruptions to public access. However, river access will remain available at several public and private access points between Junction City Campground and Bagdad Boat Launch. These facilities ensure uninterrupted public access to the river on both sides of the site boundaries. This impact is considered less than significant because potential disruptions to recreational activities within the site boundaries would be temporary and public access will continue to be provided via Junction City Campground and the Bagdad Boat Launch.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified for these alternatives, no mitigation is required.

Significance after Mitigation: N/A.

Impact 3.8-2: Construction of the project could result in an increased safety risk to recreational users.
No Impact for the No-Action Alternative; Less-than-Significant Impact for the Proposed Action and Alternative 1

No-Action Alternative

Under the No-Action Alternative, there would be no safety risks to recreational users because construction would not occur.

Proposed Action

During construction of the Proposed Action, there would be heavy equipment activity and construction vehicle traffic directly adjacent to the Trinity River. These construction-related activities could distract recreational users (e.g., boaters, anglers) for short periods of time (3-6 weeks per site). However, since no in-channel construction would occur, the Proposed Action would not increase the safety risks associated with river-related recreation. This impact would therefore be less than significant.

Alternative 1

Potential safety risks to recreational users from construction and operation under Alternative 1 are similar to those under the Proposed Action, although Alternative 1 would require slightly less construction time and slightly less work adjacent to the Trinity River. This impact would therefore be less than significant.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A.

Impact 3.8-3: Construction activities associated with the project could lower the Trinity River's aesthetic values for recreationists by increasing turbidity levels in the Trinity River. *No Impact for the No-Action Alternative; Significant Impact for the Proposed Action and Alternative 1*

No-Action Alternative

Under the No-Action Alternative, turbidity levels in the Trinity River would not increase because construction would not occur.

Proposed Action

The Proposed Action could increase turbidity in the Trinity River for some distance downstream. The level of this increase is largely dependent on the flow regime at the time of the discharge. The flows typically attributed to good fishing tend to be clear; nominal increases in turbidity may affect the recreational experience of anglers. A certain increase in these levels may result in potentially significant aesthetic impacts to certain user groups. Water quality objectives for the Trinity River specifically prohibit increases in the levels of other materials in a way that causes nuisance or adversely impacts beneficial uses (i.e., recreation).

The Basin Plan includes two specific prohibitions directed at construction, logging, and other associated non-point source activities:

- The discharge of soil, silt, bark, sawdust or other organic and earthen material from any logging, construction or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife or other beneficial uses is prohibited.
- The placing or disposal of soil, silt, bark, slash or sawdust or other organic and earthen material from any logging, construction or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities deleterious to fish, wildlife or other beneficial uses is prohibited.

Implementing the Proposed Action has the potential to increase turbidity and total suspended solids during construction activities. Although no in-river construction will occur, some bank sloughing may occur during these activities, resulting in some degree of turbidity within and downstream of the project boundary. Fine sediments may be suspended in the river for several hours following excavation activities. The extent of downstream sedimentation would be a function of the instream flow velocity and particle size. For example, fine-grained sediments like silts and clays can be carried several thousand feet downstream of the excavation areas, while larger-sized sediments like sands and gravels would tend to drop out of the water column within several feet of the construction limit. Increased turbidity and suspended solids levels would adversely affect water quality (refer to Section 3.5, Water Quality) and could also adversely affect anadromous fish species that are known to occur in the Trinity River (refer to Section 3.6, Fisheries Resources). This would therefore be considered a significant impact.

Alternative 1

Potential increases in turbidity levels in the Trinity River associated with construction of Alternative 1 would be less than under the Proposed Action. Similar to the Proposed Action, construction activities associated with Alternative 1 would temporarily result in turbidity within and downstream of the activity areas. However, Alternative 1 would result in less disturbed area and substantially less volume in terms of material excavated within the river channel at the Conner Creek and Elkhorn sites. Construction activities for the Valdor Gulch and Pear Tree Gulch sites are common to both action alternatives. Although the area and volume of material excavated from the river channel that would be affected under Alternative 1 are less than under the Proposed Action, fine sediments may be suspended in the river for several hours following excavation activities. This would therefore be considered a significant impact.

Mitigation Measures

No-Action Alternative

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A.

Proposed Action and Alternative 1

- 3a:** Turbidity increases associated with project construction activities shall not exceed the Regional Water Board water quality objectives for turbidity in the Trinity River basin. Turbidity levels are defined in nephelometric turbidity units (NTUs). The current threshold for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (2001), is summarized below.
- Turbidity shall not be increased by more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.
- 3b:** To ensure that turbidity levels do not exceed the threshold listed above during river's edge project construction activities, Reclamation or its contractor shall monitor turbidity levels 50 feet upstream and 500 feet downstream of the point of river's edge construction activities. At a minimum, field turbidity measurements shall be collected whenever a visible increase in turbidity is observed. Monitoring frequency shall be a minimum of every 2 hours during periods of increased turbidity.
- 3c:** Reclamation or its contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) that describes BMPs for the project. Ripping of all riparian areas is expected to stop delivery of storm water to the river; however, BMPs, including silt fences, sediment filters, dewatering activities, and routine monitoring to verify effectiveness, may be necessary. Proper implementation of erosion and sediment controls and dewatering activities shall be adequate to minimize sediment inputs into the Trinity River until river levels rise and inundate the floodplain. All sediment containment devices and erosion control devices will be inspected daily during the construction period to ensure that the devices are functioning properly. Excavated and stored materials will be kept in upland sites with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable upland sites. All applicable erosion control standards will be required during stockpiling of materials.

Significance after Mitigation: Less than Significant.

Impact 3.8-4: Implementation of the project could affect Wild and Scenic River values. ***No Impact for the No-Action Alternative; Less-than-Significant Impact for the Proposed Action and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, there would be no adverse impacts to Wild and Scenic River values because construction would not occur.

Proposed Action and Alternative 1

Construction and implementation of the Proposed Action and Alternative 1 would have a temporary impact on the scenic and recreational components of the Trinity River's Wild and Scenic River values. However, the impact on scenic values would be less than significant because the rehabilitation activities would enhance the overall form and function of the Trinity River, thereby enhancing the outstandingly remarkable values for which it was designated a Wild and Scenic River. Temporary impacts on the scenic quality of the river are also discussed above under Impact 3.8-3 and in Section 3.14, Aesthetics.

The impact on recreational values would also be less than significant because access to the river would be available from areas adjacent to the rehabilitation sites and because the Proposed Action and Alternative 1 do not include in-channel work that would pose a safety risk to recreational users. Temporary impacts on recreation are also discussed above under Impacts 3.8-1 and 3.8-2.

Mitigation Measures

No-Action Alternative; Proposed Action; Alternative 1

Since no significant impact was identified for these alternatives, no mitigation is required.

Significance after Mitigation: N/A.

3.9 Socioeconomics, Population, and Housing

This section presents information on regional and local socioeconomic conditions, population, and housing and the potential impacts of the Proposed Action on these resources. A detailed discussion of poverty rates and population by race and ethnicity is included in Section 3.13, Environmental Justice. Much of this section has been taken directly from *Trinity County 2004: Economic and Demographic Profile* (Center for Economic Development 2004).

Under CEQA, the “[e]conomic or social impacts of a project shall not be treated as significant impacts on the environment” (*CEQA Guidelines* Section 15131). Consequently, this section addresses CEQA issues only to the extent that potential social or economic impacts of the Proposed Action would have either a direct impact or would result in reasonably foreseeable indirect impacts on the physical environment.

3.9.1 AFFECTED ENVIRONMENT/ENVIRONMENTAL SETTING

Regional Labor Market

Trinity County is a rural region with substantial amounts of public land. As a result, the region is largely dependent on natural resources and tourism for its economic base.

Data for labor force, employment, and unemployment were obtained from the California Employment Development Department (EDD), which estimates labor force and employment statistics for all counties in the state. Data for employment by industry were collected from the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) through the Regional Economic Information System (REIS). Differences in calculation methods and differences regarding what is considered employment may account for differences in EDD and REIS employment data (Center for Economic Development 2001).

Labor Force

Labor force refers to the total civilian labor force and is the number of non-institutionalized people age 16 and older who are working or looking for work and who are not in the military. Total labor force includes wage and salary workers, proprietors, and household workers. Annual average labor force is the 12-month average labor force for a given year. In general, the average total labor force trend in Trinity County between 1991 and 2002 was upwards, having increased from 5,130 in 1991 to 5,300 in 2002, an overall 3 percent increase (Center for Economic Development 2004). The majority of the total labor force is concentrated in Weaverville and Hayfork. The primary communities within Trinity County are shown in Figure 3.9-1.

Employment

Employment refers to total civilian employment as calculated by the EDD. Total civilian employment is the number of people employed in both the private sector and the non-military public sector. Employment includes wage and salary workers, proprietors, and household workers.

Employment rates in Trinity County between 1990 and 2001 showed a significant decline, dropping by approximately 20 percent (a loss of 1,090 jobs). A decline in the timber industry and associated jobs

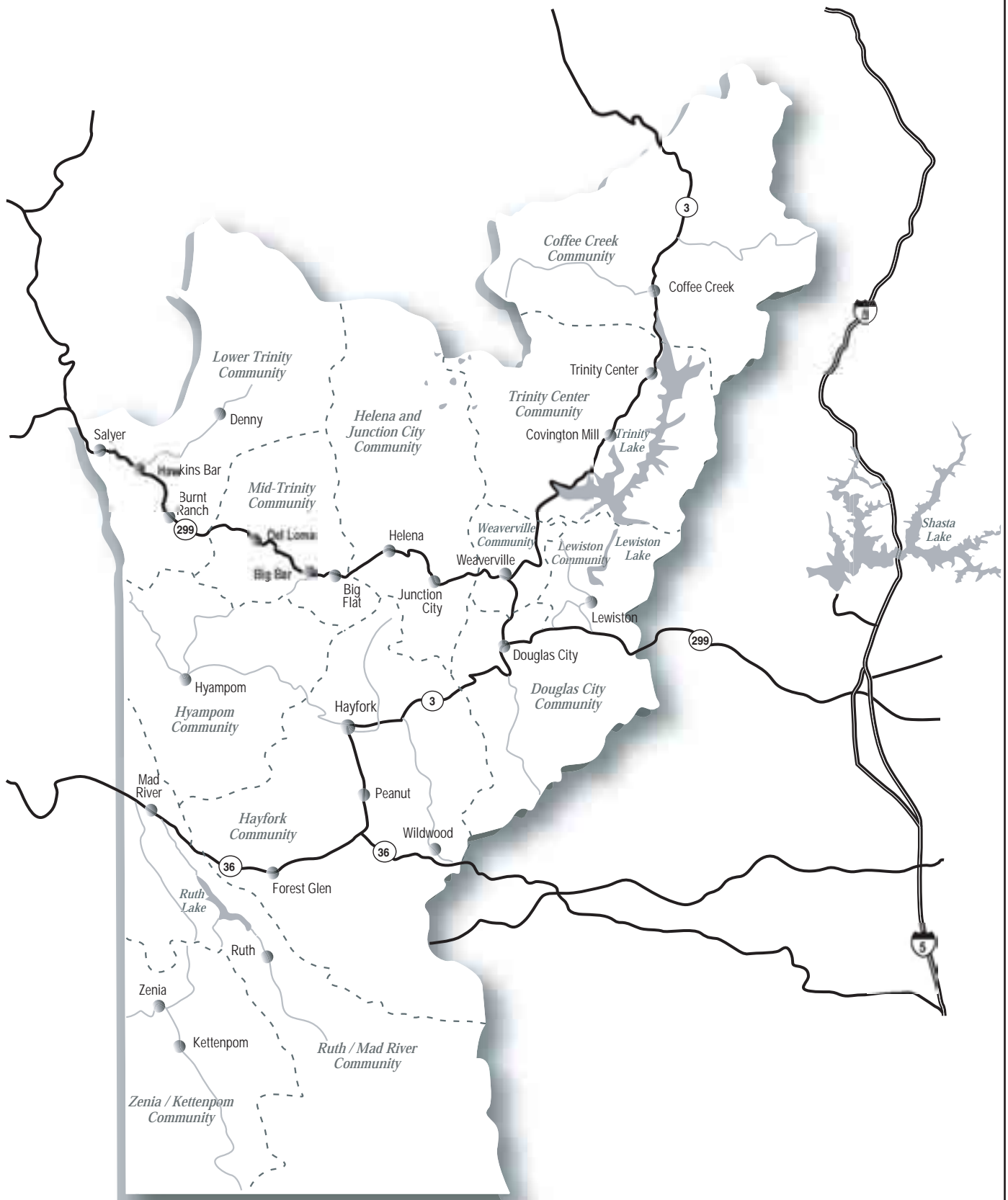


Figure 3.9-1
Trinity County Communities

accounted for this drop. However, between 2001 and 2002, total employment rates increased by 3.9 percent (Center for Economic Development 2004) as opportunities arose for increased tourism- and transportation-related job growth. Despite mill closures in both Weaverville and Hayfork, these two communities continue to be the county's largest employment centers.

Unemployment

Unemployment refers to the annual average civilian unemployment rate and represents the percentage of the total civilian labor force that is not employed. According to the California EDD, unemployment in the county declined slightly between 1990 and 2004. The annual average unemployment rate in the county generally remains far above the unemployment rate for California as a whole. Since 1990, unemployment within the county has been high, averaging 13.9 percent compared to the statewide average of 7.5 percent.

The county's labor market depends on such factors as distance to SR 299 and distance to Weaverville, the county's business center and largest labor market. Ruth/Mad River, Hayfork, Zenia/Kettenpom, and Hyampom are rural communities that do not have ready access to SR 299 or Weaverville. Subsequently, these communities have fewer job opportunities and a larger unemployment rate. In contrast, communities located on SR 299, such as Helena, Junction City, and Douglas City, from which Weaverville can be accessed directly, have smaller unemployment rates.

Employment by Industry

In this section, industries are defined using the *Standard Industrial Classification Manual*, published by the Executive Office of the President, U.S. Office of Management and Budget (1987). The measurement of employment by industry is based on the type of industry and the annual average number of full-time and part-time jobs for a given industry in a particular year.

The industrial employment trend in Trinity County is a function of the county's ample recreational opportunities and tourism. Consequently, service industries, including hotels and lodging, recreation services, museums, auto repair, and engineering and management services, continue to experience growth.

Income

When compared to the state as a whole, Trinity County has a much lower per capita income, a much lower median household income, and higher poverty rates. The industry with the highest earnings is government and public administration.

Per Capita Income

Data from the U.S. Bureau of the Census (Census) and the BEA show that per capita income levels in Trinity County tend to be significantly below state levels. Per capita income is the average income computed for every man, woman, and child in a particular group. The Census derives per capita income by dividing the total income of a particular group by the total population in that group (excluding patients

or inmates in institutional quarters). Per capita income data for Trinity County and California are depicted in Table 3.9-1.

TABLE 3.9-1.
PER CAPITA INCOME, TRINITY COUNTY AND CALIFORNIA

Year	Trinity County	California
1990	\$14,469	\$21,882
1991	\$14,824	\$21,983
1992	\$15,605	\$22,650
1993	\$15,842	\$22,833
1994	\$15,863	\$23,348
1995	\$16,445	\$24,339
1996	\$16,999	\$25,373
1997	\$17,693	\$26,521
1998	\$18,208	\$28,240
1999	\$19,084	\$29,698
2000	\$19,995	\$32,334
2001	\$21,223	\$32,877

Source: Adapted from Center for Economic Development 2004

The data in Table 3.9-1, compiled by the CED using the Census and the California Department of Finance databases, show that while the per capita income of Trinity County and the state are both increasing, Trinity County continues to lag far behind the state, with its per capita income as much as 36 percent below that of the state in 2001.

Median Household Income

Median household income is the midpoint of the distribution of household incomes. Half of all households have incomes above this level, and half have incomes below this level. Median household income in Trinity County, though increasing, is lower than the state median household income. From 1989 to 1999, median household income in the county increased by 26 percent, which is comparable to the 25 percent increase in median household income for the state, measured over the same period (Center for Economic Development 2004). However, median household income in Trinity County continues to lag behind the state median by approximately 42 percent (based on 1999 data). This represents an average of \$19,782 less money available for each household in the county than for each household in the rest of the state.

Regional Population

The population of Trinity County is generally characterized by stagnant growth, with higher proportions of white and retirement-age persons and lower proportions of Hispanic and young working-age persons. The county's demographics are influenced by the fact that approximately 75 percent of its land is federally owned and 10 percent is in private industrial timber production, much of which is restricted from development by Timber Production Zone zoning. Thus, only 15 percent of the county is private

land usable for development purposes. The county's rugged terrain and remote location also influence its demographics by limiting the developable area. Education levels of residents are typical of most of rural northern California, with a greater proportion of high school graduates and a smaller proportion of college graduates.

Total Population/Population Density

Population estimates are based on the number of people who were residing within the county boundaries, either permanently or temporarily, on January 1 of the given year. Total population includes foreign and domestic migrant workers. Trinity County's population continues to grow at a considerably lower rate than California on average, and was projected by the U.S. Census Bureau in 2000 to be ranked 54th in total population out of 58 California counties by 2004 (U.S. Census Bureau). Between 1990 and 2003, the county experienced only a 3 percent increase in population compared to an estimated 16 percent increase in California's population during the same period (U.S. Census Bureau 2005). A decline in the timber industry and an attendant loss of jobs have had a significant effect on the county's population.

Trinity County has a population density well below the population density of California as a whole. The population density of the county in 2003 was estimated at 4.2 persons per square mile, while the population density of California was estimated at approximately 230 persons per square mile (Center for Economic Development 2004). Most of the population of Trinity County is concentrated in Weaverville, Hayfork, and Lewiston (Figure 3.9-1). The communities with the lowest population concentrations, Coffee Creek and Zenia/Kettenpom, are in some of the most remote areas of the county (Figure 3.9-1).

Demographics related to Trinity County's racial and ethnic composition are discussed in detail in Section 3.13, Environmental Justice.

Housing

Each year, the California Department of Finance, Demographic Research Unit estimates the number of housing units located in each county and incorporated place, as well as California as a whole. Housing units are estimated by adding new construction and units included in annexations and subtracting demolitions from the Census benchmark.

Local Setting

Junction City offers limited services, including several commercial enterprises, a Forest Service work station, a U.S. Post Office, and Junction City Elementary School. It also includes several commercial sand and gravel operations, as well as a few recreation-based businesses such as RV parks, lodges, and rafting and fishing guides that operate along the Trinity River between Junction City and Helena. These businesses provide economic benefits to the local community and the county; however, the Junction City community is primarily residential and does not provide significant socioeconomic benefit to Trinity County beyond property tax revenues and revenues from mining operations.

Existing land uses in the area of the rehabilitation sites are primarily rural residential. There are no dwellings or structures within the site boundary. Homes in the upland areas adjacent to the site boundary would not be directly affected by the Proposed Action.

There is little likelihood that any parcels in the project vicinity will be further subdivided in the future; therefore, there is little potential for increased development densities. In addition, many of the existing parcels fall into Flood Hazard, Scenic Conservation Overlay, or Open Space zoning districts, making further development difficult. The private timberland located on the slopes above Red Hill Road is zoned for Timberland Production. Additional information on land use is provided in Section 3.2.

Planned Developments in Canyon Creek Vicinity

Because of the zoning restrictions within the site boundary, the primary development that could occur would be an expansion of sand and gravel extraction and processing operations, similar to that which occurs upstream at Hocker Flat. Some residential development could eventually occur on parcels along the west side of the Conner Creek site boundary, but not in the foreseeable future.

3.9.2 RELEVANT PLANS AND POLICIES

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

Persons and businesses displaced as a result of construction and/or operation of the Proposed Action are protected under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended April 2, 1987. This law was designed to mitigate adverse impacts experienced by private property owners in the public taking of land. Under this Act, persons or businesses displaced would receive compensation from the public entity that funds the project. Listed below are some of the major costs a public entity must compensate a displaced person for as part of the cost of acquisition of real property for a public use. A public entity is required by law to provide these and other compensation as outlined in the relocation assistance guidelines:

- actual and reasonable expense in moving him/herself, a family, a business, or a farm operation, including expense in moving personal property;
- actual direct losses of tangible personal property as a result of moving or discontinuing a business or farm operation;
- actual and reasonable expenses in searching for a replacement business or farm; and
- a fixed or in-lieu payment to compensate eligible displaced businesses for a substantial loss of existing patronage.

The Act also stipulates that a public entity shall not participate in a project that will displace individuals from their homes unless comparable replacement dwellings will be available within a reasonable period before displacement.

A comparable replacement is defined as one that is

- decent, safe, and sanitary;
- functionally equivalent to the displaced dwelling;
- an adequate size to accommodate the family being relocated;
- in an area not subject to unreasonable adverse environmental conditions;
- generally not less desirable than the location of the displacement dwelling with respect to accessibility to public utilities, commercial and public facilities, and place of employment; and
- on a site that is typical in size for residential development with normal size improvements.

Implementation of the Proposed Action would not result in the displacement of any individual from his or her home or business.

Trinity County General Plan Goals

The following General Plan goals have been established by the County:

1. To provide more diverse sources of income and stabilize the economy.
2. To provide a higher average in income levels.

Land Use Element Goals and Objectives

Cultural

Goal: Retain the rural character of Trinity County by:

- Limiting dwelling density based on retention of rural character and conservation of important resources, including historic sites and structures, and wildlife.
- Considering the “rights” of the individual when making decisions as well as the “rights” of the community.

Goal: Encourage adequate housing and residential space to keep pace with a moderate population growth by:

- Clearly designating those areas in which additional housing is necessary and desirable.
- Minimizing the “bureaucratic machinery” a landowner faces when attempting to develop housing that is consistent with this plan.
- Avoiding the need for increased public services.
- Keeping density, and thus demand, as low as possible in the most rural areas.

- Determining “threshold” densities that require expensive public services.
- Exploring outside funding possibilities available to the County when new or improved services must be provided.

Economic

Goal: Maintain and enhance a viable economic base for Trinity County by:

- Maintaining as many privately owned prime timber, agricultural, mineral, sport and commercial fishery, and animal-producing lands as possible.
- Encouraging tourism.
- Implementing the General Plan so that it is applied fairly and consistently and by stabilizing land-use regulations.

Junction City Community Plan Goals

Economic Development

Goal: To recognize and encourage, as a priority, the small business activities found in the Plan area.

- Encourage the development of a single County development permit-processing center.
- Insure that State, Federal, or County projects provide every opportunity for small local contractors to favorably compete with large contractors.

Goal: To ensure that resource production lands continue to be utilized for such purposes.

- Protect resource areas from encroachment of incompatible uses.

Trinity County Housing Policies

In order to provide an adequate supply of housing, the County has established the following policies:

1. Encourage the overall production of housing.
2. Encourage the production of housing opportunities for all income groups.
3. Work towards improving infrastructure capacity.
4. Encourage the production of housing for persons with special housing needs.
5. Encourage the repair and rehabilitation of existing housing stock.
6. Ensure that there are adequate sites available to support future housing needs.
7. Prevent discrimination in housing.
8. Encourage citizen participation during the preparation of the housing element and other general and community plan documents.

Project Consistency with the Trinity County General Plan and Community Plans

The goals and objectives described in Chapter 1 are generally compatible with the applicable General Plan goals and policies summarized above. The overall goal of the Proposed Action is to rehabilitate the sites so that they function in a manner that is closer to historic conditions (i.e., pre-Lewiston Dam).

Enhancement of river recreation and tourism opportunities associated with the Trinity River would contribute to the local economy by creating new job and business opportunities, increasing the business volume of existing businesses, and adding to the current tax base. The County's General Plan and the Junction City Community Plan have set goals aimed at moderate increases in population growth, encouraging area tourism, improving the condition of existing homes, and encouraging housing production. Implementation of the Proposed Action would provide a basis for economic growth and is thus consistent with local and county planning goals and objectives.

3.9.3 ENVIRONMENTAL CONSEQUENCES/IMPACTS AND MITIGATION MEASURES

Methodology

The following section provides a brief overview of the analytic methods used to assess the potential socioeconomic impacts of the Proposed Action. These methods included qualitative assessments of potential impacts associated with employment, income, conflicts with county and local plans, population growth, displacement of persons and businesses, and community disruption. For the purpose of this assessment, Trinity County is considered to be the area of potential socioeconomic impact.

The generation of employment results in social benefits, even if the employment is short-lived. Implementation of the Proposed Action would generate new, temporary employment opportunities for Trinity County residents. Income generation is one measure of economic activity in a community. Income growth spurs secondary economic impacts that ultimately result in increased employment activities. The Proposed Action could directly generate income growth through the payment of wages and salaries. The duration of income growth, however, is an important consideration in determining the significance of an income change. Little increased long-term economic activity may result from short-term income growth unless such growth is substantial.

Significant increases in population concentration or growth can produce negative socioeconomic impacts, such as a lack of affordable housing, or can result in socioeconomic benefits, such as increased local revenues. The potential for the Proposed Action to result in an increase in population concentration or an increase in population growth has been qualitatively assessed as a potential impact associated with the Proposed Action.

The displacement of people (through loss of residences or places of employment) generally results in negative socioeconomic impacts, such as a decrease in the local work force and loss of employment opportunities, in addition to the direct impact to the people concerned. The potential of the Proposed Action to result in the displacement of people has been qualitatively assessed as a potential impact associated with the project.

Significance Criteria

For NEPA purposes, changes in employment and incomes rates are considered significant only if the change is equal to or greater than a minimum threshold of 10 percent. This is the minimum threshold at which there may be a regional impact. Other criteria used in the analysis and relevant under NEPA include:

- The project would result in the displacement of an existing business;
- The project would induce substantial growth or concentration of population; or
- The project would displace a large number of people.

For purposes of CEQA, under which “[e]conomic or social impacts of a project shall not be treated as significant impacts on the environment,” project impacts on population and housing are relevant only if they either (i) directly relate to an impact on the physical environment, in which case a lead agency may, but need not, consider economic or social impacts in determining whether such physical impacts are significant, or (ii) would result in a reasonably foreseeable indirect impact on the physical environment (See *CEQA Guidelines*, § 15131). Under CEQA, a proposed project would have a significant impact on population and housing if it

- induces substantial growth in an area, either directly or indirectly;
- displaces substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and/or
- displaces substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impacts and Mitigation Measures

Table 3.9-2 summarizes the potential socioeconomic impacts resulting from construction and operation of the project.

TABLE 3.9-2.
SUMMARY OF SOCIOECONOMIC IMPACTS OF THE PROPOSED ACTION AND ALTERNATIVES

Impact	Project site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
1. Construction of the project would provide temporary employment opportunities for construction workers in Trinity County.	All sites	NI	B	B	B	B
2. Implementation of the project could result in the disruption or displacement of local businesses.	All sites	NI	NI	NI	N/A ¹	N/A ¹

TABLE 3.9-2.
SUMMARY OF SOCIOECONOMIC IMPACTS OF THE PROPOSED ACTION AND ALTERNATIVES

Impact	Project site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
3. Implementation of the project would result in an increased demand for housing during construction.	All sites	NI	LS	LS	N/A ¹	N/A ¹
4. Implementation of the project would result in concentrated population growth.	All sites	NI	LS	LS	N/A ¹	N/A ¹

Notes:

LS = Less than Significant S = Significant SU = Significant Unavoidable
NI = No Impact B = Beneficial N/A = Not Applicable

¹Because this potential impact is less than significant, no mitigation is required.

All Sites (Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch)

Impact 3.9-1: Construction of the project would provide temporary employment opportunities for construction workers in Trinity County. ***No Impact for No-Action Alternative; Beneficial Impact for Proposed Action and Alternative 1***

No-Action Alternative

Under the no-action alternative, no employment opportunities would be created because the project would not occur.

Proposed Action

Project implementation would generate temporary construction-related employment in Trinity County. The number of design, construction, and clerical positions required to complete the Proposed Action is undetermined, but it is expected to add a small percentage to existing local jobs. However, the duration of employment would be dependent on the length of the contracting and construction period (anticipated to be approximately 6 months). In addition, the Proposed Action would provide direct local employment opportunities only if workers are hired from the local labor force.

Alternative 1

Impacts associated with temporary employment opportunities under Alternative 1 would be similar to those of Proposed Action; however the construction period would be reduced to some degree since there would be fewer restoration activities occurring at the Conner Creek and Elkhorn sites.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A.

Impact 3.9-2: Implementation of the project could result in the disruption or displacement of local businesses. ***No Impact for No-Action Alternative, Proposed Action, and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, no disruption or displacement of local businesses would take place because the project would not occur.

Proposed Action

Local businesses would not be disrupted or displaced by the project. Although there may be some short-term, localized activities occurring along the banks of the river, businesses that depend on the river for their livelihood (e.g., rafting companies, river guides) would not be affected. The river channel and the majority of its banks would remain accessible throughout the period of project implementation.

Alternative 1

Similar to the Proposed Action, Alternative 1 would not disrupt or displace local businesses.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A

Impact 3.9-3: Implementation of the project would result in an increased demand for housing during construction. ***No Impact for No-Action Alternative; Less-than-Significant Impact for Proposed Action and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, no increased demand for housing during construction would take place because the Proposed Action would not occur.

Proposed Action

The area surrounding the community of Junction City is a rural residential area. Few rental opportunities exist within the Junction City Community Plan area. What rental property does occur in adjacent rural residential areas is typically seasonal rental property available for recreational pursuits. More affordable and more readily available short-term rentals are concentrated in the nearby community of Weaverville.

A short-term increase in the demand for housing in Weaverville could occur as a result of construction workers seeking lodging during the construction period. This would be a less-than-significant impact because of the short time during which the housing demand would potentially be increased.

Alternative 1

Temporary increases in the demand for housing during construction associated with Alternative 1 would be less than or similar to those of Proposed Action.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A

Impact 3.9-4: Implementation of the project would result in concentrated population growth. *No Impact for No-Action Alternative; Less-than-Significant Impact for Proposed Action and Alternative 1*

No-Action Alternative

Under the No-Action Alternative, there would be no population increases during or after construction because the Proposed Action would not occur.

Proposed Action

Implementation of the Proposed Action would have a less-than-significant effect on the population numbers of any Trinity County community either during or after construction. Since the majority of workers employed by the project would be drawn from the local work force and because the work is anticipated to be completed in a relatively short period of time, there would be no concentrated population increases associated with the Proposed Action.

Alternative 1

Temporary increases in population concentrations associated with Alternative 1, particularly in the Junction City and Weaverville communities, would be less than or similar to those of the Proposed Action.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A

3.10 Tribal Trust

The United States has a trust responsibility to protect and maintain rights reserved by, or granted to, federally recognized tribes and individual Indians by treaties, statutes, and executive orders. These rights are sometimes further interpreted through court decisions and regulations. The trust responsibility requires that all federal agencies, including Reclamation, take all actions reasonably necessary to protect Indian trust assets.

Indian trust assets are legal interests in property held in trust by the federal government for federally recognized Indian tribes or individual Indians. “Assets” are anything owned that has monetary value. “Legal interest” means there is a property interest for which there is a legal remedy, such as compensation or injunction if there is improper interference. Indian trust assets do not include things in which a tribe or individual Indians have no legal interest.

Indian trust assets can be real property, physical assets, or intangible property rights, such as a lease or a right to use something. Indian trust assets cannot be sold, leased, or otherwise alienated without the approval of the United States. While most Indian trust assets are located on-reservation, they can also be located off-reservation. Examples of things that can be Indian trust assets are land, minerals, hunting and fishing rights, water rights, and instream flows.

3.10.1 AFFECTED ENVIRONMENT/ENVIRONMENTAL SETTING

The need to restore and maintain the natural production of anadromous fish in the Trinity River mainstem originates partly from the federal government’s trust responsibility to protect the fishery resources of the region’s Indian tribes. The Trinity River Basin Fish and Wildlife Restoration Act of 1984 (Public Law 98-541) expressly acknowledges tribal interest in the basin’s fishery resources by declaring that the measure of successful restoration of the Trinity River fishery includes the “ability of dependent tribal...fisheries” to participate fully, through enhanced in-river “harvest opportunities, in the benefits of restoration.” In addition, the 1992 CVPIA specifically recognizes the federal trust responsibility in regard to the Trinity River fishery. The project could potentially affect anadromous fish, non-anadromous fish, water, wildlife, vegetation, and overall riverine health. These impacts could consequently affect the sociocultures and economies of tribes.

This section focuses principally on the interests of the Hoopa Valley and Yurok Tribes since, of the Indian tribes of the Klamath/Trinity Region, their interests could be the most directly affected by the project. It should be understood, however, that potential project impacts are pertinent to the Karuk and Klamath people as well, since they share a common regional heritage.

Regional Setting

The United States’ recognition of the importance of rivers and fish to the Indian people of the Klamath/Trinity Region is exemplified by the very shape and location of the lands first set aside for their reservations. The Secretary’s own instructions at the time were “to select these reservations from such ‘tracts of land adapted as to soil, climate, water privileges, and timber, to the comfortable and permanent

accommodation of the Indians” (U.S. Fish and Wildlife Service et al. 2000). In 1855, Indian Agent S. Whipple, when speaking of the Yurok, noted that, “The river is abundantly supplied with Salmon. A fine large fish quite easily taken by the Indians and which is very properly regarded by the Indian as his staff of life” (U.S. Fish and Wildlife Service et al. 2000).

In that same year, President Pierce established the Klamath River Reservation. The reservation (not to be confused with the Klamath Reservation in Oregon) was designated as a strip of territory commencing at the Pacific Ocean and extending 1 mile in width on each side of the Klamath River for a distance of approximately 20 miles. This reservation was created entirely within the aboriginal territory of the Yurok. Although the federal government’s intent was to eventually move all the region’s Indians onto the Klamath River Reservation, only some Yurok and Tolowa were moved. Flooding along the Klamath River in 1862 led to the closing of the area’s Indian Bureau office and contributed to the erroneous belief that the reservation had been abandoned, though it was still occupied by the Yurok (U.S. Fish and Wildlife Service et al. 2000).

On August 21, 1864, the DOI issued a proclamation and instructions that established the Hoopa Valley Reservation on the Trinity River pursuant to legislation enacted by Congress that same year. The reservation is 12 miles square and bisected by 15 miles of the river (it has often been called the Square or the 12-mile Square). In 1876, President Grant issued an Executive Order formally establishing the boundaries of the Hoopa Valley Reservation, and provided that the land contained within those boundaries “be withdrawn from public sale, and set apart in California by act of Congress approved April 8, 1864” (U.S. Fish and Wildlife Service et al. 2000).

Efforts soon began to provide a single contiguous homeland for the region’s Indian people by connecting the Klamath River Reservation to the Hoopa Valley Reservation. Paris Folsom, a Special Agent for the DOI, proposed that the two reservations be connected in his “Report of Special Agent on Conditions and Needs of Non-Reservation Klamath Indians,” sent to the Commissioner of Indian Affairs in 1885.

In 1891, President Harrison extended the Hoopa Valley Reservation from the mouth of the Trinity River to the ocean, thereby encompassing and including the Hoopa Valley Reservation, the original Klamath River Reservation, and the connecting strip between. By that time, as a result of the Dawes Act of 1887, much of the Klamath River Reservation and extension lands (the 20-mile strip that connected the two reservations is commonly referred to as the “Connecting Strip” or “Extension”) not already claimed as allotments by resident Indians had been opened up to non-Indian settlement. This led to checkerboard ownership of the Yurok portions of both the Extension and former Klamath River Reservation. Through various means, several timber companies quickly consolidated and heavily logged much of this land.

From 1891 through 1988, the Hoopa Valley Reservation was composed of the Hoopa Valley Square, the Extension, and the original Klamath River Reservation. In 1988, Congress, under the Hoopa-Yurok Settlement Act, separated the Hoopa Valley Reservation into the present Yurok Reservation (a combination of the original Klamath River Reservation and Extension) and Hoopa Valley Reservation. Figure 3.10-1 shows the current reservation boundaries.

Indian Federally Reserved Rights

By first creating reservations “for Indian purposes,” the United States sought to provide the Hoopa Valley and Yurok Tribes with the opportunity to remain mostly self-sufficient, exercise their rights as sovereigns, and maintain their traditional ways of life (U.S. Fish and Wildlife Service 2000). Implicit in this objective was an expectation that the federal government would protect the Tribes and their resources, a protection that extended beyond reservation borders.

The United States has a trust responsibility to protect tribal trust resources. In general, this tribal trust responsibility requires that the United States protect tribal fishing and water rights, which are held in trust for the benefit of the tribes (U.S. Department of the Interior 1995). This trust responsibility is one held by all federal agencies. For the project, Reclamation is obligated to ensure that project operations do not interfere with the tribes’ senior water rights. Pursuant to its trust responsibility and consistent with its other legal obligations, Reclamation must also prevent activities under its control that would adversely affect Tribal fishing rights, even when those activities take place off-reservation.

Federally Reserved Indian Fishing Rights

Salmon, steelhead, sturgeon, and lamprey that spawn in the Trinity River pass through the Hoopa Valley and Yurok Reservations and are harvested in tribal fisheries. The fishing traditions of these tribes stem from practices that far pre-date the arrival of non-Indians. Accordingly, when the federal government established what are today the Hoopa Valley and Yurok Indian Reservations on the Trinity and lower Klamath Rivers, it reserved for the benefit of the Indian tribes of those reservations a right to the fish resources in the rivers running through them. The Yurok and Hoopa Valley Tribes’ federally reserved fishing rights entitle them to take fish for ceremonial, subsistence, and commercial purposes. The United States has long recognized the rights of the Hoopa Valley and Yurok Tribes of the Klamath/Trinity River basin to fish. The federal government, as trustee, has an affirmative obligation to manage federally reserved Indian rights for the benefit of federally recognized Indian tribes. Federally reserved Indian fishing rights are vested property rights held in trust by the United States for the benefit of the Indians. These rights have been acknowledged and confirmed by the executive, legislative, and judiciary branches of the federal government in a number of authorities including: (1) Secretarial Issue Document on Trinity River Fishery Mitigation, issued January 14, 1981; (2) Opinion of the Solicitor of the DOI re: Fishing Rights of the Yurok and Hoopa Valley Tribes (M-36979: October 4, 1993); (3) the CVPIA (3406 (b) (23)); and (4) *Parravano v. Babbitt*, 837 F. Supp. 1034 (N.D. Calif. 1993), 861 F. Supp. 914 (N.D. Calif. 1994), affirmed 70 F.3d 539 (9th Cir. 1995), cert. denied, 518 U.S. 1016 (1996).

In most cases, federally reserved Indian fishing rights cannot be supplanted by state or federal regulation. The above-referenced 1993 Solicitor’s opinion: (1) reaffirms the historic and legal basis of the federally reserved fishing rights of the Hoopa Valley and Yurok Tribes; (2) acknowledges the federal government’s cognizance of the importance of fish to these Indians at the time it first established reservations on their behalf; (3) concludes that the tribes’ federally reserved fishing rights entitle them to harvest quantities of fish on their reservations sufficient to support a moderate standard of living, or 50 percent of the harvestable share of the Klamath-Trinity basin fishery, whichever is less; (4) recognizes that under the

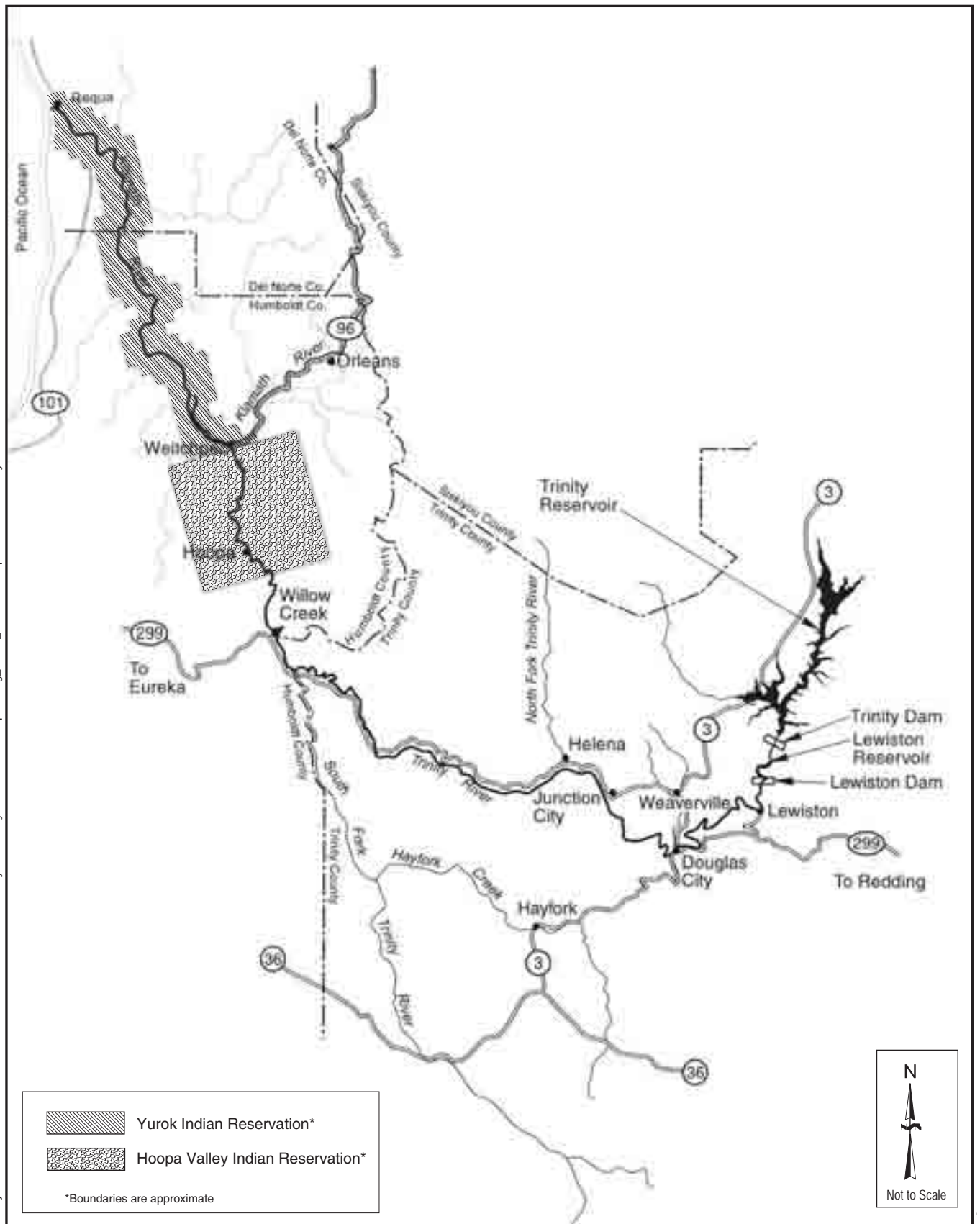


Figure 3.10-1
Trinity Basin Indian Reservations

current depleted condition of the fishery, a 50 percent allocation does not adequately meet the tribes' needs; and (5) argues that it was the degree of the Hoopa Valley and Yurok tribes' dependence on fisheries at the time their reservations were first created or expanded, and not the tribes' specific uses of the fish, that is relevant in quantifying their federally reserved fishing rights.

Today, the reserved fishing right includes the right to harvest quantities of fish that the Indians require to maintain a moderate standard of living, unless limited by the 50 percent allocation. Specifically, the tribes have a right to harvest all trust species of Klamath and Trinity River fish for their subsistence, ceremonial, and commercial needs. Tribal harvest of these species is guided by conservation requirements outlined in carefully developed tribal harvest management plans.

Water Rights

In addition to fish, the tribes have reserved rights to water. The concept of reserved rights in general, and Indian reserved water rights specifically, originated just after the start of the 20th Century with *Winters v. United States*, 207 U.S. 564 (1908). The ruling in this case, commonly referred to as the *Winters Doctrine*, states that when the federal government established a reservation, it implicitly reserved a quantity of water necessary to fulfill the purposes of said reservation. Generally, all original documents related to the establishment of reservations—treaty, executive order, or statute—indicate, at a minimum, that the purpose of the reservations is to provide a permanent home for the tribe(s) in question. In cases where reservations have been created with specific language stating or implying reserved fishing, hunting, gathering, or other rights, the *Winters Doctrine* has been interpreted to mean that adequate water supplies for these purposes have been reserved (even in addition to more general uses; see *U.S. v. Adair*, 723 F.2d 1410 [9th Cir. 1983]).

The DOI Solicitor's office reaffirmed these rights with respect to Reclamation's activities, stating that "Reclamation is obligated to ensure that project operations not interfere with the Tribes' senior water rights. This is dictated by the doctrine of prior appropriations as well as Reclamation's trust responsibility to protect tribal trust resources" (U.S. Department of the Interior 1995). Furthermore, the Solicitor's office notes that the Secretary, "through Reclamation, must operate reclamation projects consistent with vested, fairly implied senior Indian water rights" (U.S. Department of Interior 1995). Further, absent a "completed adjudication or other determination of the senior water rights," projects must be "operated based on the best available information."

Rights to Wildlife and Vegetation Resource

While the focus of the legal history surrounding Indian rights to resources has concentrated on water and fisheries, it is important to recognize that other resources, such as wildlife and vegetation, are extremely important to the tribes, and the tribes have assessed that these are no less reserved. In the case of the Hoopa Valley and Yurok Tribes, the decline in the health of the region's rivers has limited the availability of grasses and other plants important to traditional basketry, art, and medicine. Thus, while anadromous fish are the focus of the TRRP, other trust assets such as vegetation are embodied in the federal government's trust responsibility and, accordingly, need to be considered in the decision-making process.

Potentially Affected Indian Trust Assets

Indian tribes of the Klamath/Trinity Region have firmly established federally protected rights to numerous natural resources. These general resource groupings represent culturally important Indian trust assets. A partial list of trust assets is presented in Table 3.10-1. While each tribe has its own uses for the species and resources listed, the table provides a general summary of what these uses are.

TABLE 3.10-1.
PARTIAL LIST OF KLAMATH/TRINITY REGION TRIBAL ASSETS

Asset	Primary Uses by Tribes
<i>Aquatic Resources^a</i>	
Water	Subsistence, ceremonial, commercial, medicine
Fall Chinook salmon	Subsistence, ceremonial, commercial
Spring Chinook salmon	Subsistence, ceremonial, commercial
Summer steelhead	Subsistence, ceremonial, commercial
Fall steelhead	Subsistence, ceremonial, commercial
Winter steelhead	Subsistence, ceremonial, commercial
Coho salmon	Subsistence, ceremonial, commercial
Pacific lamprey	Subsistence, ceremonial, commercial
Sturgeon	Subsistence, ceremonial, commercial
Eulachon	Subsistence, ceremonial, commercial
<i>Terrestrial Resources</i>	
Willow shoots	Basketry, ceremonial
Cottonwood	Basketry
Wild grape	Basketry
Bulrush	Basketry
Hazel sticks	Basketry and weaving, ceremonial
Tules	Medicine
Spearmint	Medicine, subsistence
Blackberries	Subsistence
Bear	Subsistence
Bald eagle	Ceremonial
Blue heron	Ceremonial
Mallard	Ceremonial

^aWhile many of the fish listed are not currently commercially harvested by the tribes of the region, all these trust species were historically used for commercial purposes and the tribes continue to have the right for commercial harvest.

Cultural Environment

Native uses of natural resources and the cultural significance of those resources have developed over many centuries. Since time immemorial, native people have lived in the heavily forested drainages of the Klamath and Trinity rivers and adjacent streams in northwestern California. Over time, they learned to efficiently use the natural bounty of their territories; hunting, fishing, and gathering were the foundation of their societies. Tribes in the area included the Chilula, Hoopa Valley, Nongatl, Tsungwe, and Whilkut, which spoke Athabascan languages; the Chimariko, Karuk, and Shasta, which spoke Hoka

languages; the Wintun, which spoke a Penutian language; and the Wiyot and Yurok, which spoke Algonkian languages.

Some of these tribes, such as the Chilula, no longer exist. Others, including the Chimariko and Wintu, have not been officially recognized by the United States as a distinct and sovereign people. In fact, among the Indian peoples still present within the region, only the Hoopa Valley, Karuk, Klamath, and Yurok Tribes have received this recognition.

The aboriginal lands of the Hupa people are centered on the drainages of the Hoopa Valley of the Trinity River. The aboriginal lands of the Yurok were generally centered on the Klamath River drainage from the mouth of the river at the Pacific Ocean up to and including the Slate Creek drainage. Yurok ancestral territory also extends up the Trinity River to Tank Creek and includes the village of Oslegoits, 6 miles from the Trinity's confluence with the Klamath.

There have always been strong social, cultural, and economic ties among the tribes of the Klamath/Trinity basin, based in large part on a shared reliance on the region's rivers and associated resources, particularly salmon. This reliance extends well beyond subsistence and commerce to the cultural and social fabric of their societies, as evidenced by their traditional, ceremonial, and spiritual ways of life that focus and center on the rivers and the fish, wildlife, and vegetation they support. For Indians of the Klamath/Trinity Region, the interaction and identification with the natural environment so defines their cultures, lifestyles, and religions that its degradation has had a profoundly devastating impact.

Local Setting

Based on consultation with the Tribes and Reclamation, the rehabilitation sites contain Trust resources, including fish, vegetation, and wildlife. While no specific use of these sites by the Tribes has been identified, the Trinity River provides a valuable corridor that connects these resources to the Hoopa Valley and Yurok Tribes.

3.10.2 ENVIRONMENTAL CONSEQUENCES/IMPACTS AND MITIGATION MEASURES

The purpose of this section is to evaluate the potential impacts of the alternatives on tribal trust assets and the subsequent effects those impacts may have on the Indian tribes of the Klamath/Trinity basin.

Methodology

While the project is aimed at improving the river's anadromous fisheries, an assessment of how project construction may actually affect the Indian trust assets of the Hoopa Valley and Yurok Tribes must be performed, as directed in the DOI *Departmental Manual, Part 512, Chapter 2*, and Reclamation's Indian Trust Asset Policy. Toward this end, the Indian trust asset impact evaluation focuses on the potential effect of the project on the health of the Trinity River because the river's overall health is a primary factor in determining the availability of fish and, therefore, the ability of the Hoopa Valley and Yurok Tribes to exercise their federally reserved fishing rights. Thus, increased numbers of Chinook salmon and Pacific lamprey, and the rejuvenation of other trust assets, represent an expected beneficial byproduct of improved riverine health. The potential tribal trust impacts are not evaluated on a trust asset by trust asset basis.

Significance Criteria

No specific significance criteria were applied in the evaluation of potential consequences on tribal trust assets, although any potential modification of, or change in, the quantity or quality of downstream tribal trust assets is evaluated. Notably, nothing in CEQA expressly requires lead agencies to consider projects' impacts on tribal trust resources as a distinct category of impacts. Instead, with its focus on the physical environment, CEQA requires agencies to focus on impacts to specific natural or environmental resources, some of which, such as fish, wildlife, and water quality, might be indirectly related to tribal trust values.

Although CEQA does not expressly require the application of specific significance criteria for potential impacts to Indian trust assets, NEPA requires the evaluation of potential impacts to Indian trust assets as a distinct category. This evaluation assessed the impacts of the project from any modification or change in the value, use, quantity, quality, or enjoyment of downstream Indian trust assets.

Impacts and Mitigation Measures

Table 3.10-2 summarizes potential impacts on Indian trust assets that would result from implementation of the project.

TABLE 3.10-2.
SUMMARY OF TRIBAL TRUST IMPACTS OF THE PROPOSED ACTION, NO-ACTION ALTERNATIVE,
AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
1. Implementation of the project may reduce the quantity or quality of trust assets.	All sites	NI	LS	LS	N/A ¹	N/A ¹

Notes:

LS = Less than Significant S = Significant SU = Significant Unavoidable
NI = No Impact B = Beneficial N/A = Not Applicable

¹Because this potential impact is less than significant, no mitigation is required.

All Sites (Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch)

Impact 3.10-1: Implementation of the project may reduce the quantity or quality of Indian trust assets.
No Impact for No-Action Alternative, Less-than-Significant Impact for Proposed Action and Alternative 1

No-Action Alternative

Under the No-Action Alternative, the project would not be implemented and no impacts to a tribal trust asset would occur.

Proposed Action and Alternative 1

Under either alternative, the Trinity River would continue to support tribal trust assets. The short-term impacts described in Section 3.3 (Geology, Fluvial Geomorphology, and Soils); Section 3.5 (Water

Quality); Section 3.6 (Fishery Resources); and Section 3.7 (Vegetation Wildlife and Wetlands) would occur if the project is implemented. These impacts are expected to be short-term and to be outweighed by the overall benefits to tribal trust assets through implementation of the TRRP.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified for the alternatives, no mitigation is required.

Significance after Mitigation: N/A

3.11 Cultural Resources

This section describes the prehistory, ethnography, and history of the Trinity River region and discusses the findings of a cultural resources records search and cultural resources report prepared by Reclamation. The information contained in this section provides a general context for understanding the importance, origin, and types of cultural resources that are located within and near the four proposed Canyon Creek rehabilitation sites. Because the Proposed Action would not affect cultural resources outside of the Trinity River basin, the following discussion will address only those cultural resources associated with the Trinity River basin. Specific archaeological details of the Canyon Creek project are discussed in Report *05-45 Archaeological Investigation of the Canyon Creek Channel Rehabilitation Project Area for the Trinity River Restoration Project, Trinity County, California* (Lawrence and Welch 2005).

3.11.1 AFFECTED ENVIRONMENT/ENVIRONMENTAL SETTING

Regional Ethnography

Five periods of prehistory have been described for California's northwest coastal region, which includes the Trinity River basin. These periods are the Paleo-Indian (10,000-6,000 B.C.), Lower Archaic (6,000-3,000 B.C.), Middle Archaic (3,000-1,000 B.C.), Upper Archaic (1,000 B.C.-A.D. 500), and Emergent (A.D. 500-1800). Periods are characterized by their "pattern," a term that refers to a culture's technology as revealed by the type and sophistication of its tools, such as stone or bone projectile points used for hunting, warfare, or fishing; stone metates and manos used to grind seeds; and mortars and pestles used to grind acorns.

At the time of Euro-American contact, the Chimariko, Hupa, Tsnungwe, Wintu, and Yurok Indian tribes inhabited the Trinity River region (to the Klamath River confluence) and the area near the present-day Trinity Lake. The Chimariko and Wintu are thought to have been the primary inhabitants of lands that now include the four Canyon Creek rehabilitation sites.

Chimariko

The Chimariko inhabited a 20-mile reach of the Trinity River extending from approximately Big Bar to the mainstem Trinity River's confluence with the South Fork Trinity River. The Chimariko lived in an area with abundant natural resources. The staples of their diet were salmon and acorns, but deer, elk, bear, pine nuts, seeds, berries, roots, and small mammals were also important food sources. Sources for ethnographic information about the Chimariko are fully described in the FEIS (U.S. Fish and Wildlife Service et al. 2000a) that was prepared for the Trinity River fish restoration project.

Little is known of the Chimariko social organization since their culture was destroyed at an early date. The little information that remains indicates that the largest social unit was the village. Each village had a headman, which was a hereditary lifelong position passed through the male line. Status in Chimariko society was determined by wealth or a combination of wealth and birth. Only fragmentary data on Chimariko religion and myths exist. Although the Chimariko language no longer exists, it is thought to be of Hoka stock.

Hupa

The Hupa inhabited the lower reaches of the Trinity River in the region surrounding the river's confluence with the Klamath River. The Hupa relied heavily on salmon and acorns as food sources, but also used other fish, nuts, seeds, roots, deer, elk, rodents, and fowl.

As with many native groups of northwest California, the highest political entity was the village, but the Hupa had no formal chief or ruling council, and were instead ruled by individuals having prestige based on wealth. Wealth was defined in terms of the possession of nonsubsistence goods (usually imported items) gained by such means as trade, gambling, and indemnities. The Hupa excelled in woodworking and basket making (twined basketry).

The Hupas remained undisturbed until the 1850s, when the discovery of gold in the Trinity River basin attracted would-be miners into the area. In 1864, the Interior Department established the Hoopa Valley Reservation, centered near the confluence of the Trinity and Klamath rivers, followed by establishment of a boarding school in 1893. A business council was formed by the community in 1933, and that same year a public school was opened on the reservation. Today the Hoopa Reservation is California's largest and most populous reservation.. It is home to more than 2,000 members and maintains the largest accumulation of tribal funds in the state.

Wintu

At the time of Euro-American contact, most of the western side of the Sacramento Valley (north of Suisun Bay) was inhabited by Wintun-speaking people. Early in the anthropological study of the region, Powers (Powers 1976) had recognized a linguistic and cultural distinction between the southern membership of this large group (i.e., the Patwin) and the people occupying the northern half of the western valley. Subsequent linguistic analyses resulted in the present division of Wintuan into a southern Patwin group, a central (Nomlaki) group, and a northern (Wintu) Wintuan stock. Clearly, however, the central and northern Wintus are very closely related and share numerous cultural traits and attributes.

The Wintu were divided into nine subgroups distributed from Cottonwood Creek in the south, northward through Shasta County and into portions of Trinity and Siskiyou counties, and westward into portions of southern Trinity and northern Tehama counties. Within the general vicinity of the four rehabilitation sites, the Wintu inhabited the area east of Junction City, including the area of what is now Trinity Lake.

Wintu subsistence was based on three main staples: deer, acorns, and salmon. All three of these food sources were abundant along the mainstem Trinity River and its primary tributaries, although acorns and deer were available only seasonally.

The available ethnographic information documents a complex pattern of land use, settlement, and subsistence orientation. The salmon runs, the locations of seasonally available big game (especially deer), and the distribution of acorn-yielding oak trees made it necessary that the Wintu periodically travel far from their home territory. Although these extended forays were often arduous, they allowed the Wintu an opportunity to collect non-native raw materials, such as obsidian and other utilitarian materials that could not be obtained through trade.

The contemporary Wintu community is relatively small in terms of the number of individuals. Currently, there is only one federally recognized group of Northern Wintu, located on the Redding Rancheria, but at least four additional Northern Wintu groups dispersed throughout Shasta and Trinity counties are in various stages of seeking federal recognition.

Yurok

The Yurok inhabited California's northwestern coastline from Little River to Damnation Creek, although their ancestral territory included the Klamath River corridor from the estuary upstream to Slate Creek near present-day Trinity Lake. Food sources include salmon, ocean fish, sturgeon, sea lion, whale, elk, deer, and duck, with acorns, berries, bulbs, and grass seed rounding out the traditional diet.

Yurok life is defined by extended families affiliated with villages and represented by head spokespersons. Ceremonial wealth and rights to subsistence resource areas determine familial standing within Yurok social structure. Yurok are recognized for their highly stylized art forms and their skills in making redwood canoes, weaving fine baskets, hunting, and, especially, riverine salmon fishing. Many ancient traditions are continued through contemporary times.

Today, the Yurok Tribe is the largest Native American tribe in California, with nearly 5,000 enrolled members. The Yurok Reservation, which occupies 63,035 acres centered along the Klamath River corridor, is the size of many cities or counties, but does not have the tax base, gaming, or other business revenues available to create sustainable economic development on the Reservation. Poverty within the Yurok Tribe exceeds 80 percent.

History

Regional History

The area's first recorded European exploration occurred in 1845 when Major Pierson P. Reading discovered and named the Trinity River (the English translation of "Trinidad") when he mistakenly thought that the river emptied into the Pacific Ocean at Trinidad Bay. Prior to 1845, it is probable that fur traders like Jedediah Smith had visited the region, although there is no written documentation available. Beginning in late 1849, the discovery of gold in the Trinity River drew large numbers of miners and settlers to the region. Boom towns quickly sprang up throughout the basin, with Weaverville and Trinity Center being among the largest. In fact, there were more people living in the Trinity area in the 1850s than have ever inhabited the area at any one time since. In 1853, it was estimated that close to 2,000 Chinese alone lived and worked in Weaverville. This boom, however, was relatively short lived.

By the 1860s, the placer, or more readily accessible surface gold, had been played out and the Chinese had moved on to work on the transcontinental railroad, which was being constructed across the Sierra Nevada. Mining continued in the area in the form of large-scale, corporate-funded underground and hydraulic mining operations, which continued into the 1930s. The world's largest placer mine of its time, the LaGrange Mine, located just upstream of Junction City, operated from 1862 to 1918. Many of the gravels found near Junction City came from the LaGrange Mine operations. Large-scale dragline and

bucket dredging operations were used along many stretches of the Trinity River and a number of its tributaries beginning in 1936, a practice that continued into the 1960s.

As the gold disappeared and the railroad came into the area, logging became a more important local industry than mining. Many communities in the region developed economies based on timber harvest, although accelerated harvest and economic growth in the timber industry did not come about until after World War II, when modernization and improved technologies occurred. From World War II until about 1994, the timber industry was considered the economic engine for the county.

Local History

Junction City has been subjected to many changes since the discovery of gold in the 1850s. Most of these changes focus on the Trinity River corridor and the use of the corridor as a transportation route. Through the pre-historic Emergent Period (A.D. 500-1800), the Trinity River served as a principal access route for Native American trade and travel between the Sacramento Valley and the Klamath River. The Chimariko and perhaps the Wintu people are thought to have periodically inhabited the area around Junction City and Helena. Miners and settlers also used the river corridor as their primary access into the area. Today, SR 299 closely follows the original trail used by Native Americans, miners, and settlers traveling between the Sacramento Valley and the coast. In-river transportation was also available from the early 1850s until the 1930s. Travelers moving between Douglas City and Junction City could use a ferry operated by John Hocker, which was located at the mouth of Canyon Creek in Junction City. The Hocker Ranch consisted of a trading post and facilities for overnight guests. Flooding and fire have removed most of the original buildings in the vicinity of Junction City.

The LaGrange Mine, located just east of Junction City on Oregon Mountain, was the largest placer mine in the world for some years until a hydraulic mine in the Sierra Nevada superseded it in size. Many of the large piles of mine tailings that exist along the Trinity River between Junction City and Helena are there as a result of factory-sized bucket-line dredges that operated along the river. In the 1940s, the dredging operation of the Madrona Dredging Company used bucket-line dredges to mine the alluvial features from Hocker Flat to Chapman's Ranch along the Trinity River. World War II curtailed this type of mining activity, and large-scale mining operations were shut down permanently, although numerous small placer mines still operate on an intermittent basis in the vicinity of Junction City.

Logging in the immediate vicinity of the four Canyon Creek rehabilitation sites was never very significant due to the steep topography of the surrounding area. Timber harvest was limited to more readily accessible areas.

Present Environment

Regional Setting

The Trinity River basin remains a culturally significant area for several Native American tribes, including the Hupa, Wintu, Yurok, and descendants of the now extinct Chimariko. Not only do these tribes have ties to this region that pre-date written history, but some modern-day tribal members try to continue many of the traditional uses of the area's natural resources, such as salmon fishing. However, retaining a culture in the wake of dam construction that was traditionally and inextricably tied to the pre-dam river

ecology has resulted in conditions that are less than ideal for the continuation of some traditional practices. Changes to native land use practices brought about by the dam, current land uses, and increased population densities define a totally different kind of interaction by the native people with their environment.

A long history of flooding, fire, and vandalism have taken their toll on many potentially historically significant resources in the region. Few commercial mining operations remain, as most current mining is recreational. A decline in the timber industry resulting primarily from changes in human values has had a significant effect on the regional economy. Mill closures and fewer logging-related jobs have created a generally depressed economy in the region. However, some communities such as Weaverville have turned to their historic downtowns and rich mining history to develop a new economic base built on tourism.

Local Setting

Area of Potential Effect

A Programmatic Agreement (PA) was developed in consultation with the California State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) regarding implementation of the Trinity River Mainstem Fishery Restoration (U.S. Fish and Wildlife Service et al. 2000). The area of potential effect (APE) is delineated in the PA for compliance with the National Historic Preservation Act (NHPA). By design, the programmatic APE is general in nature and encompasses a larger area than the four Canyon Creek rehabilitation sites. The project APE encompasses the limits of the Proposed Action at Connor Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch, including the area needed for access and staging of equipment (Lawrence and Welch 2005).

Archaeological and Historical Information Sources

A records search for the Trinity River-wide APE was conducted in support of the EIS/EIR. These data were consulted before going into the field. Reclamation reviewed site maps, site record files, and standard references (e.g., National and State Registers) and completed a literature, photo, and records search at the Trinity County Historical Society in Weaverville, California. No sites of cultural or religious significance were recorded in the California Native American Heritage Commission's Sacred Lands File (Letter of May 24, 2004). No previously recorded prehistoric or historic sites were found in the records search for the APE. The records identified some previous systematic archaeological survey in the surrounding area, but none were conducted in the project areas.

Field Inventory and Evaluation

The four Canyon Creek rehabilitation sites, which begin about 1 mile downstream of Junction City and extend downriver to Helena, contain two historic cultural resources, but neither is considered eligible for inclusion in the National Register of Historic Places (NRHP). Because all of the rehabilitation sites are located in the river's floodplain, periodic scour by floods has removed evidence of any physical structures

that might have occurred within the project boundaries, with the exception of remnant tailings piles deposited along the river's banks during historic mining and dredging operations (Lawrence and Welch 2005)

An on-the-ground inventory within the APE for the Proposed Action was conducted by Reclamation archaeologists for cultural resources on May 26-28, 2004, July 26-27, 2005, and September 26-28, 2005. The results of the inventory were mixed. No cultural resources were located in the Pear Tree or Elkhorn APEs. Historic mining sites were found at Conner Creek and Valdor Gulch. The Conner Creek Site, TRRP-1, consists of the remains of bucket line dredger tailings and the associated pit or water body that once floated the dredge. The Valdor Gulch Site, TRRP-2, consists of scattered evidence of dredger tailings, an apparent drainage channel, and related surface modifications of this Trinity River terrace that covers an approximate area of 1,300 by 800 feet. The entire APE has been dredged and later disturbed by floods and gravel mining. None of the dredger tailings piles are considered eligible for inclusion in the NRHP since they are relatively recent and do not retain their integrity (Lawrence and Welch 2005).

Native American Consultation

The Hoopa Valley Tribe is a signatory of the aforementioned PA and the Tribe participated in preparation of the Trinity River Restoration EIS/EIR. They were also notified of this specific project, pursuant to the 36 CFR part 800 regulations. The requirements of the California Environmental Quality Act are also invoked for this project. The Native American Heritage Commission (NAHC) was contacted in compliance with state law. It reported that there are no known Native American sacred sites recorded in the NAHC database for the discontinuous APE. The NAHC identified two federally recognized tribes and four non-federally recognized Indian groups as possibly having cultural resource information about the APE. The four groups that are not federally recognized include the Nor-Rel-Muk Nation (Wintu, eastern Trinity County), the Tsnungwe Tribe (western Trinity County), the Wintu Educational and Cultural Council, and the Wintu Tribe of Northern California. These four groups were notified of the project and asked for cultural resources input pursuant to the regulations found at 36 CFR Part 800.4(a)(3). No response has been received from these inquiries. No Native American sites of religious or cultural significance were identified within the APE for the Proposed Action.

3.11.2 REGULATORY SETTING

Federal

Section 106 of the National Historic Preservation Act (NHPA)

Section 106 of the NHPA (1966, amended 2000) requires federal agencies to evaluate the effects of federal undertakings on historic properties that are included in or eligible for inclusion in the NRHP (16 U.S.C. 470f and 36 CFR 800). Agencies are required to identify historic properties within a project's APE and evaluate impacts. If the federal project would have an adverse effect on historic properties (36 CFR 800), the agency is required to consult with the SHPO and the ACHP, Indian tribes, and interested parties to develop alternatives or mitigation measures that would allow the project to proceed.

State

Office of Historic Preservation; California Environmental Quality Act

California Register of Historical Resources

Under CEQA, public agencies must consider the effects of their actions on both “historical resources” and “unique archaeological resources.” Pursuant to *California Public Resources Code* Section 21084.1, a “project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” Section 21083.2 requires agencies to determine whether proposed projects would have effects on “unique archaeological resources.”

“Historical resource” is a term of art with a defined statutory meaning (see *California Public Resources Code*, Section 21084.1; *CEQA Guidelines* Section 15064.5, subds. (a), (b)). The term embraces any resource listed on or determined to be eligible for listing on the California Register of Historical Resources (CRHR). The CRHR includes resources listed on or formally determined eligible for listing on the NRHP, as well as some California State Landmarks and Points of Historical Interest.

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be “historical resources” for purposes of CEQA, unless a preponderance of evidence indicates otherwise (*California Public Resources Code*, Section 5024.1; *California Code of Regulations*, tit. 14, Section 4850). Unless a resource listed in a survey has been demolished or lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the CRHR.

In addition to assessing whether historical resources that could be affected by a proposed project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the CRHR criteria prior to making a finding as to a proposed project’s impacts to historical resources (*California Public Resources Code*, Section 21084.1; *CEQA Guidelines*, Section 15064.5, subd. (a)(3)). In general, a historical resource, under this approach, is defined as any object, building, structure, site, area, place, record, or manuscript that:

- (a) Is historically or archeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political or cultural annals of California; and
- (b) meets any of the following criteria:
 - 1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - 2. Is associated with the lives of persons important in our past;

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history. (*CEQA Guidelines*, Section 15064.5, subd. (a)(3))

Additionally, *California Public Resources Code* 5024 requires consultation with the Office of Historic Preservation (OHP) when a project may affect historical resources located on state-owned land.

As noted above, CEQA also requires lead agencies to consider whether projects will affect “unique archaeological resources.” *California Public Resources Code* Section 21083.2, subdivision (g), states that “‘unique archaeological resource’ means 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:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person” (*California Public Resources Code*, Section 21083.2, subd. [g])

Local

Trinity County General Plan Goals and Objectives

The Trinity County General Plan contains goals and policies designed to guide the future physical development of the county, based on current conditions (Trinity County 2001). The General Plan contains all the state-required elements, including community development and design, transportation, natural resources, health and safety, noise, housing, recreation, economic development, public facilities and services, and air quality. In its Land Use Element, Trinity County outlines a system of historic designations intended to categorize historic buildings and natural landmarks that have been identified within the county. Categorization of these historic resources is useful for determining which structures merit submission to the NRHP for consideration of registry status.

The following goals and policies relevant to cultural resource issues associated with the Proposed Action, particularly those linked with Native American cultures, were taken from the applicable elements of the General Plan (Trinity County 2001), including the Junction City Community Plan (Trinity County 1987).

Junction City Community Plan Goals and Objectives

Community Design

Goal: To encourage the preservation of historical structures within the Plan Area.

- Extend the review and protection of historic resources beyond structures to other physical features as well.

Project Consistency with the Trinity County General Plan and Community Plans

The objectives of the Proposed Action are consistent with the applicable general plan goals and policies summarized above.

3.11.3 ENVIRONMENTAL CONSEQUENCES/IMPACTS AND MITIGATION MEASURES

An APE for the cultural resource inventory and evaluation was established by Reclamation as defined by the individual APEs for each of the four rehabilitation sites. A field survey for the project was performed by Reclamation archaeologists on May 26-28, 2004, July 26-27, 2005, and September 26-28, 2005. The inventory was to identify and subsequently evaluate any cultural resources eligible for listing as a historic property by the NRHP. None of the four rehabilitation sites support cultural resources eligible for listing. A report of this work was prepared to document the inventory (Lawrence and Welch 2005).

Significance Criteria/Determination of Effect

The activities associated with rehabilitation of the four Canyon Creek sites were evaluated to determine how they might affect cultural resources. Impacts on cultural resources are considered significant if implementation of the proposed project would potentially disturb unique cultural resources or properties on or eligible for the NRHP.

For historical resources, the lead agencies have reviewed both the federal NHPA and CEQA in order to determine thresholds of significance. As noted above, CEQA provides that a project may cause a significant environmental effect if the project “may cause a *substantial adverse change in the significance of an historical resource*” (*Pub.Resources Code*, Section 21084.1 (emphasis added)). *CEQA Guidelines* Section 15064.5 defines a “substantial adverse change in the significance of an historical resource to mean “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*” (*CEQA Guidelines*, Section 15064.5, subd. (b)(1) (emphasis added)).

CEQA Guidelines, Section 15064.5, subdivision (b)(2), defines “materially impaired” for purposes of the definition of “substantial adverse change . . .” as follows:

“The significance of an historical resource is materially impaired when a project:

- (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or
- (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the *Public Resources Code* or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the *Public Resources Code*, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- (C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.” (*CEQA Guidelines*, Section 15064.5, subd. (b)(2))

With these definitions in mind, the lead agencies considered impacts on historical resources eligible for the NRHP or CRHR to be significant if the Proposed Action would alter their eligibility for the NRHP or CRHR by

- Physically destroying or materially altering the characteristics of the historical resource that convey its historical significance and justify its eligibility for listing on the NRHP or CRHR;
- Introducing visual, audible, or atmospheric elements out of character with the historical resource and its setting in such a way as to demolish or materially alter the characteristics that convey its historical significance and justify its eligibility for listing on the NRHP or CRHR;
- Causing the historical resource to be subject to neglect to such a degree that the characteristics that convey its historical significance and justify its eligibility for listing on the NRHP or CRHR will be materially impaired; or
- Resulting in the historical resource being transferred, leased, or sold, with the probability that the characteristics that convey its historical significance and justify its eligibility for listing on the NRHP or CRHR will be materially impaired.

In addition, based on *CEQA Guidelines* Section 15064.5 and Appendix G of the *CEQA Guidelines*, the proposed project would have significant effects if it would

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5;

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
or
- Disturb any human remains, including those interred outside of formal cemeteries.

Impacts and Mitigation Measures

Table 3.11-1 summarizes the potential cultural resource impacts resulting from construction and operation of the proposed project.

TABLE 3.11-1.

SUMMARY OF CULTURAL RESOURCES IMPACTS FOR THE NO-ACTION ALTERNATIVE, THE PROPOSED ACTION, AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
1. Implementation of the proposed project could potentially result in disturbance of undiscovered prehistoric or historic resources.	All Sites	NI	S	S	LS	LS

Notes: NI = No Impact PS = Potentially Significant LS = Less-than-Significant

¹Because this potential impact is less than significant, no mitigation is required.

All Sites

Impact 3.11-1: Implementation of the project could potentially result in disturbance of undiscovered prehistoric or historic resources. *No Impact for No-Action Alternative; Potentially Significant Impact for Proposed Action and Alternative 1*

No-Action Alternative

Under the No-Action Alternative, there would be no disturbance to potentially significant cultural resources because the Proposed Action would not occur.

Proposed Action

As previously discussed under the Local Setting, each of the four proposed rehabilitation sites was surveyed for the presence of cultural resources that would be eligible for listing in the National Register. Based on the results of this survey, no sites eligible for listing were discovered.

Although unlikely considering the level of disturbance, buried archaeological resources that have not been previously recorded may be uncovered during construction. Due to the proximity to the Trinity River, unrecorded prehistoric cultural resources associated with habitation by Native Americans may be present. Ground-disturbing activities associated with construction could disrupt or adversely affect unknown subsurface archaeological resources. This would be a potentially significant impact.

Alternative 1

Similar to the Proposed Action, construction activities associated with Alternative 1 could result in uncovering of previously unrecorded archaeological resources. Ground-disturbing activities associated with construction could disrupt or adversely affect unknown subsurface archaeological resources. This would be a potentially significant impact.

Mitigation Measures

Proposed Action and Alternative 1

1a: Prior to initiation of construction or ground-disturbing activities, all construction workers shall be alerted to the possibility of buried cultural remains. This would include prehistoric and/or historic resources. Personnel shall be instructed that upon discovery of buried cultural materials, work within 50 feet of the find shall be halted and Reclamation's designated archaeologist consulted. Once the find has been identified, Reclamation will make the necessary plans for treatment of the finds(s) and for the evaluation and mitigation of impacts if the find(s) are found to be significant as defined in the PA.

1b: If buried human remains are encountered on non-federal lands during construction, work in that area must be halted, and the Trinity County Coroner's Office shall be immediately contacted. If the remains are determined to be of Native American origin, then the Native American Heritage Commission (NAHC) will be notified within 24 hours of determination, as required by *Public Resources Code* 5097. The NAHC will notify designated Most Likely Descendants, who will provide recommendations for the treatment of the remains within 24 hours. The NAHC will mediate any disputes regarding treatment of remains. For the discovery of Native American human remains and associated items on Federal lands, the Native American Graves Protection Act (25 U.S.C. 3001) and its implementing regulations (43 CFR Part 10) will be followed.

If the find is determined to be a historical resource or a unique archaeological resource, as defined by CEQA, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or other appropriate mitigation shall be made available. Work may continue on other parts of the proposed project while historical or unique archaeological resource mitigation takes place.

Significance after Mitigation: Less than Significant.

3.12 Air Quality

This section evaluates the air quality impacts associated with implementation of the No-Action Alternative, the Proposed Action, and Alternative 1. Air emissions from construction are measured against standards provided by the North Coast Unified Air Quality Management District (NCUAQMD).

3.12.1 AFFECTED ENVIRONMENT/ENVIRONMENTAL SETTING

Regional Setting

Climate and Topography

According to the *Soil Survey of Trinity County, California, Weaverville Area* (U.S. Department of Agriculture 1998), Trinity County has a climate characterized by hot, dry summers and moderate winters. Trinity County typically has an average summer high temperature of 93.9 ° Fahrenheit (F), an average winter low temperature of 28.8°F, and an average annual snowfall of 15.8 inches (Center for Economic Development 2004). In the higher wilderness areas, which reach elevations of more than 9,000 feet, the temperatures are much lower and the snowfall is much greater. The average annual precipitation for Trinity County ranges from 30 inches in the lower elevations to 70 inches in the higher elevations. Most precipitation results from major storms from the Pacific Ocean; however, a few short thunderstorms during summer occur during most years.

Table 3.12-1 provides a summary of average weather parameters recorded at the Trinity River Hatchery Weather Station in Lewiston, California, which is approximately 22 miles upstream of the Conner Creek rehabilitation site.

TABLE 3.12-1.
CLIMATOLOGICAL DATA FOR TRINITY COUNTY (1974–2005)

Weather Parameter	Measurement
Average annual temperature	54.8 ° F
Average high temperature in January	48.1 ° F
Average low temperature in January	32.1 ° F
Average high temperature in July	92.3 ° F
Average low temperature in July	52.4 ° F
Highest recorded temperature	113 ° F
Lowest recorded temperature	4° F
Average annual precipitation	32.37 inches
Average days of precipitation per year	90 days
Mean annual snowfall	5.6 inches
Highest recorded snowfall	20 inches

Source: (Western Regional Climate Center 2005)

Within Trinity County, the local airflow is strongly controlled by the deeply dissected mountains. The higher mountain ridges receive precipitation as snow and hold most of it until late spring. The lower

elevations receive precipitation mostly as rain, with occasional snow during most winters. Dense morning fog typically occurs in the Trinity River basin during the winter and occasionally throughout the rest of the year. Junction City is recognized as a “banana belt” by local residents, due to milder winters than Weaverville and Lewiston. Generally speaking, the Junction City community experiences temperature inversions,¹ primarily from late fall through early spring, when the daylight hours are shorter and the strength of the sun is weaker. These inversions, which take place at night when the air layer near the ground surface is cooler, can prevent the dispersion of air pollutants into the atmosphere.

Air Quality Management

The North Coast Air Basin (NCAB) comprises five counties in northwest California: Del Norte, Humboldt, Trinity, Mendocino, and a portion of Sonoma County. Figure 3.12-1 illustrates the NCAB in relation to all air basins in California. The North Coast Unified Air Quality Management District (NCUAQMD) is responsible for monitoring and reporting air quality for three of these counties, Humboldt, Del Norte, and Trinity counties. The NCUAQMD is located in the far northwestern portion of California and encompasses approximately 7,134 square miles. The NCUAQMD is bordered on the west by the Pacific Ocean and extends from the Oregon border south, approximately 140 miles to the Mendocino County line.

Air quality in Trinity County is influenced by a number of factors, including stationary sources such as residential wood heating, non-stationary sources such as motor vehicle exhaust, forest management (prescribed fire), and the meteorology of a given area. The NCUAQMD has defined the following general source categories for air pollution:

- Industrial: Sawmills, power plants, gravel plants, other heavy industry
- Commercial: Gas stations, body shops, restaurants, dry cleaners, etc.
- Residential: Home heating, backyard burning, paint and solvent use, etc.
- Mobile: Cars, planes, trains, and other transportation sources
- Agricultural: Forest management burning, field burning, herbicide use, etc. (North Coast Unified Air Quality Management District 1998)

Federal Requirements

The 1977 federal Clean Air Act (CAA) requires the EPA to identify National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for the following “criteria”² air pollutants: ozone (O₃); carbon monoxide (CO); nitrogen dioxide (NO₂); sulfur dioxide (SO₂); suspended particulate matter (PM₁₀ and PM_{2.5}); and lead (Pb).

Pursuant to the 1990 CAA amendments, the EPA has classified air basins (or portions thereof) as either “attainment” or “non-attainment” for each criteria air pollutant, based on whether or not the NAAQS have been achieved. All three counties of the NCUAQMD are currently designated as attainment for all criteria pollutants.

¹ Inversions occur when warm air overlies cooler air under normal atmospheric conditions.

² Termed “criteria” pollutants because EPA publishes criteria documents to justify the choice of standards.



**Figure 3.12-1
California Air Quality Basins**



State Requirements

The California Air Resources Control Board (CARB), California's state air quality management agency, regulates mobile source emissions and oversees the activities of County Air Pollution Control Districts and regional Air Quality Management Districts. The CARB regulates local air quality indirectly by establishing state ambient air quality standards and vehicle emission standards. California has adopted ambient standards that are more stringent than the federal standards for the criteria air pollutants. These standards are referred to as the California Ambient Air Quality Standards (CAAQS). Table 3.12-2 summarizes federal and state ambient standards for criteria air pollutants.

TABLE 3.12-2.
FEDERAL AND STATE CRITERIA POLLUTANT AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Federal Standard	State Standard
Ozone	1-hour 8-hour	0.12 ppm 0.18 ppm	0.09 ppm --
Carbon monoxide	8-hour 1-hour	9 ppm 35 ppm	9 ppm 20 ppm
Nitrogen dioxide	Annual arithmetic mean 1-hour	0.053 ppm --	-- 0.25 ppm
Sulfur dioxide	Annual arithmetic mean 24-hour 3-hour 1-hour	0.030 ppm 0.14 ppm -- --	-- 0.04 ppm -- 0.25 ppm
Fine particulate matter (PM _{2.5})	24-hour Annual arithmetic mean	65 µg/m ³ 15 µg/m ³	65 µg/m ³ 12 µg/m ³
Respirable particulate matter (PM ₁₀)	24-hour Annual arithmetic mean	150 µg/m ³ 50 µg/m ³	50 µg/m ³ 20 µg/m ³
Lead	30-day average Calendar quarter	-- 1.5 µg/m ³	1.5 µg/m ³ --

Notes: ppm = parts per million; µg/m³ = micrograms per cubic meter
Source: (California Air Resources Board 2005)

Under the California Clean Air Act (CCAA), which is patterned after the federal CAA, areas within California have been designated as attainment or non-attainment with respect to the state ambient air quality standards. All three counties of the NCUAQMD are currently designated as non-attainment for the state standard for particulate matter less than 10 microns in aerodynamic diameter (PM₁₀) and as attainment for the federal standard. The state standard for PM₁₀ is 50 µg/m³ (micrograms per cubic meter) as a maximum 24-hour average and 30 µg/m³ as an annual average of the 24-hour values. The federal standard for PM₁₀ is 150 µg/m³ as a maximum 24-hour average and 50 µg/m³ as the annual average of the 24-hour values (North Coast Unified Air Quality Management District 1995). A non-attainment designation means that the particulate concentrations in these counties exceed the levels set by California to protect the public health.

PM₁₀ monitoring results show that the three largest cities within the NCUAQMD (Crescent City, Eureka, and Weaverville) have had exceedances of the 24-hour standard for PM₁₀. The largest contributors to

PM₁₀ are fugitive road dust, residential fuel combustion, industrial wood and paper mills, and forest management burning (North Coast Unified Air Quality Management District 1995).

PM₁₀ sampling showed that woodstove emissions during the winter months, when added to the already occurring PM₁₀ levels, are the primary cause of high PM₁₀ values in the NCUAQMD. PM₁₀ sampling in Weaverville alone showed that woodstove emissions contributed approximately 55 percent of PM₁₀ measured at an average of samples over 50 µg/m³ (24-hour state standard) during high PM₁₀ episodes, and approximately 30 percent PM₁₀ measured at an average for all samples collected over a year (North Coast Unified Air Quality Management District 1995). These samples were collected at the Weaverville Courthouse, which is approximately 8 miles southeast of the project area, on the opposite side of Oregon Mountain.

As part of its overall strategy to meet the state's health-based standard for PM₁₀, the NCUAQMD adopted a *PM₁₀ Attainment Plan* (North Coast Unified Air Quality Management District 1995). Included in the plan are measures to reduce PM₁₀ emissions from mobile sources, as well as from woodstoves and other combustion sources. The program funds reductions in nitrogen oxide (NO_x) emissions, PM₁₀, and toxic compounds contained in diesel exhaust.

Local Requirements

The NCUAQMD has established air quality emission thresholds for stationary sources in the entire North Coast Air Basin, which can be used to assess impacts to air quality in Trinity County. Air quality emission significance thresholds (the potential of a new or modified stationary source to emit air contaminants that would equal or exceed significant emission rates in tons per year) for stationary sources are presented in Table 3.12-3.

TABLE 3.12-3.
AIR QUALITY EMISSION SIGNIFICANCE THRESHOLDS: NORTH COAST UNIFIED AIR
QUALITY MANAGEMENT DISTRICT

Air Contaminant	Significant Emission Rate (tons per year)
Carbon monoxide	100
Nitrogen oxides	40
Sulfur dioxide	40
Particulate matter	25
PM ₁₀	16
Ozone	40 (as volatile organic compounds [VOC])
Lead	0.6
Asbestos	0.007
Beryllium	0.0004
Mercury	0.1
Vinyl chloride	1
Fluorides	3
Sulfuric acid mist	7

TABLE 3.12-3.

AIR QUALITY EMISSION SIGNIFICANCE THRESHOLDS: NORTH COAST UNIFIED AIR QUALITY MANAGEMENT DISTRICT

Air Contaminant	Significant Emission Rate (tons per year)
Hydrogen sulfide (H ₂ S)	10
Total reduced sulfur (including H ₂ S)	10
Reduced sulfur compounds (including H ₂ S)	10

Source: (North Coast Unified Air Quality Management District 2005)

North Coast Unified Air Quality Management District

The NCUAQMD establishes policies, regulations, and permit procedures for Humboldt, Del Norte, and Trinity counties. The following district air quality control rules applicable to the Proposed Action were taken from *Air Quality Rules and Regulations (North Coast Unified Air Quality Management District 2005)*.

Rule 104 (3.0) - Particulate Matter

- (3.1) General Combustion Sources: A person shall not discharge particulate matter into the atmosphere from any combustion source in excess of 0.46 grams per standard cubic meter (0.20 grams per standard cubic foot) of exhaust gas, calculated to 12 percent carbon dioxide (CO₂); or in excess of the limitations of New Source Performance Standards applicable to provisions set out in Rule 104(11.0).

Rule 104 (4.0) - Fugitive Dust Emissions

- (4.1) No person shall do or allow handling, transporting, or open storage of materials in such a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.
- (4.2) Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to, the following provisions:
- (4.2.1) Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.
 - (4.2.2) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Containment methods can be employed during sandblasting and other similar operations.
 - (4.2.4) The use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
 - (4.2.5) The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.
 - (4.2.7) The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

Trinity County General Plan Goals and Objectives

The Trinity County General Plan contains goals and policies designed to guide the future physical development of the county, based on current conditions. The General Plan contains all the state-required elements, including community development and design, transportation, natural resources, health and safety, noise, housing, recreation, economic development, public facilities and services. The General Plan contains a Safety Element which addresses air quality issues.

The following goals and policies related to air quality issues associated with the Canyon Creek Rehabilitation Project were taken from the applicable elements of the General Plan (Trinity County 2001), including the Junction City Community Plan (Trinity County 1987).

County-Wide Goals and Objectives

Safety Element

The following goals, objectives, and policies were excerpted from the Safety Element and are applicable to the project.

Air Quality Goal

- Continue to maintain a high standard of air quality in Trinity County
- Ensure burning projects will not diminish air quality
- The burning of any material shall comply with burning permits, conditions and/or standards established by the NCUAQMD.

The General Plan does not identify specific goals, objectives, or policies for air quality associated with vehicular emissions and rehabilitation projects.

Junction City Community Plan Goals and Objectives

This plan includes the area centered on the Trinity River from Maxwell Creek to slightly downstream of Helena. The Junction City Community Plan does not contain any goals or objectives specific to air quality issues.

Project Consistency with the Trinity County General Plan and Junction City Community Plan

This section compares the goals and objectives of the project to the relevant local planning policies (i.e., Trinity County General Plan, Junction City Community Plan) to determine if there are any inconsistencies.

The goals and objectives described in Chapter 1 are generally compatible with the applicable General Plan goals and policies for air quality summarized above. The overall goal of the Proposed Action is to rehabilitate the sites so that they function in a manner that is closer to historic conditions (i.e., pre-Lewiston Dam). Although excavation of alluvial materials along the Trinity River would result in temporary, short-term emissions of fugitive dust and PM₁₀, the Proposed Action will include mitigation

measures intended to reduce airborne dust and construction vehicle emissions generated during project implementation.

Existing Air Quality Conditions

The CARB publishes summaries of air quality monitoring data from locations throughout the state. In addition, the CARB maintains air quality monitoring sites for PM₁₀ in Weaverville. The CARB regional air quality monitoring network provides information on ambient concentrations of criteria air pollutants. Monitored ambient air pollutant concentrations reflect the number and strength of emissions sources and the influence of topographical and meteorological factors. The nearest monitoring station to the project is located at the Trinity County Courthouse, 101 Court Street in Weaverville (Weaverville basin), which is approximately 8 miles southeast of the Canyon Creek rehabilitation sites. Pollutant concentrations measured at this station may not be generally representative of background air pollutant concentrations in the general vicinity of the Proposed Action because of the influence the Trinity River corridor exerts on local air quality in association with local weather conditions.

Particulate Matter

Suspended or respirable particulate matter (airborne dust) consists of particles small enough to remain suspended in the air for long periods of time. PM₁₀ consists of particulate matter 10 microns³ or less in diameter, which can be inhaled and may cause adverse health impacts. Particulate matter in the atmosphere results from a variety of dust- and fume-producing industrial and agricultural operations, combustion, and atmospheric photochemical reactions. Some of these operations, such as construction activities (i.e., excavation and disposal of alluvial materials), primarily contribute to increases in local PM₁₀ concentrations, while others, such as vehicle traffic, have an impact on regional PM₁₀ concentrations.

EPA has promulgated new standards for particulate matter less than 2.5 microns in diameter, or PM_{2.5}. PM₁₀ includes all particles that are 10 microns or less in diameter; therefore, PM_{2.5} is a subset of PM₁₀. Typically, 30 to 80 percent of all PM₁₀ is in the PM_{2.5} range.

Table 3.12-4 shows PM₁₀ concentrations in Weaverville over a 10-year period. All PM₁₀ concentrations are expressed in micrograms per cubic meter. The state standard for PM₁₀ is 50 µg/m³ as a maximum 24-hour average, and the federal standard for PM₁₀ is 150 µg/m³ as a maximum 24-hour average. In 1999, it was calculated that PM₁₀ concentrations (24-hour average) exceeded the state standards for more than 30 days. This relatively high PM₁₀ level was attributed to an unusually high number of wildland fires in the vicinity of the Weaverville basin during the late summer months.

³ A micron is one one-millionth of a meter.

TABLE 3.12-4.
PM₁₀ MONITORING DATA FOR WEAVERVILLE (1995-2004)

Criteria	Year	Estimated Days Over National Standard	Estimated Days Over State Standard	High 24-Hour Average	
				National	State
24-Hour Average	2004	--	--	42.5	42.5
	2003	--	--	56.5	53.9
	2002	--	--	52.3	52.5
	2001	0.0	--	72.6	72.0
	2000	0.0	18.8	50.8	51.1
	1999	0.0	24.3	99.6	94.9
	1998	0.0	18.1	46.2	46.5
	1997	0.0	17.8	54.0	54.0
	1996	0.0	--	72.0	63.0
	1995	0.0	--	41.0	--

Source: CARB 2002 <http://www.arb.ca.gov/adam/welcome.html>

3.12.2 ENVIRONMENTAL CONSEQUENCES/IMPACTS AND MITIGATION

Methodology

Data for the following analysis were taken from reports on local and regional air quality, including Particulate Matter (PM₁₀) Attainment Plan (North Coast Unified Air Quality Management District 1995), Summary of Air Monitoring Data in the North Coast Unified Air Quality Management District (North Coast Unified Air Quality Management District 1997), North Coast Air Quality Facts (North Coast Unified Air Quality Management District 1992), Air Quality Rules and Regulations (North Coast Unified Air Quality Management District 2005), and the Trinity County General Plan (Trinity County 2001). The air quality analysis is qualitative, and was conducted by assessing anticipated construction-related impacts of the project and comparing them to existing and anticipated future air quality conditions. Because the Proposed Action would generate very little traffic, quantitative data on traffic were not compiled (see Section 3.18, Traffic and Circulation), and specific information on local construction activities was not available. The results are compared to local and national ambient air quality emissions and concentrations standards to determine the significance of the impacts.

Significance Criteria

According to Appendix G of the *CEQA Guidelines*, a project will normally have an adverse impact if it would

- violate any ambient air quality standard;
- contribute substantially to an existing or projected air quality violation;

- conflict with or obstruct implementation of any applicable air quality plan;
- result in a cumulatively considerable net increase of any criteria pollutant (e.g., PM₁₀) for which the region is in non-attainment under an applicable state ambient air quality standard;
- expose sensitive receptors to substantial pollutant concentrations;
- result in substantial air emissions or deterioration of air quality;
- create objectionable odors;
- alter air movement, moisture, or temperature, or result in any change in climate, either locally or regionally; or
- produce toxic air contaminant emissions that exceed the air pollution control district's threshold level for health risk.

Since the first two criteria include violation of either federal or state air quality standards, these criteria will also be used to determine significance for NEPA compliance.

The NCUAQMD has not formally adopted a CEQA threshold of significance for compounds such as CO, NO_x, PM₁₀, and SO₂, but does use the significant emission rates listed in Table 3.12-3 as a baseline when evaluating a project's potential impacts to air quality (Torzynski, pers. comm. 2004).

Impacts and Mitigation Measures

Table 3.12-5 summarizes the potential air quality impacts resulting from implementation of the project.

TABLE 3.12-5.

SUMMARY OF AIR QUALITY IMPACTS FOR THE NO-ACTION ALTERNATIVE, PROPOSED ACTION, AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
1. Construction activities associated with the project could result in an increase in fugitive dust and associated particulate matter (PM ₁₀ and PM _{2.5}) levels.	All sites	NI	S	S	LS	LS

TABLE 3.12-5.

SUMMARY OF AIR QUALITY IMPACTS FOR THE NO-ACTION ALTERNATIVE, PROPOSED ACTION, AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
2. Construction activities associated with the project could result in an increase in construction vehicle exhaust emissions.	All sites	NI	S	S	LS	LS
3. Construction activities associated with the project and removal of vegetation could result in vegetative materials that managers will decide to burn.	All sites	NI	S	S	LS	LS

Notes:

LS = Less than Significant

S = Significant

SU = Significant Unavoidable

NI = No Impact

B = Beneficial

N/A = Not Applicable

The potential for air quality impacts from implementation of the project is discussed below.

All Sites (Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch)

Impact 3.12-1: Construction activities associated with the project could result in an increase in fugitive dust and associated particulate matter (PM₁₀ and PM_{2.5}) levels. ***No Impact for the No-Action Alternative; Significant Impact for the Proposed Action and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, there would be no construction-related increase in fugitive dust and associated particulate matter levels because the project would not be constructed.

Proposed Action

Construction associated with the Proposed Action would require the use of equipment that would temporarily contribute to air pollution within the Trinity River basin. Construction excavation and grading are sources of fugitive dust emissions (PM₁₀) that could have a temporary impact on local air quality. Dust emissions would primarily be associated with removal of vegetation, excavation and disposal of earthen materials, and equipment travel on unpaved road surfaces.

As discussed previously, the project is located within the NCAB, where PM₁₀ levels are in non-attainment. The generation of fugitive dust during construction would be considered a temporary and short-term significant impact at a local level due to the non-attainment status. To the extent possible, revegetation would be coordinated with construction so that the amount of bare ground is limited. Revegetation would not commence until plants are dormant and fall wet conditions have returned.

Alternative 1

Generation of fugitive dust and particulate matter levels associated with construction of Alternative 1 would be less than under the Proposed Action for the Conner Creek and Elkhorn sites due to the reduction in the amount of earthwork at these sites. However, Alternative 1 impacts associated with the Valdor Gulch and Pear Tree Gulch sites would be the same as the Proposed Action. To the extent possible, revegetation will be coordinated with construction so that the amount of bare ground is limited. Revegetation would not commence until plants are dormant and fall wet conditions have returned. Short-term impacts associated with the generation of fugitive dust during construction would be considered a significant impact.

Mitigation Measures

No-Action Alternative

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A.

Proposed Action and Alternative 1

- 1a:** Reclamation shall include provisions in the construction bid documents specifying that the contractor shall implement a dust control program to limit fugitive dust and particulate matter emissions. The dust control program may include, but will not be limited, to the following elements, as appropriate:
- Inactive construction areas will be watered as needed to ensure dust control.
 - Pursuant to the *California Vehicle Code* (Section 23114), all trucks hauling soil or other loose material to and from the construction site shall be covered or should maintain adequate freeboard to ensure retention of materials within the truck's bed (e.g., ensure 1-2 feet vertical distance between top of load and the trailer).
 - Excavation activities and other soil-disturbing activities shall be conducted in phases to reduce the amount of bare soil exposed at any one time. Mulching with weed free materials may be used to minimize soil erosion, as described in Sections 3.3 and 3.5 of the EA/DEIR.
 - Watering with either equipment and/or manually would be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.
 - All paved access roads, parking areas, and staging areas shall be swept (with water sweepers) at each construction site, as required by Reclamation.
 - Roads will be swept (with water sweepers) if visible soil material is carried onto adjacent public roads, as required by Reclamation.

- All ground-disturbing activities with the potential to generate dust shall be suspended when winds exceed 20 miles per hour, as directed by the NCUAQMD.
- Reclamation or its contractor shall designate a person to monitor dust control and to order increased watering as necessary to prevent transport of dust offsite. This person will also respond to citizen complaints.

Significance after Mitigation: Less than Significant.

Impact 3.12-2: Construction activities associated with the project could result in an increase in construction vehicle exhaust emissions. *No Impact for the No-Action Alternative; Significant Impact for the Proposed Action and Alternative 1*

No-Action Alternative

Under the No-Action Alternative, there would be no increase in construction vehicle exhaust emissions because the project would not be constructed.

Proposed Action

Construction associated with the project would require the use of equipment that would temporarily contribute to air pollution in the Trinity River basin. Exhaust emissions from heavy equipment during construction may contribute to air pollution. Project construction activities would generate emissions from diesel- and gasoline-powered equipment and vehicles. Diesel particulate is an identified Hazardous Air Pollutant (HAP) and Toxic Air Contaminant (TAC), emissions of which should be minimized. In this regard, the length of the construction (approximately 3 to 6 weeks) will require the contractor to comply with NCUAQMD *Rule 104 (3.0) Particulate Matter* or use portable internal combustion engines registered and certified under the state portable equipment regulation. This would be a significant impact.

Alternative 1

Construction vehicle exhaust emissions associated with Alternative 1 would be less than under the Proposed Action for the Conner Creek and Elkhorn sites because there would be less earthwork at these sites. This reduction in earthwork would result in fewer hours of construction equipment operation; however, vehicle exhaust emissions associated with construction of Alternative 1 would still be considered significant. Construction vehicle exhaust emissions associated with the Valdor Gulch and Pear Tree Gulch sites would be the same as under the Proposed Action and Alternative 1.

Mitigation Measures

No-Action Alternative

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A.

Proposed Action and Alternative 1

2a: Reclamation shall include provisions in the construction bid documents specifying that the contractors shall comply with NCUAQMD *Rule 104 (3.0) Particulate Matter*. This compliance could occur through the use of portable internal combustion engines registered and

certified under the state portable equipment regulation (Health & Safety Code 41750 through 41755).

Significance after Mitigation: Less than Significant.

Impact 3.12-3: Construction activities associated with the project and removal of vegetation could result in vegetative materials that managers will decide to burn. ***No Impact for the No-Action Alternative; Significant Impact for the Proposed Action and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, there would be no vegetative materials that would need to be burned because the project would not be constructed.

Proposed Action

Construction of the project would remove vegetation from the construction areas which may be buried, piled to create wildlife habitat, chipped, or burned. Piling and burning is a quick and economical way to eliminate flammable biomass and reduce concentrations of wildland fuels. Piles would be conserved until after construction and prepared/burned by a local contractor or the BLM during wet weather conditions. Burning of material in the fall/winter period (November-April) will also eliminate effects to nesting birds. In the event that piles are burned, smoke would temporarily contribute to air pollution in the Trinity River basin. This would be a significant impact.

Alternative 1

Smoke associated with Alternative 1 would be less than under the Proposed Action for the Conner Creek and Elkhorn sites because there would be less vegetation cleared from these sites that would possibly be burned. The reduction in vegetation removal at these sites could result in a reduction in burning activities; however, smoke associated with construction of Alternative 1 would still be considered significant. Potential smoke from burning of materials associated with Valdor Gulch and Pear Tree Gulch sites would be the same as under the Proposed Action and Alternative 1.

Mitigation Measures

No-Action Alternative

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A.

Proposed Action and Alternative 1

- 3a:** Piles will consist only of dried vegetative materials. Burn piles will be no larger than 10 feet in diameter. Field personnel will be on site during all hours of burning and materials necessary to extinguish fires will be available at all times.
- 3b:** In general, all requirements of a NCUAQMD “NON-Standard” burn permit will be met for burning. Burn management planning would may include but not be limited to:
- Ensure that burning occurs only on approved burn days as defined by the NCUAQMD (determined via calling 1-866-BURN-DAY)

- Burning will only occur during suitable conditions to ensure control of ignited fires. For instance: Water to wet the litter and duff layer and penetrate the mineral soil layer to 1/4 inch or more will be present, wind speeds will be low (< 10 mph), and temperature will be low (< 80° F)
 - Piles may be covered with a 5-foot x 5-foot sheet of 4-mil polyethylene plastic to promote drying of the slash. At least 3/4 of each pile surface would be covered and the plastic anchored to preserve a dry ignition point. Dry fuel conditions will minimize smoke emissions.
 - Slash piles would not be constructed on logs, stumps, on talus slopes, within 25 feet of wildlife trees with nest structures, in roadways or in drainage ditches. Piles would not be placed within 10 feet of trees intended to be saved (reserved trees), or within 25 feet of a unit boundary.
- 3c:** Notification of the public and the NCUAQMD will occur each day. Depending on wind direction and proximity to roads, signs or personnel will notify residents and traffic on nearby access routes.

Significance after Mitigation: Less than Significant.

3.13 Environmental Justice

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” dated February 11, 1994, requires federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their actions on minorities and low-income populations and communities as well as the equity of the distribution of the benefits and risks of their decisions. Environmental justice addresses the fair treatment of people of all races and incomes with respect to actions affecting the environment. Fair treatment implies that no group of people should bear a disproportionate share of negative impacts from an environmental action.

To comply with the environmental justice policy established by the Secretary of the Interior, all DOI agencies are to identify and evaluate any anticipated effects, direct or indirect, from a project, action, or decision on minority and low-income populations and communities, including the equity of the distribution of the benefits and risks. Accordingly, this section examines the anticipated impacts associated with the alternatives with respect to potentially affected minority and economically disadvantaged groups. Socioeconomic issues, including population and housing, are evaluated in Section 3.9, Socioeconomics, Population, and Housing. This section does not function as part of the EIR portion of the joint EA/DEIR, because CEQA does not require state or local agencies to address environmental justice concerns in an EIR.

3.13.1 AFFECTED ENVIRONMENT/ENVIRONMENTAL SETTING

Regional Setting

Poverty Rate

The Census uses a set of income limits that vary by family size and composition to determine who is poor. If a family’s total income is less than the income limit, then that family, and every individual in it, is considered poor. Poverty income level thresholds are nationwide standards set by the Census. The formula for the poverty rate is the number of persons below the poverty level divided by the number of persons for whom poverty status is determined. A comparison of the poverty rates calculated for Trinity County and California in 1989 and 1999 is depicted in Table 3.13-1.

TABLE 3.13-1.
POVERTY RATE, TRINITY COUNTY AND CALIFORNIA

	1989	1999
Trinity County	18.5%	18.7%
California	12.5%	14.2%

Source: Adapted from Center for Economic Development 2001

In 1999, 18.7 percent of the population in Trinity County was living in poverty. The 1999 median household income for Trinity County was \$27,711, which is 42 percent less than the average California income (Center for Economic Development 2004). For most communities in Trinity County, the poverty rates are higher than poverty rates of the state. The community in Trinity County with the highest poverty rate is Hyampom.

Population by Race/Ethnicity

Population by race and ethnicity is estimated annually by the California Department of Finance, Demographic Research Unit. Population by race and ethnicity is compiled by what the respondents to the Census indicate as their primary ancestry. White, black, American Indian, and Asian are racial designations, while Hispanic is an ethnic designation that can be a mixture of white, black, and American Indian races. The Hispanic population is separated from the four main racial groups because many Hispanic people associate their ancestry with their ethnicity rather than their race.

According to the data compiled by the Center for Economic Development (2004), the vast majority of the population in Trinity County (approximately 90 percent), as measured in 2003, consists of white non-Hispanic individuals. The remainder of the population is predominantly Native American (5 percent) and Hispanic (4 percent).

Following state patterns, the percentage of Hispanic and American Indian people in Trinity County is steadily increasing (Center for Economic Development 2004). In 1990, the Hispanic population was 3.3 percent of the county's total population. By 2003, the percentage had increased to 4 percent of the total. The largest minority population in the county is the American Indian population. In 1990, American Indians constituted 4.6 percent of the total county population, rising to 5 percent by 2003. During the period from 1990 to 2004, California's American Indian population increased from 0.7 percent to 1 percent of the state's total population.

In 1990, Trinity County's non-Hispanic white population was 91 percent of the county's total population. By 2003, the percentage had decreased slightly to 90 percent of the total. Comparatively, California's non-Hispanic white population decreased from 69 percent of the total population in 1990 (U.S. Census Bureau 2002) to 63 percent in 2004 (U.S. Census Bureau 2004). The percentage of black and Asian residents of the county stayed the same (each less than 1 percent).

Local Setting

The Trinity River is a valuable economic resource for Trinity County. Its popularity as a recreation destination, particularly for fishing, white water recreation, gold panning, and as an access point to the Trinity Alps, directly benefits communities such as Junction City through increased business patronage. Several RV parks, lodges, and campgrounds occur in close proximity to the Valdor Gulch and Elkhorn sites. These businesses benefit from a high volume of use during peak recreation periods (e.g., rafting, kayaking, and fishing). Other economic opportunities such as agriculture are severely limited by the surrounding topography, thereby minimizing the attraction for a transitional labor pool.

The Junction City community is predominantly white. No racial or ethnic group is disproportionately associated with this area. Cooper's Bar Estates, a middle- to upper middle-class residential subdivision that promotes large lots with river views, is located off Red Hill Road and extends along the uplands and the left bank of the Trinity River. Several homes in this development are located adjacent to the Valdor Gulch and Elkhorn sites.

The Junction City Elementary School, which includes grades kindergarten through eight, is located on Red Hill Road, just across the river from Junction City proper. This school is composed of 75 percent white (not Hispanic), 20 percent Native American, 3 percent Hispanic, and 2 percent Filipino (California Department of Education 2005). The ethnicity of the children attending the Junction City Elementary School corresponds to the general ethnic composition of the Junction City community and its environs. Similarly, the percentage of children participating in the free or reduced-cost lunch program corresponds to the general family income level. At the Junction City Elementary School, 71 percent of the children participate in the lunch program compared to 50 percent of public school children in the state (California Department of Education 2005).

3.13.2 ENVIRONMENTAL CONSEQUENCES/IMPACTS AND MITIGATION MEASURES

Methodology

The EPA compares three factors—minority representation, low-income representation, and environmental burden—for a community of concern and one or more reference areas—for example, an entire county—to analyze potential environmental justice impacts. A community of concern can be defined in a number of ways, including a municipality, a census block group, a user-defined radius around a source of pollution, or a boundary drawn along physical features such as streets, streams, or railroad tracks. The demographic data for the community of concern can then be analyzed to determine whether there would be a potential environmental justice concern in the area.

As part of this analysis, poverty levels and minority population levels were examined for Trinity County as a whole, as well as the community of Junction City. Detailed information on the residential areas associated with the project was unavailable.

Significance Criteria

Because environmental justice is not a CEQA issue, specific significance criteria were not applied in evaluating potential environmental justice consequences. Instead, any modification or change in environmental justice factors that would occur in response to the Proposed Action is evaluated.

Impacts and Mitigation Measures

Table 3.13-2 summarizes the potential environmental justice impacts that would result from implementation of the project.

TABLE 3.13-2.

SUMMARY OF ENVIRONMENTAL JUSTICE IMPACTS FOR THE PROPOSED ACTION, NO-ACTION ALTERNATIVE, AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
1. Implementation of the project could adversely affect a minority or low-income population and/or community.	All sites	LS	LS	LS	N/A ¹	N/A ¹

Notes:

LS = Less than Significant S = Significant SU = Significant Unavoidable
NI = No Impact B = Beneficial N/A = Not Applicable

¹Because this potential impact is less than significant, no mitigation is required.

All Sites (Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch)

Impact 3.13-1: Implementation of the project could adversely affect a minority or low-income population and/or community. **No Impact for No-Action Alternative; Less-than-Significant Impact for the Proposed Action and Alternative 1**

No-Action Alternative

Under the No-Action Alternative, no impact to a minority or low-income population or community would take place because construction associated with the project would not occur.

Proposed Action and Alternative 1

Although minority and low-income residents live within the general vicinity of the project (Trinity River corridor), the project impacts would generally be experienced by residents in relationship to their proximity to the Canyon Creek rehabilitation sites, regardless of their racial or income characteristics. There is no evidence to suggest that the project would cause a disproportionately high adverse human health or environmental effect on minority and low-income populations compared to other residents of the Junction City Community Plan area. The known health risks to residents that could be associated with the project are evaluated in Section 3.5, Water Quality; Section 3.12, Air Quality; and Section 3.15, Hazardous Materials. For the most part, these health risks are associated with the construction aspects of the project, in that residents and construction workers could be exposed to hazardous materials that may be associated with the project. Possible health risks to minority and low-income residents also include the risk of construction-related accidents. Reclamation will manage the project to minimize these risks, as required by applicable federal and state safety regulations. Therefore, no specific or disproportionate health risks or other impacts to low-income groups would be associated with the project.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact has been identified for any of the alternatives, no mitigation measures are required.

Significance After Mitigation: N/A.

3.14 Aesthetics

The aesthetic value of an area is a measure of its visual character and quality, combined with the viewer's response to the area (Federal Highway Administration 1983). The purpose of this section is to address aesthetic values and assess potential impacts of the project on aesthetic resources. The Proposed Action's compliance with the federal and state WSRAs will also be discussed. A review of local land use plans and policies specific to aesthetics and field reconnaissance conducted for the purpose of identifying those areas of aesthetic value potentially affected by project implementation provide the basis for this assessment.

3.14.1 AFFECTED ENVIRONMENT/ENVIRONMENTAL SETTING

Regional Setting

The Trinity River provides an important visual resource for residents and visitors to Trinity County. The scenic nature of the river is vital to the communities, residential areas, and recreational allure of the county. As part of the federal Wild and Scenic River System, the Trinity River below Lewiston Dam to its confluence with the Klamath River has been designated as "recreational." It is also listed as a Wild and Scenic River by the State of California, under which it is designated as "scenic" and "recreational."

Since the construction of the TRD, the flow regime of the Trinity River has been significantly changed (U.S. Fish and Wildlife Service and Hoopa Valley Tribe 1999). Water flows are maintained at a relatively constant level year around, with controls placed on the amounts of water flowing through the channel during spring run-off and storm events. The alterations of natural flow patterns have resulted in substantial changes in the ecology and landscape features within the channel and floodplain downstream of the TRD.

Local Context

In general, the Proposed Action focuses on the mainstem Trinity River between the communities of Junction City and Helena, California. SR 299, designated as the Trinity Scenic Byway by the USFS, parallels the Trinity River as the highway passes through this portion of the Trinity River Gorge past historic dredger tailings and present-day gravel mining operations. In general, the northern boundary of the project area conforms to the right-of-way for SR 299, and vegetation along SR 299 tends to obscure the views of the river and project area. Vegetation also obscures most views of the river and project area for travelers using Red Hill Road to the south of the sites.

The existing visual character of the project area is typified by the river channel, bordered by bands of riparian vegetation and upland vegetation (e.g., perennial grassland, foothill pine) occurring as one moves away from the river. Large piles of tailings also occur at both the Conner Creek and Valdor Gulch sites.

Campers, day-use recreationists, and local residents frequently access the Trinity River within the project area, primarily by way of four undeveloped recreational access points: Cooper's Bar, an area owned by the County, a commercial raft launch site, and Pear Tree Gulch. Additional information on these access points is provided in Section 3.8, Recreation.

Visual Environment

The visual environment or character is a function of both the natural and artificial landscape features that make up a view. Geologic, hydrologic, botanical, wildlife, recreational, and urban features such as roads, homes, and earthworks directly influence the character of an area. The perception of the visual character of an area can vary significantly by season and even by hour as light, shadow, weather, and the elements composing the view change. Form, line, color, and texture are the basic components used to describe visual character and quality for most visual assessments (Federal Highway Administration 1983). The dominance of each of these components on the landscape serves to form the viewer's impression of the area. A viewer's impression directly corresponds to the aesthetic value of the landscape. The aesthetic value of an area is a measure of its visual character and scenic quality combined with the viewer response.

Visual Sensitivity and Viewer Response

The overall response of a viewer to the quality of a view is based on a combination of *viewer exposure* and *viewer sensitivity*. *Viewer exposure* refers to the visibility of resources in the landscape, the proximity of the vantage point to the view, the elevation of the viewer relative to the view, the frequency and duration of the viewing, the number of observers, and pre-conceived expectations of individual viewers or groups. *Viewer sensitivity* relates to the extent of the public's concern for particular landscapes. Judgments of visual quality and viewer response should be based on the regional frame of reference (U.S. Soil Conservation Service 1978). The geographical setting and nature of the visual resource will significantly influence the degree of visual quality and sensitivity experienced by the viewer. For example, the presence of a small hill within an otherwise flat landscape may be viewed as a significant visual element, but the hill may have very little significance when located in mountainous terrain.

Within the project area, the Trinity River corridor is the dominant component of the visual environment. Gravel bars, dredge tailings, and various buildings along the corridor contribute to the visual character of the existing landscape.

Viewshed

The Federal Highway Administration (1983) defines a viewshed as all of the surface area visible from a particular location (e.g., a highway pull-out) or sequence of locations (e.g., a highway or trail). This document defined 11 individual viewsheds that encompass the four sites. These viewsheds are referred to as *visual assessment units* (VAU) throughout this section of the EA/DEIR. The VAUs have been defined based on exposure from surrounding residences or various points along SR 299.

Light and Glare

Because of the rural nature of the project area, potential sources of artificial light are limited to vehicles passing through the area on SR 299 and residences within and near the sites. Glare may occur during the daylight hours as the sun is reflected off the river or light-colored sand and rocks that make up the floodplain.

Viewer Groups

The perceptions of viewers are influenced by their location, specific activities in which they engage, personal degree of awareness, and individual values and goals. Three distinct viewer groups would potentially be affected by activities described in Chapter 2: motorists, residents, and recreationists.

Motorists

Motorists are those persons who would view a given rehabilitation area from a moving vehicle. Motorists may be drivers or passengers. This user group typically consists of commuters, local residents, business travelers, and tourists. Tourists are often acutely aware of viewshed opportunities and aesthetics associated with the project area when viewed from SR 299. Business travelers, commuters, and local residents who travel the same routes frequently may be acclimated to the general view, but are more likely to be aware of visual changes than occasional passersby. In general, views of the river and the project area from SR 299 are somewhat limited and of short-duration for motorists that use this travel corridor along the Trinity River.

Residents

Residents are people whose home and/or property are in close proximity to, and have a view of, any given portion of the project area. The existing landscape features associated with the project area offer a variety of visual experiences that reflect various land use practices and natural processes. The individual sensitivity of residents to aesthetics and changes within the viewshed is highly variable. Sensitivity of residents to changes in the viewshed should also be considered in the context of view point location and the length of time that their view may be altered (e.g., temporary or permanent changes to topography or vegetation as a result of construction activities and future adjustments to the morphology of the river).

Recreationists

Recreationists are members of the community or the general public who use and access the recreational resources available within or adjacent to the project area. Like residents, recreational users are highly sensitive to the visual character of the river corridor since most are drawn to the area by an appreciation of its scenic nature.

Historically (since the TRD was constructed), the primary recreational activities in the project area have been those associated with warm summer temperatures (Memorial Day to Labor Day) and fishing for anadromous salmonids throughout the year. Although these activities continue, the modifications to the flow regime described in Section 3.4 have resulted in a substantial increase in use by whitewater enthusiasts during the spring and early summer (April–July). The Trinity River, including the project area, provides a myriad of recreational opportunities that are discussed in Section 3.8, Recreation.

Visual Assessment Units and Key Observation Points

Areas of distinct visual character within the viewshed, VAUs provide a framework for comparing the visual effects of a proposed project. Figure 3.14-1 illustrates the generalized visual impact assessment process used for this EA/DEIR.

Within each VAU, key observation points (KOPs) were established along commonly traveled routes or other likely observation points from which a representative group (residents, recreationists, or motorists) could view the Proposed Action. Locations of VAUs and KOPs established for the Proposed Action are

shown in Figure 3.14-2, included at the back of this section. Designations for KOPs were assigned based on the site with which they are associated. KOPs for the Conner Creek site are given the prefix CC, Valdor Gulch is VA, Elkhorn is EL, and Pear Tree is PT. Table 3.14-1 provides a summary of KOPs, and photographs taken from each KOP are included as Appendix M.

TABLE 3.14-1.
KEY OBSERVATION POINTS

Site	VAU # and Name	KOP #	Description of Key Observation Point
Conner Creek	1 SR 299 – Upstream Unit	CC1	View from SR 299, looking southwest across river. (Photo 1a)
Conner Creek	1 SR 299 – Upstream Unit	CC1	View from SR 299, looking northwest towards river. (Photo 1b)
Conner Creek	2 McCartney's Pond Unit	CC2	View from SR 299, looking southwest towards U-2 (Photo 2a).
Conner Creek	2 McCartney's Pond Unit	CC2	View from SR 299, looking north towards pond (Photo 2b).
Conner Creek	2 McCartney's Pond Unit	CC3	View from SR 299, looking southwest across river (Photo 3a).
Conner Creek	2 McCartney's Pond Unit	CC3	View from SR 299, looking upstream (Photo 3b).
Conner Creek	2 McCartney's Pond Unit	CC26	View looking east across river (Photo 26).
Conner Creek	3 SR 299 – Downstream Unit	CC4	View from SR 299, looking upstream (Photo 4a).
Conner Creek	3 SR 299 – Downstream Unit	CC4	View from SR 299, looking northwest along right bank (Photo 4b).
Conner Creek	3 SR 299 – Downstream Unit	CC5	View from Red Hill Road, looking east across river (Photo 5a).
Conner Creek	3 SR 299 – Downstream Unit	CC5	View from Red Hill Road, looking southeast across river towards McCartney's Pond and tailings pile (Photo 5b).
Valdor Gulch	4 River Acres Unit	VA6	View from Acorn Road, looking upstream (Photo 6a).
Valdor Gulch	4 River Acres Unit	VA6	View from Acorn Road, looking south across river (Photo 6b).
Valdor Gulch	4 River Acres Unit	VA6	View from Acorn Road, looking downstream (Photo 6c).
Valdor Gulch	4 River Acres Unit	VA7	View from Valdor Lane, looking south towards river (Photo 7).
Valdor Gulch	4 River Acres Unit	VA8	View from junction of Valdor Lane and SR 229, looking south towards river (Photo 8).
Valdor Gulch	4 River Acres Unit	VA9	Representative view from homes bordering river (Photo 9).
Valdor Gulch	4 River Acres Unit	VA27	Representative view from homes bordering river (Photo 27).
Valdor Gulch	5 Acorn Lane Unit	VA10	View from Big Foot Campground, looking south towards river (Photo 10a).

TABLE 3.14-1.
KEY OBSERVATION POINTS

Site	VAU # and Name	KOP #	Description of Key Observation Point
Valdor Gulch	5 Acorn Lane Unit	VA10	View from Big Foot Campground, looking west towards tailings pile (Photo 10b).
Valdor Gulch	5 Acorn Lane Unit	VA11	View from campground, looking west towards tailings (Photo 11).
Valdor Gulch	5 Acorn Lane Unit	VA12	View from 299, looking upstream toward R2, R4, R5, R8, and R9 (Photo 12).
Valdor Gulch	6 Cooper's Bar Unit	VA13	View from 299, looking north (Photo 13a).
Valdor Gulch	6 Cooper's Bar Unit	VA13	View from 299, looking west (Photo 13b).
Valdor Gulch	6 Cooper's Bar Unit	VA14	View from Cooper's Bar (Rehabilitation Area R-5), looking northwest (Photo 14a).
Valdor Gulch	6 Cooper's Bar Unit	VA14	View from Cooper's Bar (Rehabilitation Area R-5), looking west (Photo 14b).
Valdor Gulch	6 Cooper's Bar Unit	VA14	View from Cooper's Bar (Rehabilitation Area R-5), looking east (Photo 14c).
Valdor Gulch	6 Cooper's Bar Unit	VA15	Representative view of Cooper's Bar area from adjacent homes (Photo 15a).
Valdor Gulch	6 Cooper's Bar Unit	VA15	View of Cooper's Bar area from adjacent private property (Photo 15b).
Elkhorn	7 Chimariko Road Upstream Unit	EL16	View from Chimariko Road looking northeast (Photo 16).
Elkhorn	8 Lime Point Unit	EL17	View from Lime Point Road, looking south (Photo 17a).
Elkhorn	8 Lime Point Unit	EL17	View from Lime Point Road, looking west towards river (Photo 17b).
Elkhorn	8 Lime Point Unit	EL17	View from Lime Point Road, looking north along right bank (Photo 17c).
Elkhorn	8 Lime Point Unit	EL18	View from Lime Point Road, looking west towards river (Photo 18a).
Elkhorn	8 Lime Point Unit	EL18	View from Lime Point Road, looking southeast towards Rehabilitation Area R-7 (Photo 18b).
Elkhorn	9 Chimariko Road Downstream Unit	EL19	Looking northeast towards river and R-2 (Photo 19a).
Elkhorn	9 Chimariko Road Downstream Unit	EL19	Looking southeast along left bank towards R1 and R2 (Photo 19b).
Elkhorn	9 Chimariko Road Downstream Unit	EL19	Looking northwest along left bank (Photo 19c).
Elkhorn	9 Chimariko Road Downstream Unit	EL20	Looking southwest from Trinity Canyon Lodge picnic area towards R4, R5, and U-1 (Photo 20a).
Elkhorn	9 Chimariko Road Downstream Unit	EL20	Looking west from Trinity Canyon Lodge picnic area towards R-5 (Photo 20b).
Elkhorn	9 Chimariko Road Downstream Unit	EL21	Looking north towards river (Photo 21a).
Elkhorn	9 Chimariko Road Downstream Unit	EL21	Looking west along left bank (Photo 21b).

TABLE 3.14-1.
KEY OBSERVATION POINTS

Site	VAU # and Name	KOP #	Description of Key Observation Point
Elkhorn	9 Chimariko Road Downstream Unit	EL22	View from 299, looking south towards river (Photo 22a).
Elkhorn	9 Chimariko Road Downstream Unit	EL22	View from 299, looking downstream (Photo 22b).
Elkhorn	9 Chimariko Road Downstream Unit	EL22	View from 299, looking upstream (Photo 22c).
Pear Tree Gulch	10 Fly Fishing Upstream Unit	PT23	View from 299, looking downstream along right bank (Photo 23a).
Pear Tree Gulch	10 Fly Fishing Upstream Unit	PT23	View from 299, looking south towards river (Photo 23b).
Pear Tree Gulch	10 Fly Fishing Upstream Unit	PT23	View from 299, looking upstream along right bank (Photo 23c).
Pear Tree Gulch	11 Fly Fishing Downstream Unit	PT24	View from 299, looking upstream towards R-3 and U-1 (Photo 24a).
Pear Tree Gulch	11 Fly Fishing Downstream Unit	PT24	View from 299, looking south towards R1, R3, and U-1 (Photo 24b).
Pear Tree Gulch	11 Fly Fishing Downstream Unit	PT24	View from 299, looking downstream toward U-1 (Photo 24c).
Pear Tree Gulch	11 Fly Fishing Downstream Unit	PT25	View from 299, looking upstream along right bank (Photo 25a).
Pear Tree Gulch	11 Fly Fishing Downstream Unit	PT25	View from 299, looking southwest at river (Photo 25b).

Following is a discussion of the VAUs and the KOPs that have been identified within each VAU for the rehabilitation sites.

VAU #1 (SR 299 – Upstream Unit)

VAU #1 consists of 14.36 acres in the southern third of the Conner Creek site. It extends roughly north from the southernmost portion of the Conner Creek site to the northern end of the R-1 and R-3 areas, and east from the Trinity River to SR 299. Riverine and upland activity areas included in VAU #1 include R-1 and R-3 and a portion of U-1. This VAU represents the view from SR 299. KOP CC1 illustrates the view travelers currently have of the river along this stretch of highway; only glimpses of the river and far bank can be seen through the trees and shrubs. KOP CC26 was established near a residence. Large trees on the far bank provide an effective screen of the existing tailings pile and the activity area identified as U-2. The western border of the VAU roughly borders SR 299 for a distance of approximately 1,060 feet. A vehicle traveling along SR 299 at an average speed of 55 mph would take less than 15 seconds to pass through the VAU, and montane riparian and foothill pine vegetation effectively obstructs most views of the activity areas.

VAU #2 (McCartney's Pond Unit)

VAU #2 consists of 18.36 acres in the central portion of the Conner Creek site. It extends roughly from the northern tip of R-1 north to McCartney's Pond and east from the Trinity River to approximately SR 299. The VAU encompasses a large barren area and McCartney's Pond (a man-made feature) as well as expanses of annual grassland, perennial grassland, montane riparian, foothill pine, and riverine habitat.

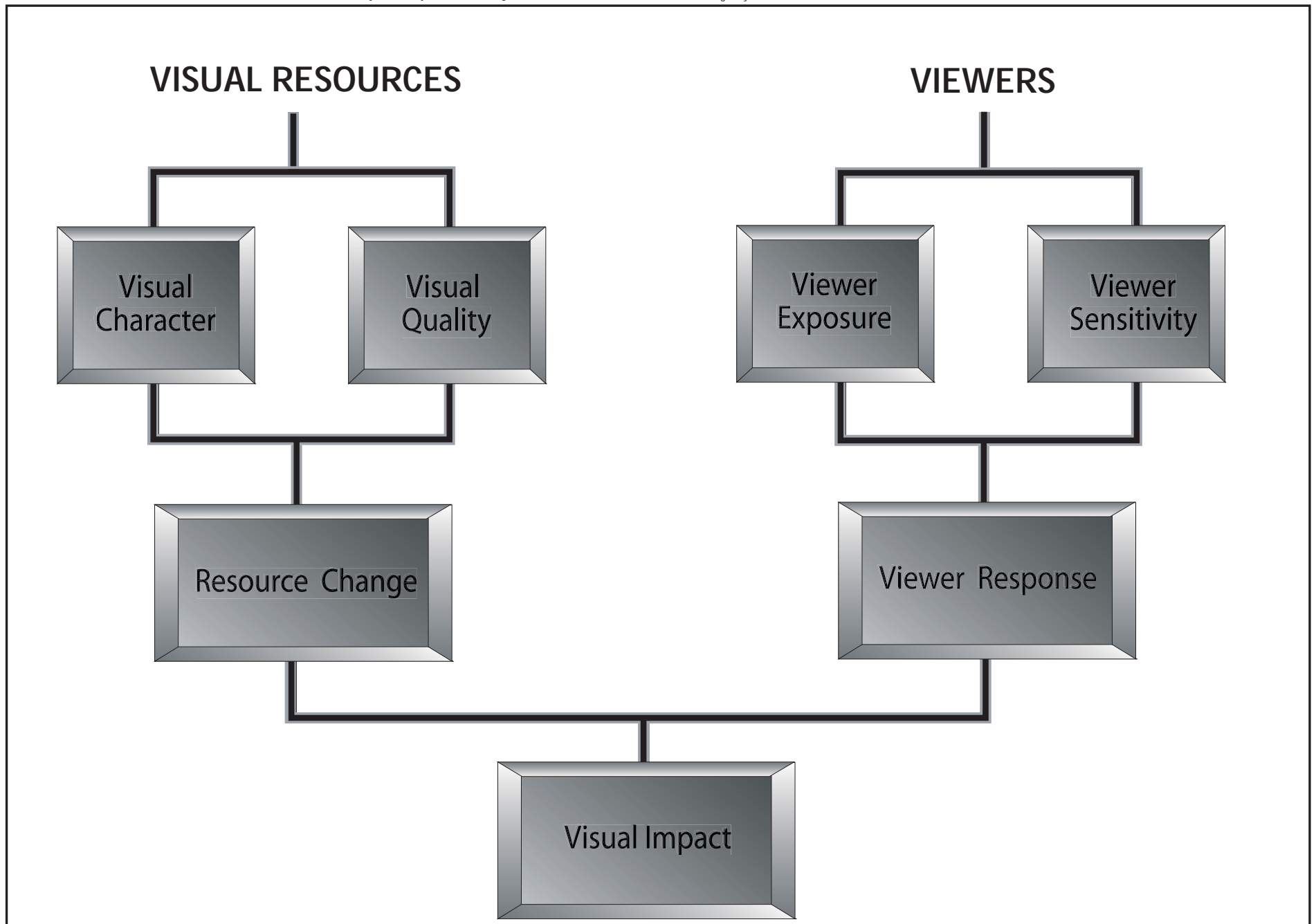


Figure 3.14-1
Visual Resource Assessment Process

The riverine and upland activity areas included in VAU #2 are R2, R-4, R-5, and U-2. KOP CC2 was established along SR 299 near a residence. Rehabilitation area U-2 is clearly visible from this residence, but would be placed over existing tailings. This tailings pile is well screened from travelers on SR 299 by mature trees. The western border of the VAU roughly borders SR 299 for a distance of approximately 600 feet. A vehicle traveling along SR 299 at an average speed of 55 mph would take less than 10 seconds to pass through the VAU.

VAU #3 (SR 299 – Downstream Unit)

VAU #3 consists of 31.90 acres in the northern portion of the Conner Creek site. It extends approximately from the southern border of McCartney's Pond north to the limits of the site and east from the Trinity River to SR 299. The VAU consists predominately of montane riparian habitat but also includes annual and perennial grassland, barren, mixed chaparral, mixed hardwood, open water, and riverine habitats. No riverine or upland activity areas are included in VAU #3. KOP CC3 was established along SR 299 and represents one of the few points that provide a relatively unobstructed view of the Trinity River to motorists. KOP CC4 was established further north along SR 299 at the northern end of the Conner Creek site. KOP CC5 was established on Red Hill Road to the west of the site and represents the view of the Conner Creek site seen by local residents from Red Hill Road. From KOP CC5, the R-5 and U-2 sites are clearly visible. The western border of the VAU roughly borders SR 299 for a distance of approximately 2,000 feet. A vehicle traveling along SR 299 at an average speed of 55 mph would take less than 25 seconds to pass through the VAU.

VAU #4 (River Acres Unit)

VAU #4 consists of 19.46 acres in the southern portion of the Valdor Gulch site. It extends roughly from the eastern tip of the site to the western end of R-2, and north from the tree line to the banks of the Trinity River. The VAU consists primarily of montane riparian, barren, and riverine habitat. Activity areas R-1 and R-2 lie within this VAU. KOP VA6 was established on Acorn Road, which provides access to the river's right bank. KOPs VA7 and VA8 were established on Valdor Lane north of the Trinity River and SR 299. Several residences occur in this area, and the KOPs are representative of their local views of the river. KOP VA9 was established along River Acres Road where several residences border the left bank. KOP VA27 was established along the left river bank. The northern border of the VAU roughly borders SR 299 for a distance of approximately 2,400 feet. A vehicle traveling along SR 299 at an average speed of 55 mph would take approximately 30 seconds to pass through the VAU.

VAU #5 (Acorn Lane Unit)

VAU #5 consists of 25.69 acres along the northern bank of the river in the Valdor Gulch site. It extends from the southern end of R-2 across the river and coincides with the eastern end of R-8. The VAU consists of annual and perennial grassland, montane riparian, foothill pine, barren, and riverine habitats. This VAU includes activity areas R-1 and R-2 and a small portion of R-8. KOPs VA10 and 11 were established at the Big Foot Campground to represent river views. An existing tailings pile is currently visible to the west of the campground. Activity areas R-3, R-8, U-2, and C would be visible from these KOPs, although vegetation obscures views to the west.

VAU #6 (Cooper's Bar Unit)

VAU #6 consists of 79.71 acres in the western portion of the Valdor Gulch site. It extends from the southernmost point of the site north across the river and east to the western end of R-2. The VAU consists of annual and perennial grasslands, montane hardwood, montane riparian, foothill pine, barren, and riverine habitat. This VAU includes activity areas R-4, R-5, R-6, R-7, R-8, R-9, and U-1. KOP VA12 was established along SR 299 and represents the view of the Cooper's Bar area to motorists. Although vegetation blocks the view along most of this stretch of highway, motorists would have a brief, relatively unobstructed view of the area as represented by KOP VA12. KOP VA13 was established along SR 299 south of KOP VA12, at the southern limit of the VAU. This point represents the typical view to travelers along this stretch of highway; the view of the river is blocked by mature trees. KOP VA14 was established on Cooper's Bar at the edge of R-4 to represent the view of the recreational users. The river itself is currently blocked from view by dense riparian growth on the bank. Several activity areas (R-4, R-5, R-6, R-8, and R-9) are visible from this point. KOP VA15 was established along the southern edge of the VAU. It represents the view of the Cooper's Bar area from adjacent residences. Mature vegetation screens these residences from U-1. The eastern border of the VAU roughly borders SR 299 for a distance of approximately 2,600 feet. A vehicle traveling along SR 299 at an average speed of 55 mph would take less than 35 seconds to pass through the VAU.

VAU #7 (Chimariko Road Upstream Unit)

VAU #7 consists of 26.55 acres along the left bank of the river in the Elkhorn site. It extends from the southeastern end of the site north to the southern end of R-2. The VAU consists of montane hardwood, montane riparian, barren, urban, and riverine habitats. Activity area R-1 lies completely within this unit as does a portion of R-2. KOP EL16 was established on Chimariko Road near several residences. Mature vegetation partially screens the view of the river in this area; however, the river is visible from the residences.

VAU #8 (Lime Point Unit)

VAU #8 consists of 15.02 acres along the right bank of the river in the Elkhorn site. It encompasses activity areas R-6, R-7, and U-2. This VAU consists primarily of perennial grassland, montane hardwood, and riverine habitats. KOP EL17 was established on Lime Point Road, which provides access to the right bank of the river. A small camper is located near this point. KOP EL18 was established on Lime Point Road north of KOP EL17. Dense riparian vegetation along the river bank obstructs the view of the river and far bank through much of this area. Activity areas R-6, R-7, and U-2 are visible from this KOP. The eastern border of the VAU roughly borders SR 299 for a distance of approximately 1,400 feet. A vehicle traveling along SR 299 at an average speed of 55 mph would take less than 20 seconds to pass through the VAU.

VAU #9 (Chimariko Road Downstream Unit)

VAU #9 consists of 22.63 acres along the left bank of the river in the Elkhorn site. It encompasses all or parts of activity areas R-2, R-4, R-5, and U-1. This VAU consists primarily of perennial grassland, montane hardwood, Klamath mixed conifer, and riverine habitats. KOP EL19 was established on the southern boundary of the unit. KOP EL20 was established at the Trinity Canyon Lodge picnic area on the right bank, representing the view of recreationists. Activity areas R-4 and R-5 are clearly visible from this point. KOP EL21 was established on the northwestern border of the VAU. Riparian vegetation

along the banks tends to block the river from view in this area. The northern border of the VAU roughly borders SR 299 for a distance of approximately 2,700 feet. A vehicle traveling along SR 299 at an average speed of 55 mph would take less than 35 seconds to pass through the VAU.

VAU #10 (Fly Fishing Upstream Unit)

VAU #10 consists of 9.24 acres and encompasses approximately the eastern half of the Pear Tree Gulch site. This VAU consists primarily of montane riparian, Klamath mixed conifer, and riverine habitats. KOPs EL22 and PT23 were established along SR 299. These points represent the view of the river to travelers on the highway. Along this stretch of SR 299, the view of the river is partly obstructed by mature trees, and at KOP EL22, the view of the river to westbound travelers is obstructed. The northern border of the VAU roughly borders SR 299 for a distance of approximately 2,100 feet. A vehicle traveling along SR 299 at an average speed of 55 mph would take less than 30 seconds to pass through the VAU.

VAU #1 (Fly Fishing Downstream Unit)

VAU #11 consists of 12.64 acres encompassing approximately the western half of the Pear Tree Gulch site, including activity areas R-1, R-2, R-3, R-4, R-5, U-1, and U-2. This VAU contains montane riparian, annual and perennial grassland, mixed chaparral, barren, foothill pine, Klamath mixed conifer, and riverine habitats. KOPs PT24 and PT25 were established along SR 299. These points represent the view of the river to motorists on the highway. At KOP PT24, the river is clearly visible from both lanes of SR 299, as would be activity areas R-1, R-2, R-3, R-4, and U-1. At KOP PT25, the view of the river is partially blocked by mature trees; however, activity area U-2 would be visible from both lanes of SR 299. The northern border of the VAU roughly borders SR 299 for a distance of approximately 2,100 feet. A vehicle traveling along SR 299 at an average speed of 55 mph would take approximately 25 seconds to pass through the VAU,

3.14.2 REGULATORY FRAMEWORK

Federal

National Wild and Scenic Rivers Act of 1968

Congress enacted the National WSRA in 1968 in an effort to protect free-flowing rivers with “outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values.” The entire mainstem of the Trinity River was designated a National Wild and Scenic River by the Secretary of Interior in 1981, primarily because of the river’s anadromous fishery. In addition, the reach of the river downstream from Lewiston Dam was classified as having distinctive scenic quality and high viewer sensitivity during peak flows, when the scenic qualities of the river are enhanced. Approximately 97.5 miles of the river are classified as recreational under the federal WSRA.

For projects upstream of Helena on the Trinity River, the BLM is responsible for ensuring that the scenic values of public lands are considered before allowing uses that may have negative visual impacts. The BLM accomplishes this through its Visual Resource Management (VRM) system, a system for minimizing the visual impacts of surface-disturbing activities to scenic public lands and maintaining scenic values for the future. The VRM system consists of two stages, inventory and analysis. The inventory stage involves identifying the visual resources of an area and assigning them to inventory classes using the BLM’s visual resource inventory process. The analysis stage involves determining

whether the potential visual impacts from proposed surface-disturbing activities or developments will meet the management objectives established for the area, or whether design adjustments will be required (U.S. Bureau of Land Management 2003a).

The VRM system also uses four inventory classes, each having distinct management objectives:

- Class I Objective: To preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention.
- Class II Objective: To retain the existing character of the landscape. The level of change to the characteristic landscape should be low.
- Class III Objective: To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate.
- Class IV Objective: To provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high.

The Trinity River corridor is classified as VRM Class II. Therefore, management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape (U.S. Bureau of Land Management 2003b).

While there are no separate reporting requirements to address Wild and Scenic Rivers, environmental documentation should include a discussion of project-related issues, summarize coordination among participating agencies, evaluate impacts to qualities that support the river's designation, and propose suitable mitigation measures as warranted. Appendix D provides the analysis and determination necessary for the Proposed Action to comply with Section 7 of the federal WSRA. Compliance may require preparation of one or more of the following:

- U.S. Army Corps of Engineers Clean Water Act Section 404 Permit;
- California Regional Water Quality Control Board Section 401 Water Quality Certification;
- NPDES Permit; and
- ESA Section 7 consultation for endangered species potentially affected by the project.

State

California Wild and Scenic Rivers Act of 1972

Patterned after the federal WSRA, the California WSRA was enacted in 1972 to preserve those rivers within the state designated as having extraordinary scenic, recreation, fishery, or wildlife values. Under this act, the Klamath River and its tributaries, including the mainstem Trinity River, are subject to similar criteria and definitions of purpose defined by the federal WSRA. However, while the federal act applies to public lands located within approximately 0.25 miles on either side of a river's channel and requires development and implementation of a river protection management plan, the state act provides protection only to the first line of permanent riparian vegetation and does not require development of a management plan.

Under the California WSRA, the segment of the Trinity River that passes through the Canyon Creek Rehabilitation Sites is designated as “scenic” and “recreational.” The *California Public Resources Code* (5093.53[b]) defines “scenic rivers” as being “those rivers or segments of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.” “Recreational rivers” are defined in the *California Public Resources Code* (5093.53[c]) as being “those rivers or segments of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.” While the California WSRA does not specifically require that water quality, streambed alteration, or other project-related permits be granted, other permits or agreements may be required to comply with other laws in accordance with the federal WSRA.

Local

Trinity County General Plan Goals and Objectives

The Trinity County General Plan contains goals and policies designed to guide the future physical development of the county, based on current conditions. The General Plan contains all the state-required elements, including community development and design, transportation, natural resources, health and safety, noise, housing, recreation, economic development, public facilities and services, and air quality. The Trinity County General Plan does not specifically address visual resources. However, certain goals identified within the context of other plan elements are relevant to visual resources. The following goals and objectives related to aesthetic issues associated with the project were taken from the applicable elements of the County’s General Plan (Trinity County 2001) and the Junction City Community Plan (Trinity County 1987).

County Wide Goals and Objectives

Cultural

Goal: To retain the rural character of Trinity County.

- By encouraging uses that fit with the land.

Natural Resource Lands

Goal: To protect the scenic natural resources of Trinity County and preserve areas that are important as commercial natural resources for future generations.

- Preserve areas of established natural scenic beauty as areas of active and passive enjoyment.

Scenic Lands

Goal: To conserve, preserve, and maintain the scenic beauty of Trinity County.

- Encourage private developers to utilize conservation methods when using or developing the land. Discourage development on steep slopes unless special construction techniques are used.
- Acquire scenic easements for conservation of Trinity County’s scenic beauty.
- Adopt stringent regulations requiring the landscaping and maintenance of vegetation on cut and fill slopes as required by the appropriate agency.
- Control encroachment of cut and fill slopes into scenic easement areas or corridors along scenic highways, whether these highways are State or County.

Junction City Community Plan Goals and Objectives

This plan includes the area centered on the Trinity River from Helena to Maxwell Creek.

Goal: To retain and enhance the overall high visual quality of the Plan area.

Community Design

Goal: To retain and enhance the overall high visual quality of the Plan Area.

- Review future development for impacts on the visual qualities on the Trinity River.

Project Consistency with the Trinity County General Plan and Community Plans

This section compares the goals and objectives of the Proposed Action to the relevant local planning policies (i.e., Trinity County General Plan, Junction City Community Plan) to determine if there are any inconsistencies.

The goals and objectives described in Chapter 1 are generally compatible with the applicable General Plan goals and policies summarized above. The overall goal of the Proposed Action is to rehabilitate the sites so that they function in a manner that is closer to historic conditions (e.g., pre-Lewiston Dam).

3.14.3 ENVIRONMENTAL CONSEQUENCES/IMPACTS AND MITIGATION MEASURES

Methodology

Driving surveys of the project sites were conducted for the purpose of identifying areas of visual sensitivity and scenic resources, and to assess the existing character and quality of the aesthetic resources associated with the Proposed Action. This assessment emphasized the potential relationship between the Proposed Action and receptors associated with the Trinity River, SR 299, and surrounding residences. VAUs were mapped based on the distinct visual character of the landscape, and KOPs (points from which the sites or portions thereof are visible from major travel routes and/or surrounding residences) were identified within each VAU and photo points were established.

Analysis of potential impacts to aesthetic resources is based on the significance criteria described in Appendix G of the *CEQA Guidelines*. The Regional Water Board, as the CEQA lead agency, has used these criteria to develop significance thresholds. Significance thresholds are used to evaluate the proposed project's potential impact on the visual character of the project area, particularly the visual character of those areas identified as KOPs. All assessments are qualitative, evaluating potential impacts of the Proposed Action on the viewshed in relation to the local aesthetic context. A review of the Proposed Action's consistency with federal and state Wild and Scenic River designations is also presented in Appendix D.

Significance Criteria

The proposed project would have a significant impact if it:

- obstructs a scenic view from public viewing areas;
- has a substantial adverse effect on a scenic vista;
- substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

- substantially degrades the existing visual character or quality of the project site and its surroundings;
- introduces physical features that are substantially out of character with adjacent residential areas;
- alters the site so that the scale or degree of change appears as a substantial, obvious, and disharmonious modification of the overall scene (to the extent that it clearly dominates the view);
- creates substantial daytime glare associated with new construction;
- disrupts adjacent residential areas from new night-time lighting;
- creates a new source of substantial light or glare that would adversely affect day or nighttime views in the sites;
- is inconsistent with the policies of the Trinity County General Plan relating to aesthetics; or
- is inconsistent with the goals and objectives of both the federal and state WSRAs with regards to the Trinity River.

Impacts and Mitigation Measures

Table 3.14-2 summarizes the potential aesthetic impacts resulting from construction and operation of the No-Action Alternative, the Proposed Action, and Alternative 1.

TABLE 3.14-2.

SUMMARY OF AESTHETIC IMPACTS OF THE NO-ACTION ALTERNATIVE, THE PROPOSED ACTION, AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
1. Implementation of the project could result in the degradation and/or obstruction of a scenic view from key observation areas.	Conner Creek	NI	S	LS	SU	N/A ¹
	Valdor Gulch	NI	LS	LS	N/A ¹	N/A ¹
	Elkhorn	NI	LS	LS	N/A ¹	N/A ¹
	Pear Tree Gulch	NI	LS	LS	N/A ¹	N/A ¹
2. Implementation of the project could substantially change the character of, or be disharmonious with existing land uses and aesthetic features.	All sites	NI	LS	LS	N/A ¹	N/A ¹
3. The project may be inconsistent with federal and state Wild and Scenic River Act or Scenic Byway requirements.	All sites	NI	LS	LS	N/A ¹	N/A ¹

TABLE 3.14-2.

SUMMARY OF AESTHETIC IMPACTS OF THE NO-ACTION ALTERNATIVE, THE PROPOSED ACTION, AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
4. The project may potentially generate increased daytime glare and/or nighttime lighting.	All sites	NI	LS	LS	N/A ¹	N/A ¹

Notes: LS = Less than Significant; NI = No Impact; N/A = Not Applicable; SU = Significant and Unavoidable

¹Because this potential impact is less than significant, no mitigation is required.

Impact 3.14-1: Implementation of the project could result in the degradation and/or obstruction of a scenic view from key observation areas. *No Impact for the No-Action Alternative; Significant and Unavoidable Impact for the Proposed Action; and Less-than-Significant Impact for Alternative 1*

No-Action Alternative

Under the No-Action Alternative, the degradation and/or obstruction of a scenic view from key observation areas would not occur as a result of construction activities.

Proposed Action

Potential impacts of this action to views from KOPs established for the Proposed Action are discussed below by VAU.

VAU # 1: SR 299 – Upstream Unit (Conner Creek Site)

KOP CC1 (Views of R-1, R3, and U-1): The Proposed Action includes rehabilitation activities in R-1, R-3, and U-1. As with all of the upland areas, U-1 would be used as a repository for excavated material (i.e., sand, gravel, and cobble). Excavated material would be placed in locations above the 100-year floodplain elevation and would be deposited in the line and form of existing tailing piles. Currently, the lack of soil development in depositional environments throughout the VAUs inhibits recruitment and survival of native vegetation. The Proposed Action will increase the overall percentage of finer grained materials in the upland activity areas, resulting in more favorable vegetation recruitment and survival, which would increase the aesthetic quality of these areas in the long term. Views into U-1 from SR 299 would be blocked by upland vegetation such that any noticeable change would be less than significant. U-1 would be visible from a nearby residence. However, the landowner has requested the placement of excavated materials in this location to fill a low spot on the property; thus, the impact is less than significant. Rehabilitation of R-1 would require recontouring of the river bank and rehabilitation of R-3 would require the removal of approximately 10,400 cubic yards of material to modify a side channel so as to reconnect the river with its floodplain. Although existing riparian vegetation in this area may be removed to allow for rehabilitation activities, revegetation of R-1 and R-3 would occur through the planting of native species and natural recruitment. Visual impacts, as seen from KOP CC1, would be less than significant.

VAU # 2: McCartney's Pond (Conner Creek Site)

KOP CC2 (Views of R-4, R-5, and U-2) and CC26 (Views of R-2, R-4, and U-2): The Proposed Action includes rehabilitation activities in R-2, R-4, R-5, and U-2. Rehabilitation of R-2, R-4, and R-5 would require some removal of riverbank material to construct a low flow bench, recontour the ground surface, remove a riparian berm, and lower the floodplain. Although existing riparian vegetation in this area would be removed to allow for rehabilitation activities, revegetation would occur through the planting of native species and natural recruitment. Further, R-2, R-4, and R-5 are barely visible from KOP CC2, due to the presence of mature trees. Thus, visual impacts as seen from KOP CC2 would be less than significant. However, vegetation in the R-2 area currently functions to screen much of the view of the existing tailings pile and proposed U-2 area from KOP CC26, which represents the view from a residence. Rehabilitation of R-2 would remove this vegetation. Although revegetation would occur, the Proposed Action would result in a temporary adverse impact on the view from KOP CC26. This is considered a significant and unavoidable impact.

VAU # 3: SR 299 – Downstream (Conner Creek Site)

KOP CC3, CC4, and CC5 (Views of R-5 and U-2): The Proposed Action includes activities in R-5 and U-2. Excavated material would be deposited in the line and form of existing tailing piles such that any noticeable change as seen from KOP CC5, which represents the view of motorist along Red Hill Road, would be less than significant. Rehabilitation of R-5 would include the removal of a riparian berm and creation of a floodplain. In addition, upland vegetation along Red Hill Road blocks much of the view of R-5, allowing only brief glimpses. Thus, visual impacts as seen from KOP CC5 would be less than significant.

VAU # 4: River Acres (Valdor Gulch Site)

KOP VA6, VA7, VA8, VA9, and VA27 (Views of R-1 and R-2): The Proposed Action includes rehabilitation activities in R-1 and R-2. Rehabilitation of R-1 and R-2 would require the cut of approximately 14,000 cubic yards of material to construct a floodplain and modify a side channel so as to reconnect the river to its floodplain. Existing riparian vegetation in this area may be removed to allow for rehabilitation activities; revegetation of R-1 and R-2 would occur through the planting of native species and natural recruitment. Although these areas are visible from the private property along this stretch of the river, as represented by KOP VA27, the views from the residences in the area are screened by vegetation that will not be affected by the Proposed Action. Thus, visual impacts as viewed from residences along the left bank would be less than significant.

VAU # 5: Acorn Lane (Valdor Gulch Site)

KOP VA10 (Views of R-1, R-2, and staging area) and VA11: The Proposed Action includes rehabilitation activities in R-1 and R-2. Rehabilitation of R-1 and R-2 would require the cut of approximately 14,000 cubic yards of material to construct a floodplain and modify a sidechannel so as to reconnect the river to its floodplain. Existing riparian vegetation in this area will be removed; revegetation of R-1 and R-2 would occur through the planting of native species and natural recruitment. Rehabilitation efforts in R-1 and R-2 would be clearly visible to users of the Big Foot Campground, as represented by KOP VA10. However, equipment is expected to be in the area for only a short time

(approximately 4-6 weeks) and the rehabilitation efforts would result in a long-term increase in the aesthetic quality of the view from KOP VA10. Thus, this impact is considered less than significant.

VAU # 6: Cooper's Bar (Valdor Gulch Site)

KOP VA12 (Views of R-3, R-4, R-5, R-6, R-8, R-9, and U-1), VA13, VA14 (Views of R-3, R-4, R-5, R-6, R-7, R-8, R-9, and U-1), and VA15 (View of U-1): The Proposed Action includes rehabilitation activities in R-3, R-4, R-5, R-6, R-7, R-8, R-9, and U-1. Excavated material would be deposited in the line and form of existing adjacent tailing piles such that any noticeable change as seen from KOP VA12, VA14, and VA15, which represent the view of motorists, recreationists on Cooper's Bar, and private property adjacent to Cooper's Bar, would be less than significant. Rehabilitation of the riverine areas would include the removal and/or movement of approximately 23,100 cubic yards of material. This would include the removal of riparian berms and construction of floodplains and low-flow benches. Views of these areas from KOP VA12 and KOP VA13, which represent the view from SR 299, are completely or partially blocked by mature trees. Thus, visual impacts as viewed from SR 299 would be less than significant. Recreationists using Cooper's Bar would have a clear view of the activities, as represented by KOP VA14. However, equipment is expected to be in the area for only a short time (approximately 4-6 weeks) and the activities would result in a long-term increase in the aesthetic quality of the view from KOP VA14. Thus, this impact is considered less than significant.

VAU # 7: Chimariko Road Upstream (Elkhorn Site)

KOP EL16 and EL19 (View of R-1, R-2, and staging area): The Proposed Action includes activities in R-1 and R-2. These activities include vegetation removal and modification of a side channel. Views of these areas from SR 299 would be blocked by mature trees but would be clearly visible to homes along the right bank. However, equipment is expected to be in the area for only a short time (approximately 4-6 weeks) and the activities would result in a long-term increase in the aesthetic quality of the view for local residents. Thus, this impact is considered less than significant.

VAU # 8: Lime Point (Elkhorn Site)

KOP EL17 (Views of R-6 and U-2) and EL18 (Views of R-7, U-2, and staging area): The Proposed Action includes rehabilitation activities in R-6, R-7, and U-2. Views of U-2 from SR 299 would be effectively screened by mature trees, thus resulting in a less-than-significant impact to travelers. However, U-2 would be visible to those using Acorn Road to access the river, including the inhabitants of a small camper that resides in the area. Activities would include recontouring and construction of a floodplain. As with U-2, views of these activity areas would be blocked from travelers on SR 299 by mature trees but would be visible to those making use of Acorn Road. However, activities would occur in the area for only a short period and would result in a long-term increase in the aesthetic quality of the area. Thus, this impact is considered less than significant.

VAU # 9: Chimariko Road Downstream (Elkhorn Site)

KOP EL20 (Views of R-4 and U-1) and EL21: The Proposed Action includes rehabilitation activities in R-4 and U-1. Activities in R-4 would result in the removal of approximately 4,500 cubic yards of material to create a floodplain. Both R-4 and U-1 would be visible to users of the Trinity Canyon Lodge picnic area as represented by KOP EL20. However, equipment is expected to be in the area for only a

short time (approximately 4-6 weeks) and the activities would result in a long-term increase in the aesthetic quality of the view from KOP EL20. Thus, this impact is considered less than significant.

VAU # 10: Fly Fishing Upstream (Pear Tree Gulch Site)

KOP EL22 and PT23: The Proposed Action does not include rehabilitation activities in VAU 10; therefore, there would be no impact to the aesthetic quality of the view from KOP EL22 or PT23.

VAU # 11: Fly Fishing Downstream (Pear Tree Gulch Site)

KOP PT24 (Views of R-1, R-2, R-3, R-4, R-5, and U-1) and PT25 (View of U-2): The Proposed Action includes rehabilitation activities in R-1, R-2, R-3, R-4, R-5, U-1, and U2. Rehabilitation of R-1, R-2, R-3, R-4, and R-5 will include vegetation removal and the removal of approximately 9,900 cubic yards of material to reactivate the floodplain, create a sidechannel, make the alcove self-maintaining, and create a feathered edge along the right bank. Views of the activity areas from KOP PT24 and PT25, which represent the view from SR 299, are partially obstructed by mature trees. Thus, changes would not be readily apparent to motorists. Activities would be visible to anglers and other recreationists on the river for only a short period, but would result in a long term increase in the aesthetic quality of the area. Thus, this impact is considered less than significant.

Alternative 1

Potential impacts of this alternative are presented for the Conner Creek and Elkhorn sites. Impacts to Valdor Gulch and Pear Tree Gulch are common to both action alternatives.

VAU # 1: SR 299 – Upstream Unit (Conner Creek Site)

KOP CC1 (Views of R-1, R3, and U-1): Alternative 1 includes activities in R-3 and U-1. Excavated material would be deposited in the line and form of existing tailing piles immediately to the west. Views into U-1 from SR 299 would be blocked by upland vegetation such that any noticeable change would be less than significant. U-1 would be visible from the nearby residence. However, the landowner has requested the placement of excavated materials in this location to fill a low spot on the property; thus, the impact is less than significant. Activities in R-3 would result in the removal of approximately 10,400 cubic yards of material to modify a side channel so as to reconnect the river with its floodplain. Although existing riparian vegetation in this area may be removed to allow for rehabilitation activities, revegetation of R-3 would occur through the planting of native species and natural recruitment. Visual impacts, as seen from KOP CC1, would be less than significant.

VAU # 2: McCartney's Pond (Conner Creek Site)

KOP CC2 (Views of R-4, R-5, and U-2) and CC26 (Views of R-2, R-4, and U-2): Alternative 1 includes rehabilitation activities in R-4, R-5, and U-2. Activities in R-4 and R-5 would require some removal of riverbank material to recontour the ground surface, remove a riparian berm, and lower the floodplain. This would improve the sinuosity of the river, allowing it to meander and take on a more natural flow pattern. These activity areas are barely visible from KOP CC2, due to the presence of mature trees. Thus, visual impacts, as seen from KOP CC2, would be less than significant. Vegetation in the R-2 area currently functions to screen much of the view of the existing tailings pile and proposed U-2 area from KOP CC26, which represents the view from a residence. No changes to the R-2 area are proposed under Alternative 1. Thus, changes in the view from KOP CC26 would be less than significant.

VAU # 3: SR 299 – Downstream (Conner Creek Site)

KOP CC3, CC4, and CC5 (Views of R-5 and U-2). Alternative 1 includes rehabilitation activities in R-5 and U-2. Excavated material would be deposited in the line and form of existing tailing piles such that any noticeable change as seen from KOP CC5, which represents the view of motorists along Red Hill Road, would be less than significant. Activities in R-5 would include the removal of a riparian berm and creation of a floodplain. Upland vegetation along Red Hill Road blocks much of the view of R-5, allowing only brief glimpses for motorists and residents. Thus, visual impacts as seen from KOP CC5 would be less than significant.

VAU # 7: Chimariko Road Upstream (Elkhorn Site)

KOP EL16 and EL19 (View of R-1 and staging area): Alternative 1 includes activities in R-1 and R-2. Activities would include vegetation removal and modification of a side channel. Views of these areas from SR 299 would be blocked by mature trees but would be clearly visible to residences along the right bank. Equipment is expected to be in the area for only a short time (approximately 4-6 weeks); therefore, the activities would result in a long-term increase in the aesthetic quality of the view for local residents. Thus, this impact is considered less than significant.

VAU # 8: Lime Point (Elkhorn Site)

KOP EL17 (Views of R-6 and U-2) and EL18 (Views of R-7, U-2, and staging area): Alternative 1 includes activities in R-6, R-7, and U-2. Views of U-2 from SR 299 would be effectively screened by mature trees, thus resulting in a less-than-significant impact to travelers. However, U-2 would be visible to those using Acorn Road to access the river, including the inhabitants of a small camper that resides in the area. Activities would include recontouring and construction of a floodplain. As with U-2, views of these areas would be blocked from travelers on SR 299 by mature trees but would be visible to those making use of Acorn Road. However, activities would occur in the area for only a short period and would result in a long-term increase in the aesthetic quality of the area. Thus, this impact is considered less than significant.

VAU # 9: Chimariko Road Downstream (Elkhorn Site)

KOP EL20 (Views of R-4 and U-1) and EL21: Alternative 1 includes activities in R-4 and U-1. Activities in R-4 would include the removal of a berm to improve the sinuosity of the river. Both R-4 and U-1 would be visible to users of the Trinity Canyon Lodge picnic area as represented by KOP EL20. However, equipment is expected to be in the area for only a short time (approximately 4-6 weeks) and the activities would result in a long-term increase in the aesthetic quality of the view from KOP EL20. Thus, this impact is considered less than significant.

Mitigation Measures

No-Action Alternative and Alternative 1

No potentially significant impacts have been identified; therefore, mitigation is not required.

Proposed Action

One significant impact was identified in VAU 2 at KOP CC26. No mitigation is available to reduce the significance of this impact.

Significance after Mitigation: Significant and Unavoidable

Impact 3.14-2: Implementation of the project could substantially change the character of, or be disharmonious with, existing land uses and aesthetic features. ***No Impact for the No-Action Alternative; Less-than-Significant Impact for the Proposed Action and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, the proposed project would not be constructed. No changes would occur to the character or harmony of aesthetic features and existing land uses.

Proposed Action and Alternative 1 (All VAUs)

The Proposed Action and Alternative 1 have both been designed to be not only functional (e.g., enhance fisheries, restore river sinuosity), but to complement the visual resources associated with each site. Overall, these alternatives incorporate the diversity of landscapes and vegetation types into the character of the activity areas. For example, under either alternative, the existing tailings pile in the Conner Creek site (U-2) will be used to dispose of material excavated from riverine areas. Design criteria stipulated that this material would be placed in a manner that blends this material into the contours of the existing pile while not changing the nominal heights of the pile. Retention of existing topographic features would significantly lessen the degree of visual impact.

Activities described in Chapter 2 provide a basis for adjustments to the river channel and floodplain over time, which are flow dependent. Although these alternatives vary in the degree to which the channel and floodplain would be affected, selection of either alternative would produce gradual, ever-improving changes in the aesthetic quality of this stretch of the Trinity River, while keeping in character with the surrounding land uses. Because changes associated with both the Proposed Action and Alternative 1 would retain the character of existing land uses and features, selection of either alternative would result in a less-than-significant impact on aesthetic resources.

Mitigation Measures***No-Action Alternative, Proposed Action, and Alternative 1***

No potentially significant impacts have been identified; therefore, mitigation is not required.

Significance after Mitigation: N/A

Impact 3.14-3: The project may be inconsistent with the federal or state Wild and Scenic River Acts or Scenic Byway requirements. ***No Impact for the No-Action Alternative; Less-than-Significant Impact for the Proposed Action and Alternative 1.***

No-Action Alternative

Under the No-Action Alternative, the proposed project would not be constructed. No changes would occur that would be inconsistent with the federal or state WSRA or Scenic Byway requirements.

Proposed Action and Alternative 1 (All VAUs)

Under Section 7 of the WSRA, direct and adverse effects to the values for which the Trinity River was recognized as a Wild and Scenic River are prohibited. Implementation of either the Proposed Action or Alternative 1 would not be inconsistent with these values because the activities would not be considered

substantially out of character with the current aesthetic conditions. Implementation of either alternative would result in a less-than-significant impact to aesthetic resources. The WSRA Section 7 Determination for the proposed action is included as Appendix D.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

No potentially significant impacts have been identified; therefore, mitigation is not required.

Significance after Mitigation: *N/A*

Impact 3.14-4: The project may potentially generate increased daytime glare and/or nighttime lighting.
No Impact for the No-Action Alternative; Less-than-Significant Impact for the Proposed Action and Alternative 1

No-Action Alternative

Under the No-Action Alternative, no changes in existing daytime glare or nighttime lighting would occur because the proposed project would not be constructed.

Proposed Action and Alternative 1 (All VAUs)

Under either the Proposed Action or Alternative 1, significant increases in daytime glare and/or nighttime lighting are not anticipated to occur. Construction activities would not take place during nighttime hours; therefore, nearby residences and motorists traveling along the river corridor would not be subjected to the headlights of construction equipment or stationary spotlights. Material removed from the floodplain and deposited into activity areas is generally not reflective and would have a less than significant impact on daytime glare. Some changes may occur in the locations and amounts of glare produced by the widened active river channel, but, overall, these changes would be short-lived as the sun passes over; the impacts of these changes would therefore be less than significant. The most likely viewer group to be affected by daytime glare would be residents, but only a few homes near the sites have views of various portions of the rehabilitation areas and these views are generally somewhat limited. Furthermore, any occurrences of daytime glare produced by the sun reflecting off of the water would be of short duration.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

No potentially significant impacts have been identified; therefore, mitigation is not required.

Significance after Mitigation: *N/A*

3.15 Hazards and Hazardous Materials

This section evaluates of the types of hazards and hazardous materials that may currently be present at the four rehabilitation sites. Hazardous materials that could be introduced as a result of project implementation, as well as possible health hazards associated with the proposed project, are also included in this discussion.

3.15.1 AFFECTED ENVIRONMENT/ENVIRONMENTAL SETTING

Regional Setting

Hazardous materials and wastes are regulated by federal, state, and local agencies, and are required to be recycled or disposed of properly. However, illegal storage and disposal, and unintentional releases of hazardous materials or waste from leaks and accidents can still occur. In Trinity County and within the general vicinity of the project, hazardous materials and waste are transported primarily via roadways such as SR 299 and Red Hill Road. The California Highway Patrol (CHP) under CCR, Title 13, Section 1150-1194 and CFR, Title 49 regulates the transport of hazardous materials. When a spill of a hazardous material or waste occurs on a highway, the CHP is responsible for directing cleanup and enforcement (CCR Section 2450-2453b).

When a hazardous material or waste spill occurs on public land, it is the managing agency's responsibility to initiate and direct cleanup, to initiate investigations and direct enforcement, and to contact the necessary personnel for performing these functions. When a hazardous material/waste spill occurs on private lands, the property owner is responsible for cleanup. Trinity County Environmental Health contacts the proper personnel and ensures that cleanup is completed according to federal, state, and local regulations.

Title 27 of the California Health and Safety Code (Article 1, §15100) established a unified program to deal with hazardous waste and materials in California (California Environmental Protection Agency 2003). The program consolidated six state environmental programs into one program under the authority of a Certified Unified Program Agency (CUPA). These programs are the Hazardous Materials Business Plan/Emergency Response Plan, Hazardous Waste, Tiered Permitting, Underground Storage Tanks, Aboveground Storage Tanks (Spill Prevention Control and Countermeasure only), and the Uniform Fire Code Hazardous Materials Management Plan. The CUPA is typically a local agency that has been certified by the California Environmental Protection Agency (CalEPA) to implement the six state environmental programs within the local agency's jurisdiction.

While larger, more urban areas often benefit greatly from the formation of a CUPA, rural areas such as Trinity County are often overwhelmed by the costs and training required for implementing these programs at the local level. Trinity County has not formed a CUPA for the following reasons (Trinity County 2001):

1. No significant public or environmental health benefit has been identified for implementing these programs in rural areas that do not have an industrial base.

2. The CalEPA incentive funding, allotted in 2001, to the non-CUPA authority was not guaranteed and was dependent on the annual California budget. However, eligibility for such funding required a full commitment from the County to participate as a CUPA.
3. The program requires annual reporting and periodic state audits that would require approximately 100 hours of staff time annually, without any direct benefit to public health.
4. There would be substantial increased County liability from accepting responsibility for enforcing hazardous materials laws.
5. Inspector proficiency would be extremely challenging due to the complexity of the hazardous material laws and the lack of local inspector opportunities. Establishing and maintaining staff proficiency would be a problem and would increase County liability.

Currently, the CalEPA is responsible for administering CUPA programs in Trinity County, since the County has declined to apply for CUPA status itself. The one exception is the County's Underground Tank Program which has been administered by Trinity County Environmental Health for over a decade. The County has adopted this program as a proactive measure directed at stemming the occurrence of groundwater contamination caused by leaky underground fuel storage tanks. Under this program, fuel tanks must be permitted and inspected annually to ensure operator compliance and to protect the county's groundwater and drinking water supplies.

Uncontrolled or abandoned places throughout the nation where hazardous waste poses a possible threat to local ecosystems or people are referred to as "Superfund" hazardous waste sites by the EPA, and as such, are included in the EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database. A search for occurrences of Superfund sites in Trinity County yielded three sites near the project location. Table 3.15-1 provides a summary of the proximity of these three sites to the project location. Although they are Superfund sites, none are included on the National Priorities List, which consists of those sites known or likely to release hazardous substances, pollutants, or contaminants.

TABLE 3.15-1
HAZARDOUS WASTE SITES RECORDED IN TRINITY COUNTY, CALIFORNIA

Site Name	Status	Location	Distance from Proposed Action
Cheek Skyline Logging	Active	South of Highway 3, Douglas City, CA	20 miles
Kingsbury Creek Mine Lab	Active	Shasta Trinity NF, Hayfork, CA	25 miles
USFS Drinkwater Gulch Mine	Active	T31N, R12W, Section 6, Hayfork, CA	23 miles

Source: EPA 2005 (<http://www.epa.gov/superfund/sites/cursites/index.htm>)

Toxins

Toxicity concerns in the Trinity River center around polluted run-off from abandoned mines and mining activities, sediment released from subdivision development, road erosion in areas with unstable soil and decomposed granite, septic tank use, aboveground and underground tanks, and lumber mills. The possibility of mercury release from tailings and/or fluvial fine sediments, which could be disturbed and

mobilized by rehabilitation activities, is generally acknowledged. The accumulation of mercury in aquatic biota is well documented. Consequently, regulatory guidelines default to numeric criteria promulgated by the EPA for priority toxic pollutants (see Section 3.5.2) or the narrative threshold, which states that toxic substances should not occur in concentration levels such that detrimental physiological responses in humans or aquatic life may result. Under the California Toxics Rule, the total allowable concentration of measured mercury in unfiltered water should not exceed 0.050 parts per billion (ppb).

Flooding

Aside from the hazard posed by elemental toxicity, environmental hazards can take many forms, including flooding or fluctuating water levels, unstable geology, road corridors, and wildfire. Water level fluctuations, particularly those that occur rapidly, pose a distinct hazard to recreational users. The flood season within the Trinity River basin typically occurs between October and April, when over 90 percent of the annual precipitation falls. Floods on the Trinity River are controlled to some extent by the TRD, but significant flood events have occurred along the river corridor as recently as 1997. Section 3.4 provides a detailed discussion of water resources, including the type and variability of flood flows.

Seismic Events

Infrequently, seismic events occur in the region, generally in the form of low to moderate levels of ground shaking associated with nearby or distant earthquakes. The potential for landslides triggered by seismic events is not considered significant within the site boundaries or upstream in the vicinity of the TRD, due to the low historical seismicity of the region. However, the steep topography and shallow, erosive soils found in much of the region increase the potential for landslides and rockfalls triggered by precipitation, disturbance, or a combination of these two factors. Although landslides are a common occurrence along SR 299, such events typically are intercepted by the highway and rarely contribute material to the river. There is a greater potential for areas downstream of the project area to incur slope failures during seismic events due to steeper topography and unstable geologic materials. Possible effects of large downstream landslides could include temporary landslide damming of the mainstem Trinity River, depending on the volume of failed material and the flow regime at the time of the event. A detailed discussion of geologic hazards is presented in Section 3.3.

Roadways

Due to topography and population density distribution, there are relatively few roads in Trinity County; therefore, equestrians, pedestrians, bicyclists and motor vehicles commonly use the same roadways. Generally well maintained, the county's roads often follow riparian corridors and are typically winding and narrow. The two primary access routes—SR 299 and Red Hill Road—are two-lane roadways with minimal shoulders. One notable characteristic of Trinity County's roadway system is the lack of any existing traffic signals (LSC Transportation Consultants 2005). Between 1995 and 2002, there were 151 traffic-related accidents on roadways in Trinity County, five of which involved fatalities (LSC Transportation Consultants 2005). The CHP provides patrols on state highways, while the Trinity County Sheriff's Department patrols both state highways and county roads. There are no local police departments in any Trinity County community.

Wildland Fire

The steep topography and mosaic of mixed-conifer, hardwood, and chaparral woodlands, coupled with typically hot, dry summers, create an extreme fire danger potential throughout most of Trinity County. Human-caused fires, particularly along roadways and other developed areas, are relatively common, although the county is also frequently subject to lightning-caused fires. Wildland fire is detrimental to watershed function, killing vegetation, burning the organic matter in litter and soil, and forming impervious soil layers, factors that contribute directly to accelerated runoff from the watershed during and immediately after a storm event. Concentrated runoff discharged over a shorter period of time can result in increased flood hazards. Bare soils and increased runoff can also increase the risk of landslides.

Trinity County fire protection needs are currently met by 16 volunteer fire departments dispersed throughout the county, the California Department of Forestry and Fire Protection (CDF), and the USFS. By law, the CDF is responsible for wildland fire protection on all private lands within Trinity County, and the USFS is responsible for wildland fire protection on all federal National Forest lands. Consequently, both the CDF and USFS fire stations are staffed only during the summer fire season, which normally lasts from May to November. The Trinity County volunteer fire departments are responsible for structural fire protection and rescue services in Trinity County throughout the year. The Junction City Volunteer Fire Department provides services within the general area of the Junction City Community Plan; however, the department routinely responds to calls outside of its legal boundaries if it is dispatched by the 911 Center, which is maintained by the Trinity County Sheriff's Department (Trinity County Planning Department 2002b).

Evacuation Routes

The Safety Element of the Trinity County General Plan identifies specific major evacuation routes in the event of an emergency. Steep topography, the Trinity River, and the sizable Trinity Alps Wilderness substantially restrict evacuation options in the area of Trinity County in which the Proposed Action would be located. In general, SR 299, which extends east/west through the county, is the primary evacuation route for the region (Figure 3.15-1).

Local Setting

No structures or dwellings are present within the rehabilitation activity areas, although the site boundaries include residential and commercial properties. Junction City Elementary School is located upstream of the easternmost rehabilitation site (Conner Creek, and private residences are scattered along the river from Junction City to Helena. The reach of the Trinity River between Junction City and Helena is a popular recreation site, commonly used by rafters, swimmers, and anglers. In the past 10 years, no hazardous material spills have been recorded in the vicinity of Junction City (Peter Hedtke, Trinity County Health Department, pers. comm. 2004).

Toxins

The potential hazard posed by latent mercury in the reach of the Trinity River that passes through the four rehabilitation sites is addressed in Section 3.5, Water Quality. Elevated levels of mercury may occur in placer tailings piles, alluvial deposits of fine sediments (bed and bank), and wetland features associated

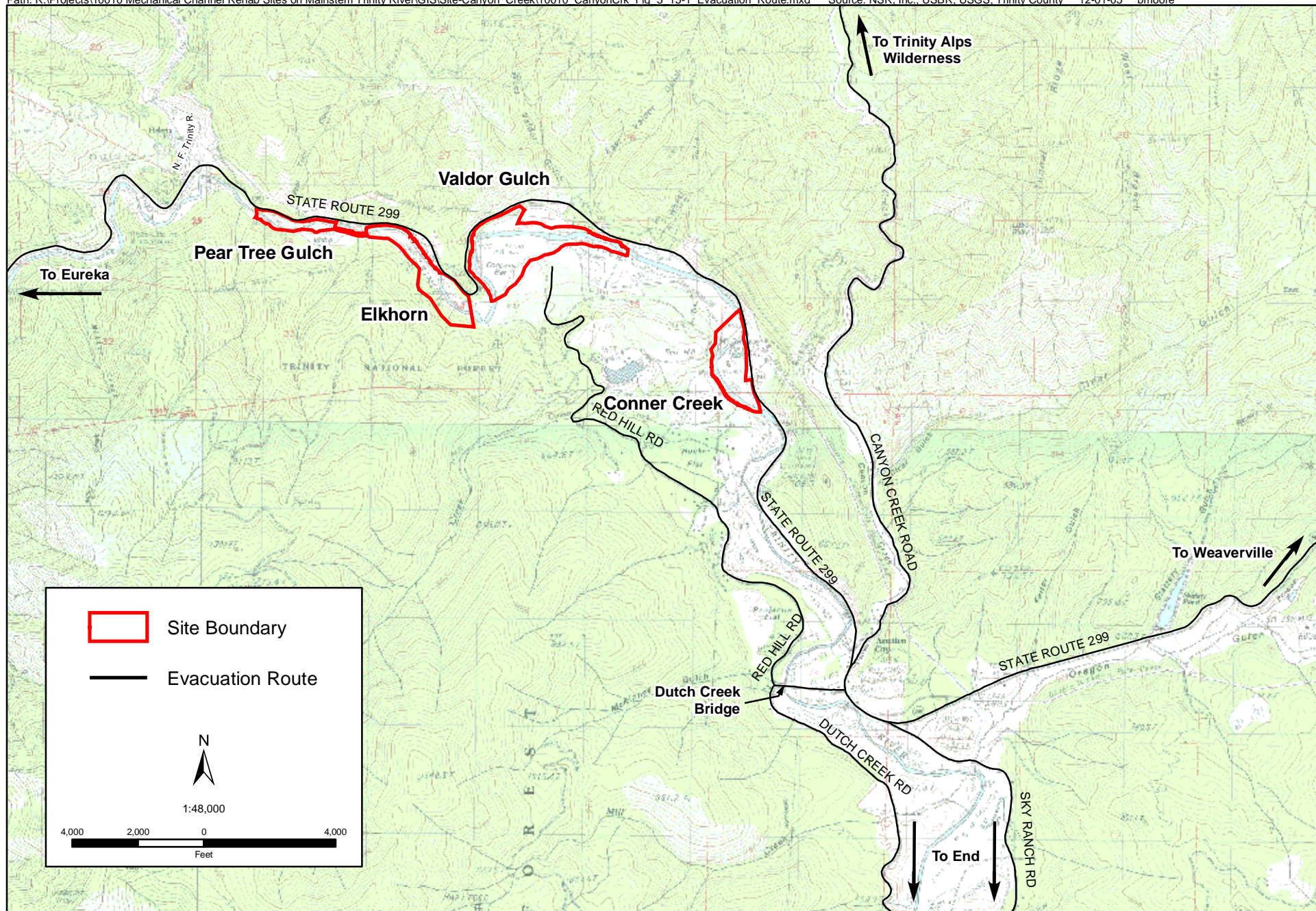


Figure 3.15-1
Major Evacuation Routes

with dredge tailings and gravel mining pits (e.g., ponds), but availability of mercury to the environment is unlikely to be affected by this project.

Wildland Fire

Since 1911, when documentation of fire start locations and causes (human versus natural) began, a pattern of human-caused fires has emerged along the SR 299 corridor (Trinity County Planning Department 2002b). Concentrated development of the Junction City area, relative to much of the county, is a factor that contributes to human-caused fire starts. While the surrounding forested uplands are at risk of damage from wildfire, the majority of lands included in the four rehabilitation sites are alluvial in nature with some riparian vegetation.

Evacuation Routes

The primary evacuation route throughout the project area is SR 299. Access to SR 299 from homes located on the left bank of the river is made via Red Hill Road or Dutch Creek Road, both of which are accessed via the Dutch Creek Bridge located upstream of the project area and south of Junction City. Red Hill Road provides the only access to the Cooper's Bar Estates, a sizable rural residential subdivision located northwest of Junction City on the river's left bank. Similar to Red Hill Road, Dutch Creek Road and Sky Ranch Road (see Figure 3.15-1) are dead-ends and could not be used to evacuate traffic in any direction other than toward SR 299. Canyon Creek Road, which extends north from Junction City (see Figure 3.15-1), is not a feasible evacuation route since it terminates at the boundary of the Salmon-Trinity Alps Wilderness.

3.15.2 REGULATORY FRAMEWORK

Pertinent federal, state, and local environmental laws and regulations pertaining to hazards and the storage, handling, and disposal of hazardous waste are summarized below.

Federal Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 is the primary federal statute focusing on past hazardous waste activities. The CERCLA's scope is broader than that of other federal statutes. The CERCLA also initiated development of the National Priorities List, which lists sites that are eligible for remedial action. Section 101(14)(a) of CERCLA states "a hazardous substance is any substance [the] EPA has designated for special consideration under the Clean Air Act (CAA), Clean Water Act, or Toxic Substances Control Act and any hazardous waste under RCRA." The EPA maintains and updates a list of all such hazardous substances (40 CFR 302).

Federal Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) is a federal regulatory statute designed to provide "cradle to grave" control of hazardous waste by imposing management requirements on generators and transporters of hazardous wastes and on owners and operators of treatment, storage, and disposal facilities.

U.S. Environmental Protection Agency

The EPA, in addition to having several other responsibilities, regulates disposal of hazardous wastes through the RCRA. Under the RCRA, the EPA regulates the activities of waste generators, transporters, and handlers (any individual who treats, stores, and/or disposes of a designated hazardous waste). The EPA is also responsible for tracking hazardous waste from its generation to its final disposal (i.e., cradle to grave) to assure proper accountability.

Occupational Safety and Health Administration

Under the Occupational Safety and Health Act, the Occupational Safety and Health Administration (OSHA) is obligated to prepare and enforce occupational health and safety regulations with the goal of providing employees a safe working environment. OSHA regulations apply to the work place and cover activities ranging from confined space entry to toxic chemical exposure. OSHA regulates workplace exposure to hazardous chemicals and activities through promulgating regulations specifying work place procedures and equipment.

U.S. Department of Transportation

The U.S. Department of Transportation (DOT) regulates the interstate transport of hazardous materials and wastes through implementation of the Hazardous Materials Transportation Act. This act specifies driver-training requirements, load labeling procedures, and container design and safety specifications. Transporters of hazardous wastes must also meet the requirements of additional statutes such as the RCRA.

State Superfund Program

In 1981, the California State Legislature enacted the Hazardous Substances Account Act to establish state authority to clean up hazardous substances releases, compensate persons injured from exposure to hazardous substances, and provide funds for payment of the state's mandatory 10 percent share of cleanup cost under the federal Superfund Law. The California Department of Health Services administers the state Superfund program.

California Environmental Protection Agency Department of Toxic Substances Control

The California Environmental Protection Agency Department of Toxic Substances Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under the RCRA and the State Hazardous Waste Control Law. Both laws impose "cradle to grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment.

California Emergency Response to Hazardous Materials Incidents

California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government and private agencies. Response to hazardous materials incidents is one part of this plan. The plan is administered by the state Office of Emergency Services, which coordinates the responses of other agencies, including the CalEPA, CHP, CDF, the Regional Water Board, local fire departments, and other emergency service providers.

Hazardous Materials Transport

State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the CHP and Caltrans. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads.

Trinity County General Plan Goals and Objectives

The Trinity County General Plan contains goals and policies designed to guide the future physical development of the county, based on current conditions. The General Plan contains all the state-required elements, including community development and design, transportation, natural resources, health and safety, noise, housing, recreation, economic development, public facilities and services, and air quality. The following goals and policies related to hazards and hazardous waste issues associated with the proposed project were taken from the applicable elements of the General Plan (Trinity County 2001), including the Junction City Community Plan (Trinity County 1987).

County-Wide and Community Goals and Objectives – Safety Element

The following goals, objectives, and policies are applicable to hazards and hazardous materials.

Flooding

- Maintain or return the open space lands subject to flooding.
- Protect public and private developments from flood hazards.

Hazardous Material/Waste Safety Goal

- Reduce threats to the public health and the environment caused by the use, storage and transportation of hazardous material and hazardous waste.

Proper Regulation of Transportation and Storage

- Transport of hazardous materials shall be regulated by the CHP under CCR Title 13: 1150-13:1194 and CFR Title 49.

Accessibility

- 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.
- Encourage owners of existing private roads to provide identification signage for emergency access purposes.

Water Quality

- Trinity County shall implement and maintain a water quality monitoring program, including the monitoring of swimming holes, failing sewage treatment systems, herbicides, mine runoff, and baseline monitoring.

Seismic Safety

- The county shall confirm that all construction and grading activities done will not adversely affect the stability of any slope.

Project Consistency with the Trinity County General Plan and Community Plans

The goals and objectives described in Chapter 1 are generally compatible with the applicable General Plan goals and policies summarized above. The overall goal of the Proposed Action is to rehabilitate the sites so that they function in a manner that is closer to historic conditions (i.e., pre-Lewiston Dam).

Flood attenuation associated with the Proposed Action would contribute to the County's objectives related to flood protection and public safety by rehabilitating the floodplain. Grading of existing, artificially created dredge tailing slopes within the site boundaries to a lesser angle may decrease the risk of small-scale landslides and possible flooding, both of which are goals identified in the county and community plans.

3.15.3 ENVIRONMENTAL CONSEQUENCES/IMPACTS AND MITIGATION MEASURES

Methodology

Field reconnaissance of the project area was conducted by TRRP staff to identify and/or characterize any hazards or potentially hazardous materials. In addition, Trinity County Planning Department and Environmental Health staff were consulted regarding the potential for hazardous substances to occur in the general vicinity of the rehabilitation sites.

Significance Criteria

An impact concerning hazards and hazardous materials would be considered significant if the project would

- involve the use, production, or disposal of materials that pose a hazard to people or to animal or plant populations in the area affected;
- create a substantial potential public health or safety hazard due to risk of upset (accidents);
- create a substantial potential public health or safety hazard due to a reasonably foreseeable release of hazardous materials and/or hazardous waste (i.e., from contaminated soil);
- violate applicable laws intended to protect human health and safety or expose employees to working situations that do not meet health standards;
- physically interfere with, or impair implementation of, emergency response plans or emergency evacuation plans;
- substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

- be located on a site that is included on a list of hazardous materials sites compiled pursuant to *California Government Code* Section 65962.5 and, as a result, create a significant hazard to the public or 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; or
- expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Impacts and Mitigation Measures

Table 3.15-2 summarizes the potential hazards and hazardous waste impacts that could result from construction of the project.

TABLE 3.15-2

SUMMARY OF HAZARDS AND HAZARDOUS WASTE IMPACTS FOR THE NO-ACTION ALTERNATIVE, THE PROPOSED ACTION, AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
1. Implementation of the project may increase the potential for release of, or exposure to, potentially hazardous materials that could pose a public health or safety hazard.	All sites	NI	LS	LS	N/A ¹	N/A ¹
2. Construction activities associated with the project may interfere with emergency/response/ evacuation plans by temporarily slowing traffic flow.	All sites	NI	LS	LS	N/A ¹	N/A ¹
3. Implementation of the project may contribute to area wildland fire potential and catastrophic fire behavior.	All sites	NI	LS	LS	N/A ¹	N/A ¹

TABLE 3.15-2

SUMMARY OF HAZARDS AND HAZARDOUS WASTE IMPACTS FOR THE NO-ACTION ALTERNATIVE, THE PROPOSED ACTION, AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
4. Implementation of the project may contribute to an increased risk of landslide and flooding.	All sites	NI	LS	LS	N/A ¹	N/A ¹

Notes:

LS = Less than Significant S = Significant SU = Significant Unavoidable
 NI = No Impact B = Beneficial N/A = Not Applicable

¹Because this potential impact is less than significant, no mitigation is required.

All Sites (Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch)

Impact 3.15-1: Implementation of the project may increase the potential for release of, or exposure to, potentially hazardous materials that could pose a public health or safety hazard. ***No Impact for No-Action Alternative; Less-than-Significant Impact for Proposed Action and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, construction activities that could potentially release hazardous substances (i.e., oil, gas, diesel, mercury) in a manner that could pose a health or safety hazard to the general public would not occur because the project would not be implemented.

Proposed Action

The potentially hazardous materials (e.g., oil, fuels, etc.) that would be needed to operate machinery to be used in conjunction with implementation of the proposed project are similar to those transported along SR 299 on a routine basis. The temporary nature of the construction aspects of the proposed project, combined with the implementation of BMPs and the distance from residences and frequently used recreation areas, would minimize the potential for any hazardous materials used by the project to become a public hazard.

Recent studies have determined that toxins such as mercury and methylmercury do not pose a significant hazard to the environment or the public in their current latent form. Further, it has been determined that any disturbance during project implementation of gravels or sediments that may contain toxins would not result in a significant increase in current background levels of toxins in the environment.

Alternative 1

The potential for construction activities under Alternative 1 to result in the significant exposure of the public and the environment to the adverse effects of hazardous substances (i.e., oil, gas, diesel) would be less than those of the Proposed Action due to the decrease in magnitude and duration of the construction

activities. Implementation of Alternative 1 would require a shorter construction period and less ground disturbance than the Proposed Action.

Mitigation Measures

No-Action Alternative, Proposed Action and Alternative 1

Since no impact was identified, no mitigation is required.

Significance after Mitigation: N/A.

All Sites (Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch)

Impact 3.15.2: Construction activities associated with the project may interfere with emergency response/evacuation plans by temporarily slowing traffic flow. ***No Impact for No-Action Alternative; Less than Significant Impact for Proposed Action and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, construction activities that could interfere with emergency response/evacuation plans would not occur because the project would not be constructed.

Proposed Action

Under the Proposed Action, construction traffic would include the mobilization and demobilization of construction equipment (i.e., scrapers, excavators, bulldozers) to the site. Once the equipment is on the site, construction traffic would be limited to daily trips for personnel and routine service and supply vehicles. Construction activities would be managed to ensure that emergency response/evacuation plans are not impeded.

Alternative 1

Under Alternative 1, the potential to interfere with emergency response/evacuation plans would be less than under the Proposed Action due to the shorter construction time and a decrease in the area of activities.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impacts were identified, no mitigation is required.

Significance after Mitigation: N/A

All Sites (Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch)

Impact 3.15.3: Implementation of the project may contribute to area wildland fire potential and catastrophic fire behavior. ***No Impact for No-Action Alternative; Less-than-Significant Impact for Proposed Action and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, implementation of the project would have no impact on wildland fire potential or catastrophic fire behavior because the project would not be constructed.

Proposed Action

The Proposed Action would have a less-than-significant impact on wildland fire potential and behavior. Project activities are proposed to occur in the riparian corridor of the Trinity River, an area that currently supports little or no combustible vegetation. Potential fuels (e.g., grasses, herbaceous weeds) are generally non-contiguous and the river serves as a significant natural fire break. The types and amounts of fuels and their continuity may be decreased temporarily by implementation of the Proposed Action, particularly in areas subject to vegetation removal, but any such changes would not be significant with respect to fire potential and behavior. In the long-term, potential fire conditions would be similar to those that currently exist (e.g., potential fuels would be limited to riparian vegetation, sporadic grasses, and herbaceous weeds).

Alternative 1

Under Alternative 1, the potential for wildland fire and catastrophic fire behavior would be similar to that of the Proposed Action.

Mitigation Measures*No-Action Alternative, Proposed Action and Alternative 1*

Since no significant impacts were identified, no mitigation is required.

Significance after Mitigation: N/A

All Sites (Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch)

Impact 3.15.4: Implementation of the project may contribute to an increased risk of landslide or flooding. *No Impact for No-Action Alternative; Less-than-Significant Impact for Proposed Action and Alternative 1*

No-Action Alternative

Under the No-Action Alternative, implementation of the project would have no impact on the potential for landslides or flooding because the project would not be constructed. The Trinity River floodplain within the boundary established for the proposed project would not be altered and existing base floodwater surface elevations would remain the same.

Proposed Action

If the Proposed Action is implemented, the placement of excavated material outside of the BFE floodplain will result in no change to the existing base floodwater surface elevation. The absence of structures within the site boundaries provides limited opportunity for exposing people or personal property to flood risks.

The risk of landslides would also remain less than significant under the Proposed Action, since all work is proposed to take place in the river channel or floodplain, both of which have relatively flat topography. Further, the Proposed Action does not involve alteration of toe-slopes adjacent to any geologically unstable areas with the potential to slide.

Alternative 1

Under Alternative 1, the potential for landslides or flooding would be similar to that of the Proposed Action. Although some Alternative 1 activities proposed for the Elkhorn and the Connor Creek rehabilitation sites differ slightly from those of the Proposed Action in that Alternative 1 requires less constructed floodplain and feathered edge at both sites, the potential risk of landslides or flooding would remain similar to that of the other sites.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impacts were identified, no mitigation is required.

Significance after Mitigation: N/A

3.16 Noise

This section evaluates the potential noise impacts associated with implementation of the No-Action Alternative, the Proposed Action, and Alternative 1. The following evaluation is based on a review of local land use plans and policies and field reconnaissance to identify potential sensitive receptors in the project area.

3.16.1 AFFECTED ENVIRONMENT/ENVIRONMENTAL SETTING

Existing Noise Levels

Noise is generally defined as excessive and unwanted sound emanating from noise-producing objects. Total environmental noise exerts a sound pressure level that is generally measured with an A-weighted decibel scale (dBA), which approximates the range of sound audible to the human ear (where 10dBA is at the low threshold of hearing and 120–140dBA is the threshold of pain). Human responses to noise are subjective and can vary. Intensity, duration, frequency, time pattern of noise, and existing background noises are some factors that can influence individual responses to noise. Table 3.16-1 lists examples of dBA levels for a range of noises.

TABLE 3.16-1.
NOISE LEVELS AND ASSOCIATED EFFECTS FOR A VARIETY OF NOISE TYPES

Noise Source at a Given Distance	A-Weighted Sound Level in Decibels ^{a,b}	Noise Environments	Subjective Impression
Civil defense siren (100 feet)	140–130		Pain threshold
Jet takeoff (200 feet)	120	Rock music concert	Very loud
	110		
Pile driver (50 feet)	100	Boiler room	
Ambulance siren (100 feet)	90		
Freight cars (50 feet)	80	Printing press	Loud
Pneumatic drill (50 feet)		Kitchen garbage disposal	
Freeway (100 feet)	70		Moderately loud
Vacuum cleaner (100 feet)	60	Data processing center Department store/office	
Light traffic (100 feet)	50	Private business office	Quiet
Large transformer (200 feet)	40		
Soft whisper (5 feet)	30	Quiet bedroom	Threshold of hearing
	20	Recording studio	
	0-10		

^a A-Weighted Sound Level, dBA = The A-weighted filter de-emphasizes very-low and very-high frequency components of sound similar to the response of the human ear.

^b Values in this column show a range of noise levels, with 140 being very loud and 0-10 being very soft. Line items in the columns do not always align horizontally because the noise levels of some of the noise sources and noise environments fall between the values shown.

This noise analysis describes the existing noise environment in the vicinity of the four rehabilitation sites, determines whether the Proposed Action would result in significant noise impacts, and whether mitigation for these impacts would be required.

Noise measurements are usually taken over time to capture daily or hourly variance in noise levels. Noise levels taken over time are often reported in energy-equivalent noise level (L_{eq}), the day-night average noise level (L_{dn}), and the community noise equivalent level (CNEL). L_{eq} is an hourly average, while L_{dn} and CNEL are 24-hour weighted averages.

Noise is not considered to be a problem in Trinity County. Sources of noise in Trinity County include the following:

- highway traffic, especially commercial trucks (e.g., logging trucks, tankers)
- sawmills
- airports (light planes, helicopters)
- mining (sand and gravel excavation)
- other sources, classifiable as miscellaneous residential, commercial, and industrial sources

Noise levels in the general vicinity of the Canyon Creek rehabilitation sites are governed primarily by noise from SR 299 traffic and, to a lesser extent, sand and gravel operations. SR 299 parallels the rehabilitation sites, and the closest large sand and gravel mining operation is in the Junction City area, approximately 2 miles southeast of the Conner Creek site. Local residential and commercial vehicle traffic and miscellaneous sources (e.g., river flow, river recreationists, overhead aircraft, barking dogs, children at play) are intermittent sources of noise throughout the area.

A community noise survey was conducted in Trinity County in 2002 (Brown-Buntin 2002) as part of the update currently in process for the noise element of the County's General Plan. The survey point nearest to the proposed rehabilitation sites is the Junction City Elementary School, located approximately 2 miles southeast of the Conner Creek rehabilitation site. The survey indicated that although the noise levels were slightly higher than those expected in small communities and rural areas, they were consistent with the levels expected in small communities and rural areas; the slightly higher noise levels were caused by a water well pump near the survey point. The community noise survey results indicate that noise levels in the Junction City area range from 47 to 76 dB L_{dn} ¹. Occasional aircraft overflights, fire sirens, and construction activities were other sources of maximum noise levels. Background noise levels in the absence of these maximum-noise generating sources are largely attributable to distant traffic, water, wind, livestock, birds, and insects.

Sensitive Noise Receptors

Sensitive receptors are specific geographic points, such as schools, residences, commercial areas, or parks, where people could be exposed to unacceptable levels of noise. Given the nature of the Proposed Action, the noise-generating activities would occur throughout each of the rehabilitation site boundaries;

¹dB L_{dn} = The average equivalent sound level during a 24-hour day, obtained after addition of 10 A-weighted decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m. A-weighted decibels, abbreviated dBA, or dB(a), are an expression of the relative loudness of sounds in air as perceived by the human ear.

however, these would occur only during short periods of time. Upon completion of the Proposed Action, the noise levels would return to the levels that occurred prior to initiation of the Proposed Action. Vehicle traffic on SR 299 and intermittent motor boat passage along the Trinity River produce the majority of ambient noise experienced by noise sensitive receptors in the project area.

Noise-sensitive receptors that have been identified in the general vicinity of the four rehabilitation sites include private residential areas, a commercial enterprise, and persons, primarily recreationists (e.g., hikers, picnickers, anglers, rafters), and wildlife that use the Trinity River corridor. Noise tolerance levels for these groups are subjective, varying widely between individuals. A detailed discussion of wildlife species that are known to occur or have the potential to occur in the project vicinity is provided in Section 3.7.

There are 10 stationary sensitive receptors in the vicinity of the four rehabilitation sites (Figure 3.16-1a – d). Each of these stationary sensitive receptors is located within approximately 0.25 mile of SR 299 and the Trinity River. Each of the 10 sensitive receptors receives varying degrees of ambient noise levels from the highway and the river. However, vegetation and topography create buffers to these noise sources, reducing the intensity, duration, frequency, and time pattern of generated noise. These natural buffers would also aid in buffering noise from project construction activities. Sensitive receptors identified within 1,000 feet of the project site boundaries for each of the rehabilitation sites are listed in Table 3.16-2.

TABLE 3.16-2.
SENSITIVE NOISE RECEPTORS WITHIN 1,000 FEET OF THE CANYON CREEK
REHABILITATION SITES

Receptor Number	Description	Approximate Distance to Nearest Rehabilitation Area
Conner Creek Rehabilitation Site		
1	Residential area	160 feet to R-2
2	Residential area	110 feet to U-2
Valdor Gulch Rehabilitation Site		
3	Residential area	500 feet to U-1
4	Residential area	600 feet to R-2
5	Residential area	450 feet to R-2
6	Commercial area	220 feet to R-1
Elkhorn Rehabilitation Site		
7	Residential area	110 feet to R-1 through R-5
8	Residential area	350 feet to R-6 and R-7
9	Residential area	1,500 feet to U-2
Pear Tree Gulch Rehabilitation Site		
10	Residential area	200 feet to U-1

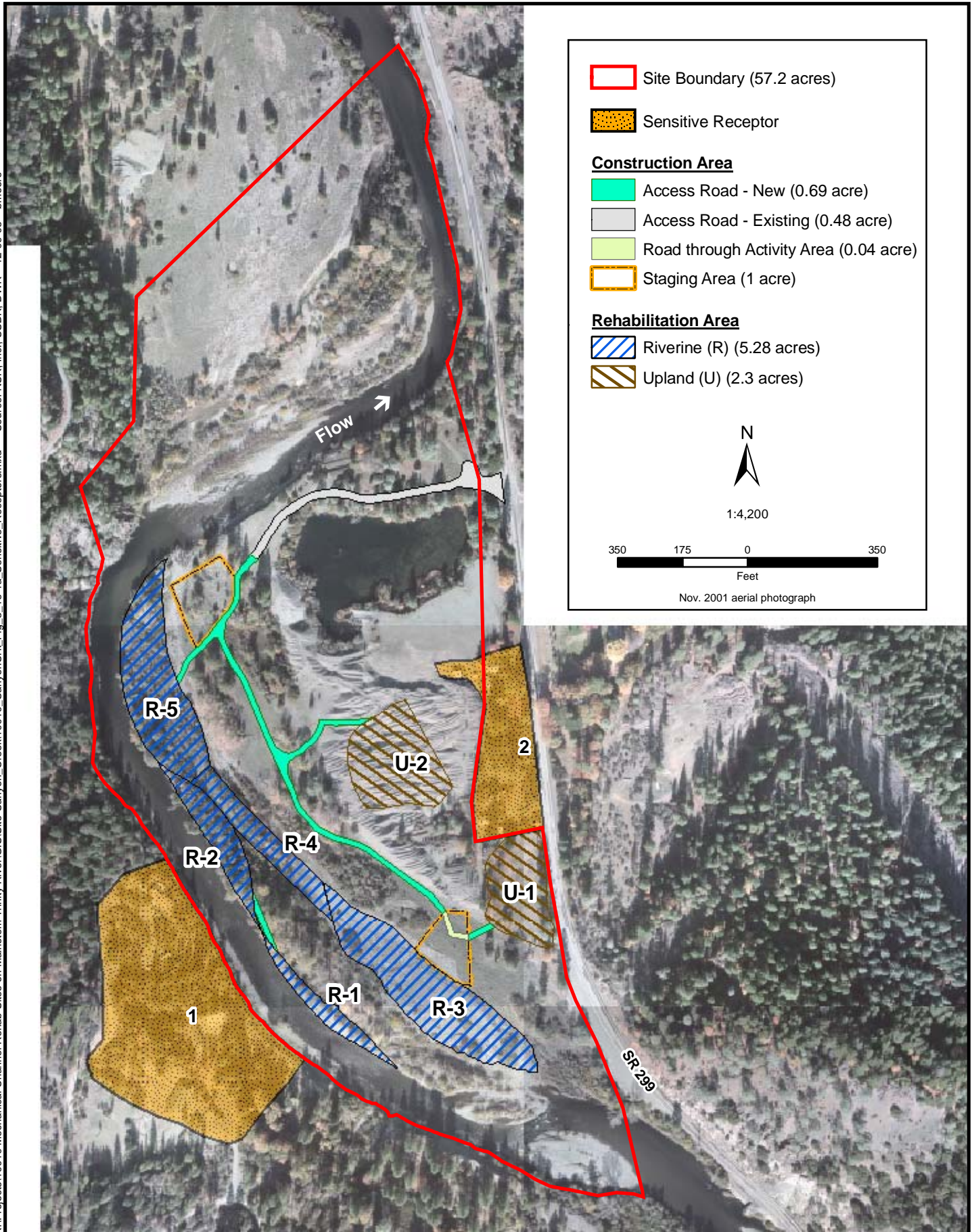


Figure 3.16-1a
Conner Creek - Sensitive Receptor Locations

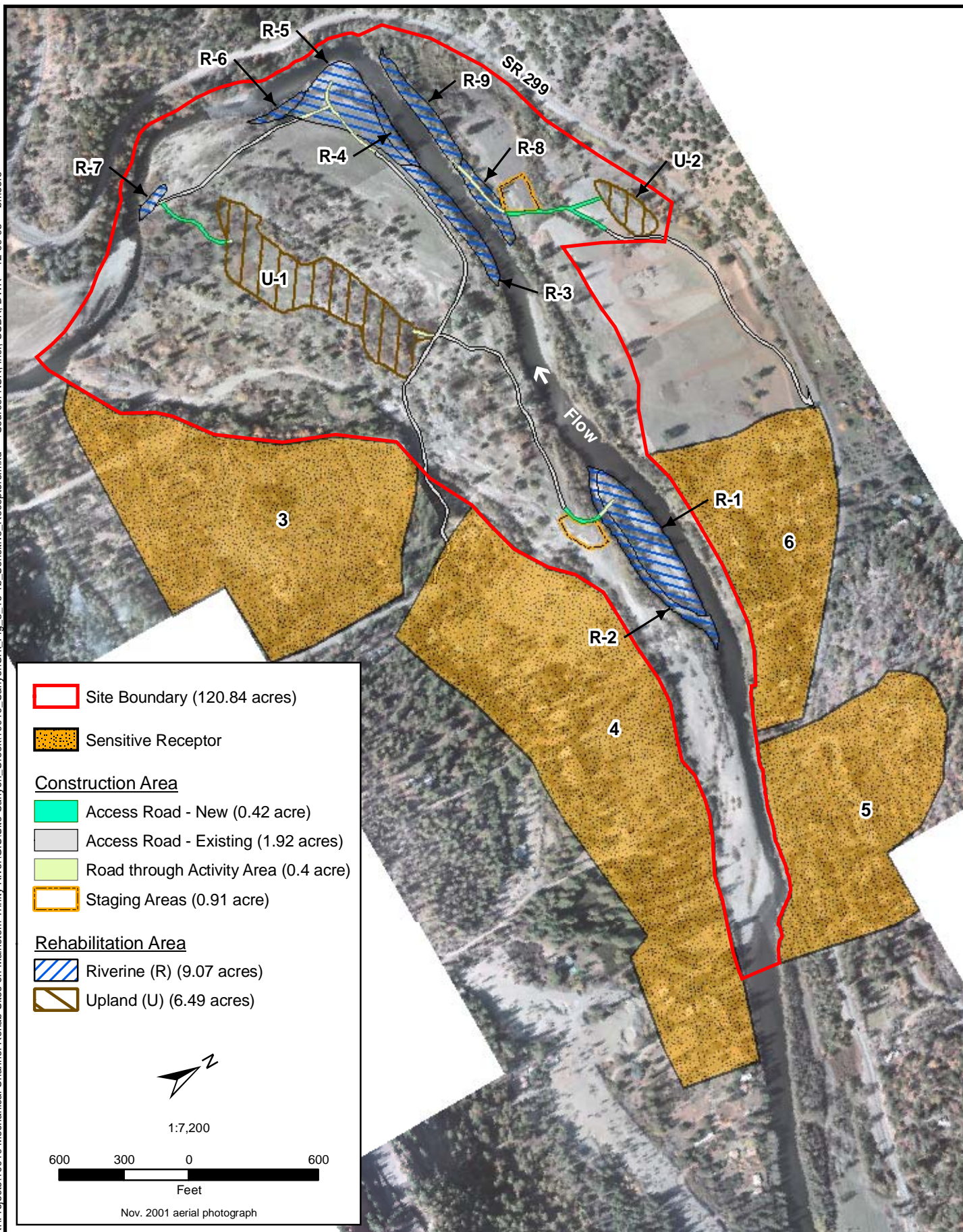


Figure 3.16-1b
Valdor Gulch - Sensitive Receptor Locations

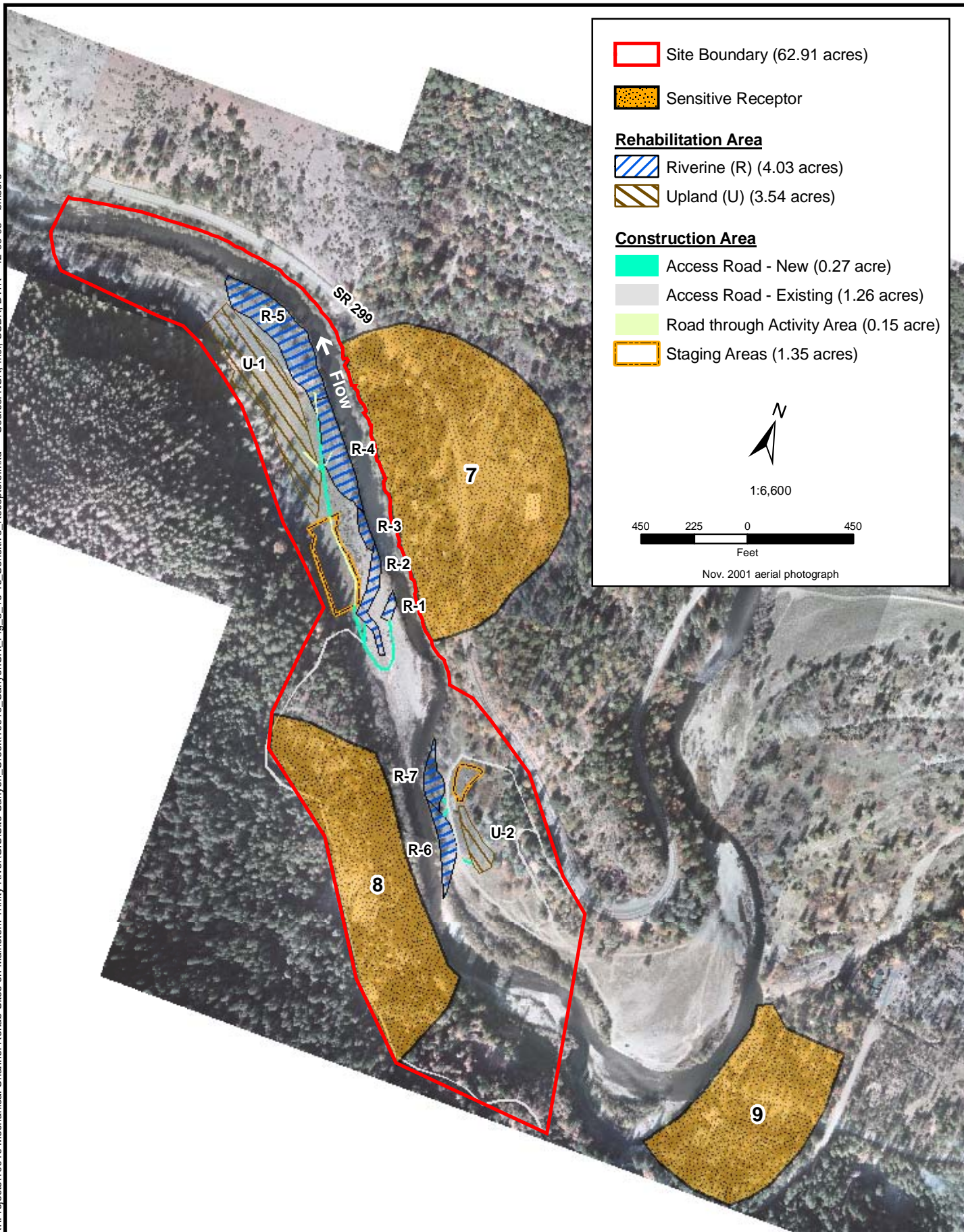


Figure 3.16-1c
Elkhorn - Sensitive Receptor Locations

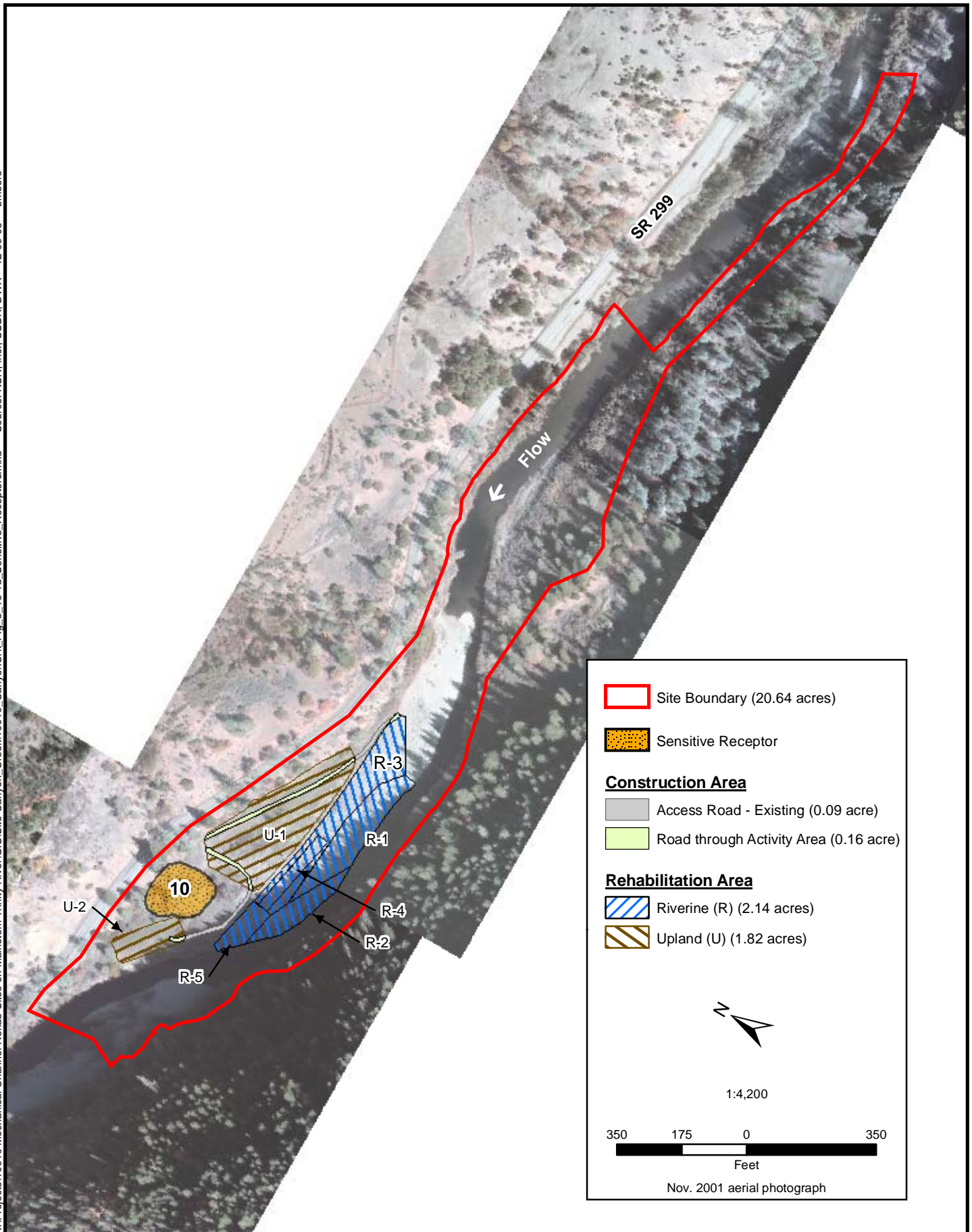


Figure 3.16-1d
Pear Tree Gulch - Sensitive Receptor Locations

Table 3.16-3 lists the U.S. General Services Administration maximum noise levels allowed for government contract construction activities.

TABLE 3.16-3.
U.S. GENERAL SERVICES ADMINISTRATION MAXIMUM NOISE LEVELS ALLOWABLE
FOR GOVERNMENT CONTRACTS

Equipment	Sound Level (dBA) at 50 feet
Earthmoving	
Front loader	75
Backhoe	75
Dozer	75
Tractor	75
Scraper	80
Grader	75
Truck	75
Paver	80
Impact	
Pile driver	95
Jack hammer	75
Rock drill	80
Pneumatic drill	80
Materials handling	
Concrete mixer	75
Concrete pump	75
Crane	75
Derrick	75
Stationary	
Pump	75
Generator	75
Compressor	75
Other	
Saw	75
Vibrator	75

Source: Sincero and Sincero 1996

Typical construction noise levels are shown in Table 3.16-4. This table assumes operations of various construction equipment, as indicated in Table 3.16-5.

TABLE 3.16-4.
TYPICAL CONSTRUCTION NOISE LEVELS

Construction Stage	Noise Level (dBA, L _{eq}) ¹
Ground clearing	84
Excavation	89
Hauling	88
Revegetation	65

¹ Average noise levels 50 feet from the noisiest source and 200 feet from the rest of the equipment associated with a given construction stage. Noise levels correspond to public works projects (50 dBA ambient environment). Source: Bolt 1971

TABLE 3.16-5.
CONSTRUCTION EQUIPMENT NOISE

Type of Equipment	Maximum Level, dBA at 50 feet
Truck	75
Scrapers	80
Bulldozers	75
Backhoe	75
Pneumatic tools	80

Source Sincero and Sincero 1996

3.16.2 RELEVANT PLANS AND POLICIES

Trinity County

Trinity County has no specific noise standards, but a draft noise element of the General Plan and implementing ordinance are under review for adoption (Brown-Buntin 2002). The current adopted noise element that was prepared in 1974 makes only recommendations and has no implementing ordinance. The Draft County Noise Ordinance was considered by the County Board of Supervisors for approval in June 2003, and the County Planning Department was instructed to continue working on it and present it at some point in the future. County staff indicate there is no expectation that a Draft County Noise Ordinance will be approved prior to completion of the NEPA/CEQA process for the Proposed Action.

The Trinity County General Plan identifies a specific recommendation that is applicable to the Proposed Action. This recommendation states: *“It must be realized that although noise is not a health problem in Trinity County, it is a major annoyance in some areas and should be abated, when feasible, to the benefit of everyone.”* Mitigation measures specific to project construction activities will be applied to meet this recommendation.

Project Consistency with the Trinity County General Plan and Community Plans

This section compares the goals and objectives of the Proposed Action to the relevant local planning policies (i.e., Trinity County General Plan, Junction City Community Plan) to determine if there are any inconsistencies.

The goals and objectives described in Chapter 1 are generally compatible with the applicable General Plan goals and policies summarized above. The overall goal of the Proposed Action is to rehabilitate the sites so that they function in a manner that is closer to historic conditions (e.g., pre-Lewiston Dam).

3.16.3 ENVIRONMENTAL CONSEQUENCES/IMPACTS AND MITIGATION MEASURES

Methodology

Since the Proposed Action would not result in a noticeable increase in traffic volume, the focus of this impact analysis will be on construction noise. Construction noise impacts are based on an assumed mixture of construction equipment and related noise levels. Noise levels of individual types of equipment are based on industry averages. Assumptions related to construction equipment and industry noise averages were used to evaluate construction-related noise impacts.

Implementation of the Proposed Action would occur during a relatively short time period (approximately 6 to 12 months). Associated activities would consist of several distinct phases, including site preparation (minor grading and grubbing), excavation, transport and placement of excavated material, and revegetation of the rehabilitation areas. Noise levels used to evaluate project construction were taken from literature that assumes a typical mix of construction equipment used in the construction of public works projects (Bolt 1971). These construction noise levels were used to determine the noise levels at the nearest sensitive receptors.

Significance Criteria

Based on Appendix G of the *CEQA Guidelines*, the Proposed Action would be considered to have a significant direct noise impact if it results in a noise increase and:

- exposure of persons to or generation of excessive ground-borne vibration or ground borne-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 existing levels; and
- exposure of persons to or generation of noise levels in excess of standards established in the Trinity County General Plan Noise Element, or applicable standards of other agencies.

Impacts and Mitigation Measures

Table 3.16-6 summarizes the potential noise impacts resulting from construction of the Proposed Action.

TABLE 3.16-6.

SUMMARY OF NOISE IMPACTS FOR THE NO-ACTION ALTERNATIVE, PROPOSED ACTION, AND ALTERNATIVE 1

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
1. Construction activities associated with the project would result in temporary noise impacts to nearby sensitive receptors.	All sites	NI	S	S	LS	LS

Notes:

LS = Less than Significant

S = Significant

SU = Significant Unavoidable

NI = No Impact

B = Beneficial

N/A = Not Applicable

All Sites (Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch)

Impact 3.16-1: Construction activities associated with the project would result in noise impacts to nearby sensitive receptors. ***No Impact for No-Action Alternative; Significant Impact for Proposed Action and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, no change in ambient noise levels would occur because the project would not be constructed.

Proposed Action

During the construction phase of the project, noise from construction activities would dominate the noise environment in the immediate area. As shown in Table 3.16-4, construction activities would generate noise levels ranging from 70 to 90 dBA at a distance of 50 feet, although intervening terrain and vegetation could reduce these noise levels. Construction noise would be temporary and is expected to last for 3 to 6 weeks at each site. There would be no permanent noise impacts as a result of project implementation.

Ten sensitive receptors are located in the immediate vicinity of the four rehabilitation sites (Figures 3.16-1 through 3.16-4). Sensitive receptors identified within 1,000 feet of the four rehabilitation sites are listed in Table 3.16-2. Each sensitive receptor is located at least 100 feet from the nearest proposed activity. During the construction phases of the project, noise from construction activities would dominate the noise environment in the immediate area. This would be considered a significant impact.

Construction activities would typically occur during normal working hours. No nighttime construction activities are proposed; however, incidental project activities (i.e., security, equipment service) in support of the project could occur at night. The noise levels associated with incidental activities would not exceed

ambient noise levels in the project vicinity (e.g., noise from SR 299 traffic). No construction activities would occur on Sundays.

Alternative 1

Noise impacts would be lower under Alternative 1 than under the Proposed Action. Under Alternative 1, there would be less excavation at the Conner Creek and Elkhorn sites and less time would be required to rehabilitate these sites. At the Conner Creek site, rehabilitation activities would not occur at activity areas R-1 and R-2, therefore reducing the noise impacts associated with sensitive receptor #1. Proposed activities within the vicinity of sensitive receptor #2 at the Conner Creek site would be the same under both the Proposed Action and Alternative 1. At the Elkhorn site, rehabilitation activities would not occur in activity areas R-2, R-4, and R-5, therefore reducing the noise impacts associated with sensitive receptor #7. Proposed activities within the vicinity of sensitive receptors #8 and #9 at the Elkhorn site would be the same under both the Proposed Action and Alternative 1. It is anticipated that ground vibration associated with project rehabilitation activities under the Proposed Action and Alternative 1 will not be detectable at adjacent land uses, nor will it result in structural damage.

Mitigation Measures

No-Action Alternative

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A.

Proposed Action and Alternative 1

- 1a:** Construction activities near residential areas would be scheduled between 7:00 AM and 7:00 PM, Monday through Saturday. No construction activities shall be scheduled for Sundays or other hours and days established by the local jurisdiction (i.e., Trinity County). The contractor may submit for variances in construction activity hours, as needed.
- 1b:** Reclamation shall require in construction specifications that the contractor maintain all construction equipment with manufacturer's specified noise muffling devices.
- 1c:** Reclamation shall require in construction specifications that the contractor place all stationary noise-generating equipment as far away as feasibly possible from sensitive noise receptors or in an orientation minimizing noise impacts (i.e., behind existing barriers, storage piles, unused equipment).

Significance after Mitigation: Less than significant.

3.17 Public Services and Utilities/Energy

This section evaluates potential impacts to public services and utilities from implementation of the No-Action Alternative, the Proposed Action, and Alternative 1. Additionally, this section addresses potential impacts to energy resources due to substantial or wasteful use of energy resources during implementation of the Proposed Action and the alternatives. The analysis provided in this section is based on review of local planning documents applicable to the Proposed Action, telephone communication with local service providers, and field reconnaissance by TRRP and NSR staff.

3.17.1 AFFECTED ENVIRONMENT/ENVIRONMENTAL SETTING

Regional Setting

Water Supply and Distribution

Community service districts provide water services to several communities in Trinity County, including Weaverville, Lewiston, and Hayfork. In some instances, local service districts provide water service to small residential areas. Outside these communities, a large portion of the population is served by onsite water developments. These developments include wells, springs, and surface intake facilities along the Trinity River and its tributaries.

Surface Water

Surface water is provided by pumps and stilling wells in the Trinity River, as well as developed springs throughout the area. Surface water is primarily used for domestic purposes, including incidental use for gardens, livestock, and fire protection.

Groundwater

The Recent Alluvium formation is the predominant, fresh water-yielding formation along the Trinity River. This formation underlies the four proposed rehabilitation sites at varying depths. Water quality is highly variable and depends on local geologic features. The most common potential hazards to groundwater quality in Trinity County involve concentration of nitrates and dissolved solids from agricultural practices and septic tank failures.

Water Treatment Facilities

Water treatment facilities vary widely throughout the county. Water treatment facilities that serve communities are operated in accordance with established EPA guidelines. Water supplies that serve small subdivisions and private residences often have filtration and treatment systems that are used to address local water quality concerns.

Wastewater Collection and Treatment

Trinity County has very limited wastewater collection and treatment facilities. Septic tanks and drain fields are used throughout most of the county. No public wastewater collection and treatment systems are available to residents in the general vicinity of the Proposed Action.

Gas Supply and Distribution

Natural gas providers do not serve northern Trinity County. Liquefied propane gas and kerosene fuels are provided through distributors based in Weaverville and Redding to residents on a case-by-case basis.

Solid Waste Collection and Disposal

Several independent private companies provide subscription garbage collection service to residents of Trinity County. There are also several remote collection sites available for county residents to deliver self-hauled residential, commercial, and industrial refuse, green waste, recyclables, and household hazardous materials. All material collected is transported to a landfill in Anderson, California.

Law Enforcement

The Trinity County Sheriff's Department (TCSD) provides law enforcement for the entire county. TCSD headquarters is located in Weaverville and a substation is located in Hayfork. Resident officers are stationed throughout the county and serve as the primary contact point for local communities.

The California Highway Patrol (CHP) operates from an office in Weaverville and serves as the primary law enforcement agency for state facilities and transportation corridors. The CHP works closely with the TCSD to provide law enforcement coverage to Trinity County.

The BLM and the USFS provide law enforcement in association with their land management activities. Although the focus of BLM and USFS officers is actions on public lands, they work closely with other agencies to provide law enforcement support throughout Trinity County.

Fire Protection/Emergency Services

Sixteen volunteer fire departments located throughout Trinity County, the California Department of Forestry and Fire Protection (CDF), and USFS currently meet Trinity County fire protection needs. The volunteer fire departments are responsible for structural fire protection and rescue services in Trinity County throughout the year. The 16 volunteer fire departments are Douglas City, Post Mountain, Hayfork, Wildwood, Junction City, Hyampom, Lewiston, Trinity Center, Coffee Creek, Salyer, Hawkins Bar, Weaverville, Southern Trinity, Downriver, Barker Valley, and Kettenpom-Zenia. The volunteer fire departments currently have a membership of approximately 200 to 225. Only Trinity Center, Hayfork, Lewiston, and Weaverville receive tax revenues to support their volunteer fire departments, although these revenues are limited. The volunteer fire departments routinely respond outside of their legal boundaries to any emergency to which they are dispatched by the 911 center maintained by the TCSD.

By law, CDF is responsible for wildland fire protection on all private lands in Trinity County, and the USFS is responsible for wildland fire protection on all National Forest lands. CDF and USFS fire stations are staffed only during the summer fire season, which normally lasts from May to late October. The Shasta-Trinity National Forest maintains a work station, including a seasonal fire crew, in Junction City directly across Dutch Creek Road from the Junction City Volunteer Fire Department. During the summer fire season, all fire agencies in the county respond to any reported fire, regardless of legal jurisdiction. CDF and USFS are legally and financially responsible for managing wildland fires within their

jurisdiction; however, the volunteer fire departments are often the first to respond and the first to arrive on the scene of a spreading wildfire. CDF and USFS depend on the volunteer fire departments to provide the initial attack on wildfires, and both agencies have agreements with the volunteer fire departments to reimburse the departments for their assistance.

Medical Services

Medical services in Trinity County are provided by a variety of organizations. There are two health clinics run by Trinity County Public Health Department, located in Weaverville and Hayfork. In addition, Mountain Community Medical Services (formerly Trinity Hospital) in Weaverville provides 24-hour emergency services. Trinity Life Support Ambulance and Southern Trinity Area Rescue (STAR) provide ambulance services, while the TCSD maintains an active Search and Rescue Team.

Telephone Service

A number of providers offer telephone service to residents of Trinity County. At the present time, no high-speed or fiber optic services are available in the county, and cell phone service is limited to Weaverville and some areas along the Trinity River corridor. In some remote areas, satellite service is the only communication option available to customers.

Electrical Service

Trinity Public Utilities District serves most of Trinity County, including residences and businesses in the project vicinity.

Schools

Due to the remote location and isolation of some residents, bus service to Trinity High School is provided for residents throughout the project vicinity. Bus routes for Trinity High School include SR 299, Highway 3, and miscellaneous county roads. There is no school bus service for the Junction City Elementary School District.

Local Setting

The four proposed rehabilitation sites are in the Junction City Community Plan Area. The Plan Area includes the area centered on the Trinity River between Helena and Maxwell Creek.

Water Supply and Distribution

Water development in the Junction City community is served by mutual or private water systems. No community systems exist in the immediate vicinity of the four proposed rehabilitation sites. BLM operates a water system that provides potable water to the Junction City Campground. Water is generally plentiful throughout the area, although care must be taken to protect the water supply from contamination from septic systems and other sources. Water supply for the Cooper's Bar subdivision associated with the Valdor Gulch rehabilitation site is from private wells on individual properties. There are no wells in the vicinity of the rehabilitation project (Peter Hedkey, pers. comm.).

Surface Water

The Trinity River is the primary surface water source in the project vicinity. The river, which is subject to dramatic changes in flow on a recurring basis, bisects the four proposed rehabilitation sites.. No intakes were identified within the four proposed rehabilitation sites; however, residents downstream rely on the river for water. These residents use river water, either through direct intakes or stilling wells that intercept shallow subsurface flow adjacent to the river. These developed sources are typically located within the active channel or on the floodplain and require a collection system, pump, and distribution system to service individual residences.

Groundwater

Due to the location and nature of the terrain, groundwater levels respond to river stage. Observations of the excavations associated with sand and gravel operations within the four proposed rehabilitation sites suggest that groundwater levels fluctuate seasonally with flows. Groundwater wells provide water for domestic purposes adjacent to the four proposed rehabilitation sites. All rehabilitation areas were located to ensure that these wells are avoided. Private residences outside the site boundary use groundwater as their primary or secondary water source in a number of areas.

Wastewater Treatment and Collection

No sewage disposal systems or public treatment services are located in the immediate vicinity of the four proposed rehabilitation sites, although Junction City Elementary School operates a small treatment facility for its own use. All wastewater treatment and collection for adjacent residences is provided by on-site septic systems. The major constraints to on-site sewage disposal are poor soils, saturated soils, and steep slopes. The Trinity County Soil Survey (U.S. Department of Agriculture 1998) indicates that most of the soils in the Junction City Community Plan Area are moderately to severely restricted for home site development.

Solid Waste Collection and Disposal

The county's single landfill is located in Weaverville, adjacent to the Lonnie Pool Airport. This landfill now operates as a transfer station. Solid waste is collected from transfer stations throughout the county and delivered to the Weaverville facility. From here, all material is transported by truck to a landfill located in Anderson, California.

Fire Protection

Local governmental units, such as the Junction City Volunteer Fire Department (JCVFD), provide most emergency public services within the Junction City Community Plan Area. CDF and USFS also provide fire protection services to the area between May and late October. During the summer, a USFS helicopter and a 20-person crew are available during daylight hours. During daylight, CDF also has automatic dispatch of a fire retardant bomber and lead plane from Redding.

The JCVFD has an 11-person volunteer crew and chief. JCVFD crews are the primary responders to vehicle accidents, structure fires, and wildland fires on a year-round basis. The JCVFD provides fire protection and emergency medical aid services to district residents and travelers along SR 299. The

JCVFD maintains three fire engines, a rescue vehicle, and a water tender. Several of these vehicles are located in rural areas outside of the Junction City townsite.

CDF has identified all of the Junction City Community Plan Area as being a high fire hazard area. Three fire lookouts—Weaver Bally, Hayfork Bally, and Bonanza King—allow for quick fire detection throughout the Plan Area. The rural nature of this area and limited fire station locations have resulted in relatively slow response times, particularly in the winter.

Utilities

The project sites themselves are generally devoid of utilities. However, many of the access roads to the rehabilitation sites contain power lines that cross the roads. These power lines may be used as an auxiliary source of power for various proposed activities (e.g., pumps, staging equipment) at the proposed rehabilitation sites.

Schools

There is one elementary school district and one high school district in the general vicinity of the Proposed Action. The Junction City Elementary School District operates a primary school (grades kindergarten through eight) in Junction City. Junction City Elementary School is located near the junction of Red Hill Road and Dutch Creek Road, approximately 4.5 miles and 5.5 miles from the Valdor Gulch and Elkhorn rehabilitation sites, respectively. It serves the river corridor west of Weaverville and the area downstream from Junction City to about Helena. Students from this elementary school attend ninth through twelfth grades at Trinity High School in Weaverville. The area currently has a kindergarten through twelfth-grade population of approximately 100. Of these, approximately 60 attend Junction City Elementary School and approximately 40 attend Trinity High School in Weaverville. The state-rated capacity of the elementary school is 100.

3.17.2 RELEVANT PLANS AND POLICIES

Trinity County General Plan Goals and Objectives

The Trinity County General Plan contains goals and policies designed to guide the future physical development of the county, based on current conditions. The General Plan contains all the state-required elements, including community development and design, transportation, natural resources, health and safety, noise, housing, recreation, economic development, public facilities and services, and air quality. The following goals and policies related to public service and utility issues associated with the Proposed Action were taken from the applicable elements of the General Plan (Trinity County 2001), including the Junction City Community Plan (Trinity County 1987).

Junction City Community Plan Goals and Objectives

The Junction City Community Plan covers the area centered on the Trinity River from Helena to Maxwell Creek.

Public Services and Facilities

Goal: Maintain as a priority the existing level of public services and improvements within areas of the community already served.

Objective: Insure that new development does not reduce the level of existing services.

Project Consistency with the Trinity County General Plan and Community Plans

The goals and objectives described in Chapter 1 are generally compatible with the applicable General Plan goals and policies summarized above. The overall goal of the Proposed Action is to rehabilitate the sites so that they function in a manner that is closer to historic conditions (i.e., pre-Lewiston Dam).

3.17.3 ENVIRONMENTAL CONSEQUENCES/IMPACTS AND MITIGATION MEASURES

Methodology

The analysis addresses potential impacts from implementation of the project on the following public services and facilities: water supply and distribution; wastewater collection and treatment; law enforcement; solid waste collection and disposal; fire protection; telephone service; electric service; and schools. The analysis qualitatively addresses potential impacts to energy resources due to substantial or wasteful energy use during project construction. The analysis is based on a review of planning documents applicable to the project area, telephone communication with various agencies, and field reconnaissance.

Significance Criteria

A project would normally have a significant impact on public services or utilities under CEQA if it would

- not comply with published national, state, or local statutes, regulations, or standards relating to solid waste;
- interfere with emergency services;
- degrade the level of service of a public service or utility;
- require relocating infrastructure;
- result in substantial adverse physical impacts associated with the provision of, or 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 fire protection, police protection, schools, parks, or other public services;
- require substantial improvements to the infrastructure or level of staffing of a public service or utility to maintain its existing level of service;

- require or result in the construction of new water treatment, wastewater treatment, or storm water drainage facilities, or the expansion of such existing facilities, the construction of which could cause significant environmental effects;
- be served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs;
- disrupt utilities service to create a public health hazard or extended service disruption; or
- encourage activities that result in the use of large amounts of fuel or energy, or would use fuel or energy in a wasteful manner.

Impacts and Mitigation Measures

Table 3.17-1 summarizes the potential impacts on public services and utilities that could result from implementation of the project.

TABLE 3.17-1.
SUMMARY OF IMPACTS ON PUBLIC SERVICES AND UTILITIES OF THE PROPOSED ACTION AND ALTERNATIVES

Impact	Project site	No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
1. Implementation of the project could potentially disrupt existing electrical and phone service during the construction phase.	All sites	NI	NI	NI	N/A ¹	N/A
2. Construction of the project could result in the generation of increased solid waste.	All sites	NI	LS	LS	N/A	N/A
3. Implementation of the project could result in disruption to emergency services or disruption to school bus routes or student travel routes during the construction phase.	All sites	NI	S	S	LS	LS
4. Construction of the project could result in a substantial use of nonrenewable energy resources.	All sites	NI	LS	LS	N/A	N/A

Notes:

LS = Less than Significant S = Significant
NI = No Impact N/A = Not Applicable

¹Because this potential impact is less than significant, no mitigation is required.

All Sites (Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch)

Impact 3.17-1: Implementation of the project could disrupt existing electrical and phone service during the construction phase. *No Impact for the No-Action Alternative, Proposed Action, and Alternative 1*

No-Action Alternative

Under the No-Action Alternative, no construction-related disruption to existing electrical or telephone service would occur because the project would not be implemented.

Proposed Action and Alternative 1

Under the Proposed Action and Alternative 1, no activities would occur to disrupt electrical or telephone service in the project area. Although no power poles, power lines, or phone lines are located within the site boundary, there are a number of electrical and phone lines that cross access roads to the proposed Conner Creek and Elkhorn rehabilitation sites on the left side of the Trinity River. Clearance for most phone lines is 18 feet and is higher for utilities lines; these clearances should be adequate to allow access by construction equipment. If any vehicles exceeding this height are anticipated to travel under a phone line, height requirements will need to be verified by the contractor before accessing the site to ensure that utility lines are not damaged. No impacts to existing electrical or telephone service are anticipated to occur as a result of the Proposed Action or Alternative 1.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified for the alternatives, no mitigation is required.

Significance after Mitigation: N/A

Impact 3.17-2: Construction of the project could result in the generation of increased solid waste. *No Impact for the No-Action Alternative; Less-than-Significant Impact for the Proposed Action and Alternative 1*

No-Action Alternative

Increased quantities of solid waste would not be generated under the No-Action Alternative because there would be no construction activities.

Proposed Action

Under the Proposed Action, construction would result in the generation of solid waste associated with the removal of substantial amounts of vegetation and other construction-related waste (e.g., trash from workers, cans, buckets). Vegetation would be chipped to provide mulch, piled on site, or left in the

floodplain to provide structural habitat for juvenile fishes. Smaller-sized solid waste generated by construction activities would likely be disposed of locally at the Weaverville waste facility. Waste collected at the Weaverville facility is currently transported by truck to a landfill located in Anderson, California. The Anderson landfill currently has sufficient capacity and the necessary permits to accommodate construction waste that is non-hazardous. The contractor would be responsible for determining appropriate disposal sites for any hazardous waste. Disposal of potentially hazardous waste is evaluated in Section 3.15, Hazardous Materials.

Alternative 1

Under Alternative 1, construction would result in the generation of the same types of solid waste as the Proposed Action, but the amounts of vegetation and construction-related waste would be slightly lower because there would be no restoration activities at Conner Creek areas R-1 and R-2 and Elkhorn area R-2.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A.

Impact 3.17-3: Implementation of the project may result in disruption to emergency services or disruption to school bus routes or student travel routes during the construction phase. ***No Impact for the No-Action Alternative; Significant Impact for the Proposed Action and Alternative 1***

No-Action Alternative

Since there would be no construction activities associated with implementation of the No-Action Alternative, there would not be any disruption to emergency services, school bus routes, or student travel routes.

Proposed Action and Alternative 1

Although construction activities associated with the Proposed Action and Alternative 1 would be confined to the rehabilitation sites described in Chapter 2, access for mobilization and demobilization of heavy equipment may require traffic control on Dutch Creek and Red Hill Roads as well as Wintu Pass Road; the need for such traffic control would be minimal. In addition, construction personnel and service vehicles would use designated routes during throughout the construction phase. Any potential road/bridge closures would be implemented during non-peak hours to avoid traffic circulation impacts. However, a closure, even during non-peak hours (i.e., 11:00 p.m. to 6:00 a.m.) could have the potential to significantly decrease response time for police service, fire protection, and other emergency services. This would be considered a significant impact.

In the event that road closures would be required during the school year (mid-August through mid-June), these closures would occur only during non-peak hours, consistent with the requirements outlined in

Section 3.16 and Section 3.17 and in coordination with the appropriate school district to avoid disruption of student access to bus service.

Mitigation Measures

No-Action Alternative

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: *N/A*

Proposed Action and Alternative 1

- 3a:** Reclamation shall stipulate in the contract specifications for construction that the contractor must stage construction work and temporary closures in a manner that will allow for access by emergency service providers.
- 3b:** Reclamation shall stipulate in the contract specifications that the contractor must provide 72-hour notice to the local emergency providers (i.e., TCSD, CDF, Junction City Fire Department, and Trinity Life Support Ambulance) prior to the start of temporary closures.

Significance after Mitigation: *Less than Significant.*

Impact 3.17-4: Construction of the proposed project could result in a substantial use of nonrenewable energy resources. ***No Impact for the No-Action Alternative; Less-than-Significant Impact for the Proposed Action and Alternative 1***

No-Action Alternative

No use of nonrenewable energy resources would occur under the No-Action Alternative because construction activities would not occur.

Proposed Action and Alternative 1

Energy expenditures associated with construction under both the Proposed Action and Alternative 1 would include both direct and indirect uses of energy. Combustion of the refined petroleum products needed to operate construction equipment would be part of the direct energy use. Indirect energy use typically represents about three-quarters of total construction energy usage, with direct energy use comprising the remaining quarter. Though construction energy would be consumed only during the construction phase, it would represent irreversible consumption of finite natural energy resources.

Construction would consume fuel and electricity, along with indirect energy for materials used in construction. Fuel would be consumed by both construction equipment and construction-worker vehicle trips. Electricity would be used by construction equipment, such as welding machines, power tools, and pumps. Energy consumed by construction power equipment would be relatively minimal.

Construction energy consumption would be a short-term impact and would not be an ongoing drain on finite natural resources. Alternative 1 would use slightly less energy than the Proposed Action during the construction phase since there would be slightly less earthwork under this alternative. Construction under both the Proposed Action and Alternative 1 would consume energy primarily in the form of fuel and

electricity and would not have a significant effect on local or regional energy sources. Energy consumption by construction activities would be a less-than-significant impact, and mitigation is not required.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified, no mitigation is required.

Significance after Mitigation: N/A

3.18 Transportation/Traffic Circulation

This section addresses transportation and traffic issues related to implementation of the Proposed Action and alternatives. The following evaluation is based on a review of local transportation plans and policies, as well as a field reconnaissance to document current local roadway conditions.

3.18.1 AFFECTED ENVIRONMENT/ENVIRONMENTAL SETTING

Regional Roadway Network

The USFS Scenic Byways program was developed to provide alternative uses of national forest lands while meeting the public demand for scenic driving tours on safe, well-maintained roads within or near the boundaries of national forests. Trinity County currently has two Scenic Byways, the Trinity Scenic Byway along SR 299 and the Siskiyou-Trinity Scenic Byway along SR 3 and SR 36. SR 299 was designated the Trinity Scenic Byway in October 1991. It enters Trinity County from the east over Buckhorn summit, descending toward the Trinity River at Douglas City. Following Weaver Creek to Weaverville and then climbing Oregon Mountain, it rejoins the river at Junction City and follows the Trinity River Gorge into Humboldt County. SR 3, historically called the Trinity Heritage Scenic Byway, has recently been renamed the Siskiyou-Trinity Scenic Byway. It extends south from Montague in Siskiyou County through the Scott River Valley and enters Trinity County over the Scott Mountain summit, 55 miles north of Weaverville. It extends through the Trinity Alps to Trinity Lake before continuing on to Weaverville, then south through Hayfork to the end of the highway at its junction with SR 36. This scenic byway continues along SR 36 through Forest Glen before continuing into Humboldt County (Center for Economic Development 2001).

The Junction City/Helena Community is a collection of residential and commercial areas connected by SR 299. Sky Ranch Road, Canyon Creek Road, Dutch Creek Road, and Red Hill Road are part of the Trinity County road system. The Valdor Gulch and Elkhorn rehabilitation sites are accessed via Red Hill Road, after crossing Dutch Creek Bridge over the Trinity River; the Pear Tree Gulch and Conner Creek rehabilitation sites are accessed directly from SR 299 (Figure 3.18-1).

Local Setting

SR 299 provides access to the Pear Tree Gulch and Conner Creek rehabilitation sites on the right side of the Trinity River. Rehabilitation areas and staging/spoils areas for these two sites are all located between the river and SR 299.

Red Hill Road and Wintu Pass Way, via Dutch Creek Road, provide access to the Valdor Gulch rehabilitation site on the left side of the Trinity River. Access to the right side (activity areas U-2, R-8, and R-9) is via a small road just west of Acorn Lane, off of SR 299. Chimariko Road via Wintu Pass Way provides access to the Elkhorn rehabilitation site on the left side of the Trinity River. Access to the right side of the Elkhorn rehabilitation site (activity areas R-7, R-6, and U-2) is via a small road directly off of SR 299. Table 3-18.1 characterizes the roadways that provide access to the proposed rehabilitation sites.

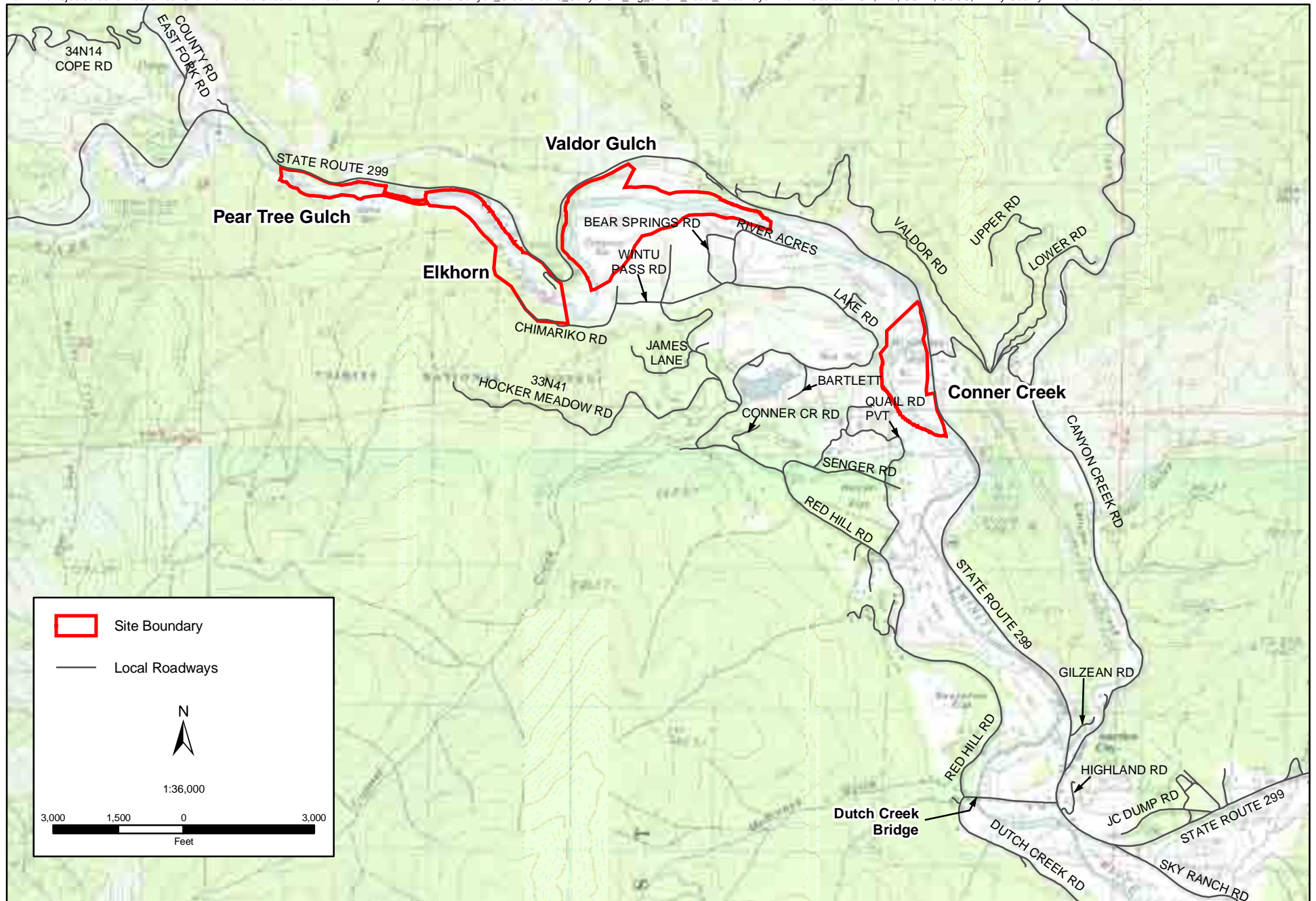


Figure 3.18-1
Local Roadways

TABLE 3.18-1.
ROADWAY CHARACTERISTICS FOR ACCESS ROADS TO THE REHABILITATION SITES

Road Name	Rehabilitation Site Access	Ownership	Roadway Class	Number of Lanes	Surface Type	Curb Shoulder	Pedestrian Walkway	Traffic Counts (ADT)	Cross Streets
SR 299	Valdor Gulch Conner Creek Elkhorn Pear Tree Gulch	State of California	Highway/ Scenic Byway	2-3	Paved	Yes	No	1,675 (1)	Canyon Creek Road Dutch Creek Road
Dutch Creek Road	Elkhorn Valdor Gulch	Trinity County	Local/ Residential	1-2	Paved	No	Bike Lane	886 (2)	Red Hill Road SR 299
Red Hill Road	Elkhorn Valdor Gulch	Trinity County	Local/ Residential	1-2	Paved	No	Bike Lane	604 (2)	Dutch Creek Road
Chimariko Road	Elkhorn Valdor Gulch	Trinity County	Local/ Residential	1-2	Paved	No	No	N/A	Wintu Pass Way
Wintu Pass Road	Elkhorn Valdor Gulch	Trinity County	Local/ Residential	1-2	Paved	No	No	N/A	Red Hill Road

Sources:

- (1) Caltrans Information: <http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/2003>
- (2) Average Daily Traffic (ADT), Jan Smith, County Transportation Department pers. comm. 2004.

Designated Truck Routes

SR 299 is a designated truck route between the Sacramento Valley and the coastal communities of northern California. It is the main access for all four rehabilitation sites. Red Hill Road via Dutch Creek Road provides access to residential areas and timberlands, both federal and private. Chimariko Road also provides access to local residences. Apart from SR 299, these roads are not designated truck routes and were not designed for heavy truck traffic.

Public Health

No public health programs or private meals programs for seniors (i.e., Meals on Wheels) or disabled persons currently serve residents in the Junction City community.

Bikeways/Pedestrian Circulation

In conformance with the Junction City Community Plan, Red Hill Road was widened to include a bike lane, primarily to provide alternative transportation between local residences and Junction City. Pedestrians include students who walk from connecting streets to the bus stops along Red Hill Road and local residents who use the roadway for access, as well as for exercise and recreational pursuits on an occasional basis.

Parking

There are no designated public parking areas at any of the four sites. There are informal areas where parking occurs at all four sites, generally for river access. None of these areas will be accessible to the public during the construction phase of the project.

3.18.2 REGULATORY SETTING

Trinity County General Plan Goals and Objectives

The Trinity County General Plan contains goals and policies designed to guide the future physical development of the county, based on current conditions. The General Plan contains all the state-required elements, including community development and design, transportation, natural resources, health and safety, noise, housing, recreation, economic development, public facilities and services, and air quality. The following goals and policies related to transportation/traffic issues associated with the Proposed Action, were taken from the applicable elements of the General Plan (Trinity County 2001), including the Junction City Community Plan (Trinity County 1987).

Circulation Element

The Circulation Element contains the following goal associated with non-motorized transportation.

Goal: To 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.

Junction City Community Plan Goals and Objectives

The Junction City Community Plan covers the area centered on the Trinity River from Helena to Maxwell Creek. The transportation element of the Plan is intended to coordinate the existing and planned transportation and circulation systems with planned land uses. Applicable goals and objectives of the Plan's transportation element are listed below.

Transportation

Goal: To provide a roadway system that effectively, efficiently, and safely serves transportation needs.

Objective: Improve the safety characteristics of identified roadways based on average daily traffic and public safety requirements.

Goal: To coordinate the transportation and circulation system with planned land uses.

Objective: Concentrate heavy traffic generators on major roads.

The Plan also provides a public services and facilities element that works in conjunction with the transportation element. That element is described in the Public Services section of this document.

Project Consistency with the Trinity County General Plan

This section compares the goals and objectives of the Proposed Action to the relevant local planning policies (i.e., Trinity County General Plan, Junction City Community Plan) to determine if there are any inconsistencies.

The following project objectives apply to the lead/responsible agencies for CEQA purposes:

- Provide safe and reasonable access to the site for project planning, implementation, and monitoring.
- Develop partnerships with willing participants, and encourage positive landowner interest and involvement.

These project objectives are consistent with the applicable general plan goals and policies summarized above. Truck traffic will be minimized and contained on as few roads as possible. Access for local landowners will be maintained, and closures will be minimal. Mitigation measures for disruption of traffic flow, damage to existing roads, and creation of new access roads are outlined below.

California Department of Transportation Regulations

The California Department of Transportation (Caltrans) requires an encroachment permit to be issued for trucks and other project-related traffic to use SR 299 under certain circumstances. If trucks are using access roads near sharp corners or corners with poor visibility for oncoming traffic, or if the angle of access requires vehicles to pull into oncoming traffic to properly make a turn onto the highway, an encroachment permit is required from Caltrans. These conditions may likely apply to access conditions at the Conner Creek, Elkhorn (right bank), and Pear Tree Gulch rehabilitation sites. Flaggers, spotters with radios, or temporary signs may be necessary at these sites.

3.18.3 ENVIRONMENTAL CONSEQUENCES/IMPACTS AND MITIGATION MEASURES

Methodology

A qualitative assessment of traffic impacts was performed, based on the construction procedures and equipment that will be used, local transportation policies, site review of existing conditions, and the level of traffic on the key roadways.

Significance Criteria

Significance criteria were developed based on Appendix G of the *CEQA Guidelines*, as well as project-specific issues identified during the scoping process (i.e., access during construction). For the project, significant construction-related impacts would result if the project would:

- cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in 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 for designated roads or highways;

- disrupt existing traffic operations, including vehicular and bicycle traffic;
- significantly degrade the existing conditions of local private roads;
- obstruct access to adjacent land uses, including emergency access;
- affect the operation of the local transit system;
- pose a safety hazard to motorists, bicyclists, or pedestrians;
- cause substantial damage to or wear of public and private roadways; or
- reduce available parking capacity.

Impacts and Mitigation Measures

Table 3.18-2 summarizes the potential transportation/traffic impacts that would result from implementation of the project.

TABLE 3.18-2.
SUMMARY OF TRANSPORTATION IMPACTS FOR THE PROJECT

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Project with Mitigation	Alternative 1 with Mitigation
1. Construction activities would reduce/close existing traffic lanes.	All sites	NI	LS	LS	N/A ¹	N/A ¹
2. Construction activities would generate short-term increases in vehicle trips.	All sites	NI	LS	LS	N/A ¹	N/A ¹
3. Implementation of the project would obstruct access to adjacent land uses.	Conner Creek	NI	LS	LS	N/A ¹	N/A ¹
	Valdor Gulch	NI	S	S	LS	LS
	Elkhorn	NI	S	S	LS	LS
	Pear Tree Gulch	NI	LS	LS	N/A ¹	N/A ¹
4. Construction activities would increase local roadway wear-and-tear.	All sites	NI	LS	LS	N/A ¹	N/A ¹

TABLE 3.18-2.
SUMMARY OF TRANSPORTATION IMPACTS FOR THE PROJECT

Impact	Project Site	No-Action Alternative	Proposed Action	Alternative 1	Project with Mitigation	Alternative 1 with Mitigation
5. Construction activities could pose a safety hazard to motorists, bicyclists, and pedestrians.	All sites	NI	S	S	LS	LS

Notes:

LS = Less than Significant S = Significant SU = Significant and Unavoidable
 NI = No Impact B = Beneficial N/A = Not Applicable

¹Because this potential impact is less than significant, no mitigation is required.

Impact 3.18-1: Construction activities would reduce/close existing traffic lanes. *No Impact for the No-Action Alternative; Less-than-Significant Impact for the Proposed Action and Alternative 1*

No-Action Alternative

Under the No-Action Alternative, there will be no construction-related reduction or closure of traffic lanes.

Proposed Action and Alternative 1

Project construction activities associated with the Proposed Action or Alternative 1 would be managed to ensure that SR 299, Dutch Creek Road, Red Hill Road, Chimariko Road, and Wintu Pass Way remain open to through traffic, although traffic control may be necessary during the mobilization and demobilization of heavy equipment. No road closures are anticipated; therefore, passage for emergency vehicles would not be restricted. The adequate passage of traffic within and through the construction area in the event of an emergency evacuation is discussed in Section 3.15, Hazards and Hazardous Materials. Because any traffic control requirements associated with project access roads would be temporary, this impact is considered less than significant.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified, no mitigation is required.

Significance After Mitigation: N/A.

Impact 3.18-2: Construction activities would generate short-term increases in vehicle trips. *No Impact for the No-Action Alternative; Less-than-Significant Impact for the Proposed Action and Alternative 1*

No-Action Alternative

Under the No-Action Alternative, short-term increases in vehicle trips would not occur because there would be no construction activities.

Proposed Action and Alternative 1

Construction activities would require a number of truck and worker vehicle trips on area roads leading to and from the construction areas, including SR 299, Dutch Creek Road, Red Hill Road, Wintu Pass Way, and Chimariko Road. Heavy equipment (e.g., large trucks, excavators, back-hoes, etc.) would be mobilized to the construction sites at the beginning of work and removed at the end of work at each site. During the construction period when the greatest number of workers and trucks would be required, up to 20 construction workers and their vehicles would need access to the site daily. These vehicle trips would be added to area roads on a daily basis. Throughout construction, Reclamation shall limit the amount of daily construction equipment traffic by staging most construction equipment and vehicles within each project site boundary for the duration of work at each site. Post-construction activities (i.e., revegetation, maintenance and monitoring) would require intermittent access for 3 to 5 years, depending on the success of natural revegetation. Because the existing traffic volumes along SR 299 are moderate and the increase in traffic from construction on other area roads would be relatively minor and temporary, increased traffic associated with construction activities is considered a less-than-significant impact.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified, no mitigation is required.

Significance After Mitigation: N/A.

Impact 3.18-3: Implementation of the project would affect access to adjacent land uses. ***No Impact for the No-Action Alternative; Significant Impact for the Proposed Action and Alternative 1***

No-Action Alternative

Under the No-Action Alternative, access to adjacent land uses would not be affected because no construction activities would occur.

Proposed Action and Alternative 1

As described in Section 3.2, land uses adjacent to the four rehabilitation sites consist mainly of residential areas and recreational river access. The residents on the right bank (east bank) of the Trinity River live on the east side of SR 299 and are not located directly adjacent to the site boundaries. There are no residences associated with parcels within the site boundaries of any of the four rehabilitation sites. As previously described, construction activities associated with the right side of Trinity River would use primary access points on SR 299. The Elkhorn and Valdor Gulch rehabilitation sites would be accessed via a combination of SR 299 and Dutch Creek, Red Hill, Wintu Pass, and Chimariko roads. Access to

adjacent lands at the Valdor Gulch and Elkhorn sites may be restricted if traffic control measures are being used. This would constitute a significant impact. Because the Pear Tree Gulch and Conner Creek rehabilitation sites are accessed directly from SR 299, access to adjacent lands would not be affected. For these two sites, the impact would be less than significant. Recreational access to the Trinity River would be restricted within the site boundaries on both sides of the river during the construction period; however, several public access points are available adjacent to all four rehabilitation site boundaries (upstream or downstream). Impacts relating to recreational activities are discussed under Section 3.8, Recreation.

Mitigation Measures

No-Action Alternative

Since no significant impact was identified, no mitigation is required.

Proposed Action and Alternative 1 for the Valdor Gulch and Elkhorn Rehabilitation Sites

- 3a** Construction bid documents will require that access be maintained throughout the construction period for all private residences adjacent to the project site boundaries and access roads on the left side of Trinity River.
- 3b** During the construction phase of the project, Reclamation shall limit the amount of daily construction equipment traffic by staging most construction equipment and vehicles on the project site throughout work at each site.

Significance After Mitigation: Less than Significant

Impact 3.18-4: Construction activities would increase wear-and-tear on local roadways. *No Impact for the No-Action Alternative; Less than Significant Impact for the Proposed Action and Alternative 1*

No-Action Alternative

Under the No-Action Alternative, there would be no wear-and-tear on local roadways because no construction activities would occur.

Proposed Action and Alternative 1

Under the Proposed Action and Alternative 1, construction-related traffic that would be added to area roads would consist of heavy trucks. However, movement of heavy equipment via SR 299 would be minimal because construction equipment (e.g., large trucks, excavators, backhoes) would be mobilized to individual rehabilitation sites at the beginning of work and removed at the end of work at each site. . Some additional truck travel on SR 299 may be required if excavated materials are moved from the Elkhorn (right river bank) or Conner Creek sites for use in constructing the base of a future river access ramp at the Pear Tree Gulch site. SR 299 is the only access road for the Conner Creek and Pear Tree Gulch rehabilitation sites and the river right portion of the Elkhorn site under both the Proposed Action and Alternative 1. Because SR 299 is designed to accommodate a mix of vehicle types, including heavy trucks, the project is not expected to add significantly to roadway wear-and-tear on SR 299. The impacts of the project related to wear-and-tear on SR 299 would therefore be less than significant.

Mobilization of heavy construction equipment to and from the Valdor Gulch rehabilitation site and the river left portion of the Elkhorn site will occur only at the beginning and end of construction at these sites. Equipment will be staged on-site during construction, and no materials will be moved between sites on the Trinity River's left bank. The rural roads over which construction equipment must pass are built to withstand occasional use by heavy equipment, but could not withstand substantial heavy truck traffic volumes. Because of the planning that has occurred to minimize heavy equipment use on the rural roads needed to access the Valdor Gulch and Elkhorn rehabilitation sites—Chimariko Road, Wintu Pass Way, Dutch Creek Road, and Red Hill Road—the project is not expected to significantly add to roadway wear-and-tear on these roads. The impacts of the project related to wear-and-tear on rural roads in the project vicinity would therefore be less than significant.

Mitigation Measures

No-Action Alternative, Proposed Action, and Alternative 1

Since no significant impact was identified, no mitigation is required.

Significance After Mitigation: N/A.

Impact 3.18-5: Construction activities could pose a safety hazard to motorists, bicyclists, and pedestrians. *No Impact for the No-Action Alternative; Significant Impact for the Proposed Action and Alternative 1*

No-Action Alternative

The No-Action Alternative would not pose a safety hazard to motorists, bicyclists, or pedestrians because there would be no construction activities.

Proposed Action and Alternative 1

Traffic safety hazards could arise for motorists, pedestrians, and bicyclists in the vicinity of the construction access routes when heavy construction equipment is entering or leaving a rehabilitation site. Access to the Trinity River through each of the four rehabilitation sites may be limited to identified routes during construction activities to minimize public exposure to construction traffic. Trucks entering and exiting the access road off SR 299 may pose a temporary hazard to cyclists and motorists using the roadway. Bike lanes exist on Dutch Creek Road and Red Hill Road, and trucks traveling on these routes would pose a safety hazard to pedestrians and bicyclists. Although these impacts would be limited to brief and intermittent time periods, they are considered significant.

Mitigation Measures

No-Action Alternative

Since no significant impact was identified, no mitigation is required.

Significance After Mitigation: N/A.

Proposed Action and Alternative 1

- 5a** Reclamation shall include provisions in the contract specifications that require the construction contractor to prepare and implement a traffic control plan that would include provision and maintenance of temporary access through the construction zone, reduction in speed limits through the construction zone, signage and appropriate traffic control devices, illumination during hours of darkness or limited visibility, use of safety clothing/vests to ensure visibility of construction workers by motorists, and fencing as appropriate to separate pedestrians and bicyclists from construction activities.

Significance After Mitigation: Less than Significant

Other Statutory Considerations

This chapter addresses other statutory considerations that must be evaluated pursuant to NEPA and/or CEQA. The following sections address these specific statutory considerations, with the applicable environmental guidelines noted in parentheses:

- 4.1 – Cumulative Impacts (NEPA and CEQA)
- 4.2 – Growth-Inducing Impacts (NEPA and CEQA)
- 4.3 – Significant Irreversible and Irretrievable Commitments of Resources Which Would Result from the Proposed Action (NEPA and CEQA)
- 4.4 – Relationship Between Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity (NEPA)
- 4.5 – Mitigation Monitoring Program for CEQA-Mandated Mitigation (CEQA)
- 4.6 – Significant and Unavoidable Adverse Impacts (CEQA)
- 4.7 – Findings of Fact and Statements of Overriding Consideration (CEQA)

4.1 Cumulative Impacts

4.1.1 LEGAL REQUIREMENTS

Cumulative impacts are the impacts on the environment that result from the incremental impacts of the proposed action when added to other past, present, and reasonably foreseeable future actions (14 CCR 15355[b], 40 CFR 1508.7), regardless of what agency (federal or non-federal) or entity undertakes such other actions. These impacts can result from individually minor but collectively significant actions taking place over time.

The State *CEQA Guidelines* and Council on Environmental Quality (CEQ) NEPA regulations require that the cumulative impacts of a proposed action be addressed in an environmental document when the cumulative impacts are expected to be significant (14 CCR 15130[a], 40CFR 1508.25[a][2]). When a lead agency is examining a project with an incremental effect that is not “cumulatively considerable,” the lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

4.1.2 METHODOLOGY

The analysis of cumulative impacts in this EA/DEIR addresses the cumulative impacts of the Proposed Action, as well as the No-Action Alternative and Alternative 1. The Proposed Action may be implemented in an interactive manner with other projects. In addition, these other projects may affect the impacts of the Proposed Action.

According to the *CEQA Guidelines*, the cumulative impacts discussion “should be guided by the standards of practicality and reasonableness.” The *CEQA Guidelines* require that a cumulative impacts analysis identify related projects, summarize the expected environmental impacts of those related projects, and analyze the cumulative impacts of the proposed and related projects. The geographic scope of the area examined for cumulative impacts is the Trinity River corridor between Lewiston Dam and the confluence of the North Fork Trinity River (Helena, California). The following section summarizes the projects and programs that, along with the Proposed Action, may contribute to cumulative impacts.

4.1.3 RELATED PROJECTS AND PROGRAMS

Fish Habitat Management

Forty-seven mechanical rehabilitation projects were identified in the FEIS/EIR for the Trinity River Mainstem Fishery Restoration Project (U.S. Fish and Wildlife Service et al. 2000a). The project evaluated in this EA/DEIR is the second in a series of channel rehabilitation projects planned by the TRRP. Currently, the TRRP is planning several additional rehabilitation projects, with oversight from the TMC.

The TRRP has two distinct program elements: 1) the Rehabilitation and Implementation Group, which is responsible for project development, engineering, and regulatory compliance, and 2) the Technical Modeling and Analysis Group, which is responsible for project development, monitoring, and integrating activities in an adaptive management framework.

A number of federal, state, and local participants are involved at both the policy and project level. Active participants include Reclamation, USFWS, NOAA Fisheries, USFS, BLM, the Regional Water Board, DWR, Trinity County, and the Hoopa Valley and Yurok Tribes.

Two projects identified in the ROD have been completed. The first of these projects was the replacement of four bridges between Lewiston and Douglas City to accommodate higher flows in the Trinity River (U.S. Bureau of Reclamation 2003). Construction of the four bridges was completed in 2005. The second of these completed projects was a mechanical channel rehabilitation project at Hocker Flat on the Trinity River from RM 78 to 79.1. The rehabilitation activities proposed in Chapter 2 are similar to those implemented at Hocker Flat in 2005.

A total of four additional mechanical channel rehabilitation projects (consisting of work at 18 originally defined FEIS/EIR rehabilitation sites) are slated for implementation by the TRRP between 2006 and 2008. The Indian Creek Channel Rehabilitation Project is expected to be implemented in 2006. The Upper Lewiston (Sites 1-4) and Dark Gulch projects are in the initial planning stages, with an estimated construction date in 2007. Projects that include eight additional original FEIS/EIR locations are planned for 2008. These projects, between Lewiston Dam and Douglas City, are similar in size and character to the projects activities described in Chapter 2.

The success of the Upper Lewiston and Indian Creek rehabilitation sites is contingent on the increased Trinity River flows mandated by the ROD. The goals of these projects are similar to those of the Proposed Action:

- Increase the diversity and area of habitat for salmonids, particularly habitat suitable for rearing;
- Increase the structural and biological complexity of habitat for various species of wildlife associated with riparian habitats; and
- Increase the hydraulic and fluvial geomorphic diversity and complexity.

The design of these sites will seek to encourage desirable geomorphic features, including a more sinuous channel, increased diversity in the longitudinal profile, dynamic alternate bar sequences, a floodplain frequently accessible by the future flow regime, fine sediment deposition on the floodplain during overbank flows, increased channel morphology and hydraulic complexity, more exposed gravel bars, and increased secondary high-flow channels and off-channel wetlands.

Additional restoration actions proposed for the Trinity River corridor include dredging of the Hamilton sediment ponds at the mouth of Grass Valley Creek, which control the introduction of fine sediment from the creek into the Trinity River; placement of coarse sediment (spawning gravel) at the Lewiston hatchery in August 2006; and modification of local infrastructure (e.g., raising roads at Poker Bar and moving pumps and pump houses, etc.) and facilities between Douglas City and Lewiston Dam to accommodate future ROD flow releases of up to 11,000 cfs.

The development and implementation of a Coarse Sediment Management Plan for the Trinity River may result in placement of about 10,300 cubic yards of gravel into the river annually, with an estimated range from 0 cubic yards in critically dry water years to 67,000 cubic yards in extremely wet water years. The actual amounts and locations would be determined through the TRRP monitoring program.

On May 4, 2004, the STNF published a Notice of Intent to prepare an EIS on the Trinity 1-8 Mining Operation in the Federal Register. The Proposed Trinity 1-8 Mining Operation would be a placer gold mining operation located in the Canyon Creek watershed about 9 miles north of Junction City. The mining operation would process approximately 1,138,478 tons of gold bearing placer gravels from about 22 acres over a 25-year period. Because this project is in the early planning stages, it is not known whether it could contribute to cumulative impacts.

Trinity River Mainstem Fishery Restoration Project FEIS/EIR

The Trinity River, a major tributary of the Klamath River system, has been subject to extensive water development as part of the CVP. Efforts have been underway since the TRD was constructed to mitigate its adverse effects on salmonid habitat. The ROD issued on the FEIS (U.S. Department of Interior 2000) portion of the FEIS/EIR mandates a restoration program consisting of “a combination of managed high flow releases, mechanical riparian berm removal, and gravel augmentation to redirect geomorphic processes so that a more complex channel form will evolve, creating the mosaic of aquatic habitats necessary to enhance freshwater salmonid production.”

A biological opinion issued by NMFS (now called NOAA Fisheries) found that the program “*is not likely to jeopardize the continued existence of [SONCC ESU] coho salmon,*” and “*is not likely to destroy or adversely modify critical habitat for the [SONCC ESU] coho salmon.*” Specifically, the biological opinion concluded “*that because the expected outcome of implementation of the Proposed Action is*

greatly improved fish habitat conditions (including necessary coho salmon habitat), the value of critical habitat for both the survival and recovery of SONCC coho salmon will not be appreciably diminished.” Included in this biological opinion was an incidental take statement that included terms and conditions to implement Reasonable and Prudent Measures (RPMs). RPMs related to the Trinity River Mainstem Fishery Restoration Project include:

- Complete ‘the first phase of the channel rehabilitation projects’ (U.S. Fish and Wildlife Service et al. 2000) in a timely fashion.
- The USFWS and/or Reclamation shall provide for review of individual mainstem channel rehabilitation projects via the technical team (‘designated team of scientists,’ ‘technical modeling and analysis team or equivalent group’), and provide a written recommendation to the NMFS about whether the projects are similar to those described in the Trinity River Mainstem Fishery Restoration Project DEIS and should be covered by this incidental take statement; if the technical team determines that these projects and their impacts to aquatic habitat are substantially different than described in the DEIS and U.S. Fish and Wildlife Service et al. (2000), the technical team will recommend to the NMFS that additional consultation under Section 7 of the ESA is appropriate.

California Coastal Salmonid Restoration Program/Five Counties Salmonid Conservation Program

As a result of the proposed listing of the SONCC ESU coho salmon, the counties of Humboldt, Trinity, Del Norte, Siskiyou, and Mendocino joined together to assist in the recovery of coho and now steelhead. The overall goal of the counties is to address and improve anadromous salmonid habitat as well as conservation and restoration within the five-county area, such that the listings do not result in massive economic impacts similar to those that occurred when the northern spotted owl was listed. Significant funding has been or is being provided by NOAA Fisheries, the State Water Board (Proposition 204 Delta Tributary Watershed Program), CDFG’s For the Sake of the Salmon (SB 271), and the California Resources Agency (CRA).

In 1997, the CDFG established the Salmonid Restoration Program for coastal watersheds. Initiatives included in this program support watershed planning projects at a local level, coastal salmon and anadromous trout habitat restoration, and improved efforts to manage anadromous salmon. The program includes a Salmon and Steelhead Trout Restoration Account, to be expended on a wide range of issues, including watershed planning, on-the-ground habitat restoration projects, and other projects for restoring salmonid populations. This fund also finances a Watershed Restoration and Protection Council that 1) oversees state watershed protection and enhancement activities, and 2) directs and develops a Watershed Protection Program to provide for anadromous salmonid conservation.

Trinity County is participating in the Salmonid Restoration Program through the Five Counties Salmon Conservation Program. The Five Counties Program, consisting of Trinity, Del Norte, Siskiyou, Humboldt, and Mendocino counties, is coordinating and prioritizing restoration projects and developing standard practices to prevent degradation of salmonid habitat resulting from county road projects. NOAA Fisheries has nominated the Five Counties Program for the Governor’s Environmental and Economic

Leadership Award in the area of Watershed Management for “laudable efforts of restoring, enhancing, and improving California’s watersheds, while promoting sustainable economic progress.”

The Five Counties group has inventoried fish passage barriers at county road crossings and sediment delivery sources along county roads. Prioritized projects were identified to improve fish passage and reduce sediment delivery to both salmonid-bearing and non salmonid-bearing streams in the Trinity, Klamath, Eel, Mad, Van Duzen, Redwood Creek, Smith, Gualala, and other major coastal watersheds. Fish barriers have been removed at a rate of five to 10 per year for the last 3 years, and future projects are in the planning and design stage.

Clean Water Action Section 303(d) Total Maximum Daily Load Requirements

The TMDL and accompanying source allocation for sediment in various reaches and tributaries of the Trinity River have been established to comply with Section 303(d) of the CWA because the State of California has determined that the water quality standards for the Trinity River have been consistently exceeded due to excessive sediment. The TMDL for sediment describes how seasonal variation is considered. Sediment delivery in the Trinity River watershed inherently has considerable annual and seasonal variability. Due to the variability in terms of magnitude, timing, duration, and frequency, the TMDL and load allocation apply to the sources of sediment and use a 10-year rolling average. A number of contributing causes were identified, including historic mining effects, past road-building activities, certain timber-harvesting practices, and the concomitant effects of reduced bed-mobilizing river flows, due to the TRD, on sediment transport (U.S. Environmental Protection Agency 2001). The TMDL does not allocate flow; however, it does take into account critical conditions for flow, loading, and water quality parameters. The control of the streamflow below the TRD has greatly contributed to the impairment of the Trinity River below Lewiston Dam (U.S. Environmental Protection Agency 2001). The reduction in available coarse sediment upstream of Rush Creek and the significant contribution of fine sediment from Grass Valley Creek have severely affected the sediment flux in the river. These effects are observable as far downstream as the North Fork.

In 2001, the EPA established the TMDL, with assistance from Regional Water Board staff (U.S. Environmental Protection Agency 2001). The primary adverse impacts associated with excessive sediment in the Trinity River pertain to the beneficial uses ascribed to anadromous salmonid fish habitat. The main responsibility for water quality management and monitoring resides with the State of California. The EPA now expects the state to develop and submit implementation measures to the EPA as part of revisions to the state water quality management plan, as provided by the EPA regulations in 40 CFR Section 130.6.

4.1.4 ISSUE-SPECIFIC CUMULATIVE IMPACT ANALYSIS

The following discussion identifies potential cumulative impacts that are anticipated as a result of implementing the Proposed Action (including the No-Action Alternative, Proposed Action, and Alternative 1 in relation to past, present, and reasonably foreseeable future projects for each resource area described in Chapter 3. In other words, the discussion identifies those areas in which the impacts of the Proposed Action, when viewed against the backdrop of these other projects, could cause an incremental

impact that is “cumulatively considerable” within the meaning of CEQA. Where appropriate, cumulative significant impacts are described pursuant to *CEQA Guidelines*. According to Section 15130 of the *CEQA Guidelines*, effects of the project as well as surrounding projects and reasonably foreseeable development in the surrounding area should be considered.

Land Use

Under the No-Action Alternative, the Proposed Action would not be implemented and the Trinity River within and downstream of the site boundary would continue to function in response to the managed flows from the TRD. No significant cumulative land use effects are anticipated to result from the No-Action Alternative. The selection of the No-Action Alternative could limit the ability of the TRRP to achieve the overall goal of restoration of the Trinity River.

There are no incompatible land uses and access impacts would be temporary under both of the action alternatives. Therefore, no significant cumulative land use effects are anticipated to occur under either of the action alternatives. The implementation of other restoration elements associated with the Trinity River may support the TRRP goal of restoration of the Trinity River.

Geology, Fluvial Geomorphology, and Soils

Under the No-Action Alternative, the Proposed Action would not be implemented, and the effects on geology, fluvial geomorphology, and soils would be similar to those that have occurred since the construction and operation of the TRD. No significant cumulative impacts are anticipated to result from the No-Action alternative. The selection of the No-Action Alternative could limit the ability of the TRRP to achieve the overall goal of restoration of the Trinity River.

No significant cumulative impacts associated with geologic hazards, geomorphic processes, or erosional processes are anticipated to occur as a result of implementation of either action alternative. Appropriate implementation of prescribed mitigation measures will adequately mitigate for potential impacts regarding geologic hazards. The short-term erosional aspects will be addressed through implementation of the prescribed mitigation measures in conformance with the Trinity River TMDL. The fluvial geomorphic processes embodied in the Healthy River Attributes would be affected at the local level; however, these effects would not be significant at the scale previously described.

In short, either action alternative as mitigated would benefit, rather than adversely affect, geology, fluvial geomorphology, and soils in the long term, as would most of the other related programs and projects described in this chapter. Instead of creating adverse impacts that would compound or exacerbate the adverse impacts of other projects, either of these alternatives would contribute to long-term environmental benefits and assist in meeting the TMDL sediment requirements for the Trinity River.

Water Resources

Under the No-Action Alternative, the Proposed Action would not be implemented and the effects on water resources would be similar to those that have occurred since the construction and operation of the TRD. No significant cumulative impacts to water resources are anticipated to result from the No-Action

Alternative. The selection of the No-Action Alternative could limit the ability of the TRRP to achieve the overall goal of restoration of the Trinity River.

No significant cumulative impacts to water resources, specifically no increase in the 100 year flood line within the site boundaries illustrated on Figures 2.2a-d, are anticipated due to implementation of either action alternative. Since the project is within the floodplain of the Trinity River, it is subject to the jurisdiction of the Trinity County Floodplain Management Ordinance. The increased channel capacity provided by either of the action alternatives would reduce flow impacts in conjunction with other channel restoration projects and other flow-impact reduction projects (e.g., elevation and maintenance of infrastructure).

Water Quality

Under the No-Action Alternative, the Proposed Action would not be implemented and the effects on water quality would be similar to those that have occurred since the construction and operation of the TRD. No significant cumulative impacts to water quality are anticipated to result from the No-Action Alternative. The selection of the No-Action Alternative could limit the ability of the TRRP to achieve the overall goal of restoration of the Trinity River.

No significant cumulative impacts to water quality are anticipated to occur as a result of implementation of either action alternative. The TRRP has identified the need to undertake a suite of restoration activities throughout the Trinity River basin. While some activities may be implemented simultaneously, the intent of the TRRP is to stage these activities, both in terms of timing and locations, in a way that minimizes the potential impacts on water quality. In the event that simultaneous implementation of these activities is required over the course of several years, some level of cumulative degradation of water quality (sedimentation) could occur within the Trinity River during construction and implementation periods. Appropriate implementation of prescribed mitigation measures, coordinated by the TRRP, will adequately mitigate for potential water quality impacts associated with turbidity, sedimentation, accidental spills, etc. The cumulative effect of activities proposed under either action alternative is considered less than significant.

In short, either action alternative as mitigated would benefit, rather than adversely affect, water quality in the long term, as would most of the other related projects described in this chapter. Instead of creating adverse impacts that would compound or exacerbate the adverse impacts of other projects, either action alternative would contribute to long-term water quality benefits.

Fishery Resources

Under the No-Action Alternative, the Proposed Action would not be implemented and the effects on fishery resources would be similar to those that have occurred since the construction and operation of the TRD. No significant cumulative impacts to fishery resources are anticipated to result from the No-Action Alternative. The selection of the No-Action Alternative could limit the ability of the TRRP to achieve the overall goal of restoration of the Trinity River.

No significant cumulative impacts to fisheries resources are anticipated to occur due to the implementation of either action alternative. The Proposed Action, in conjunction with the projects and programs described in the preceding section, is a direct result of years of legislative direction, legal decisions, scientific study, and public involvement directed at restoring the fishery resources of the Trinity River. The 2000 biological opinion (National Marine Fisheries Service 2000) acknowledged that simultaneous implementation of these projects and programs (specifically the TRRP) may result in short-term loss of aquatic habitat and temporary displacement of aquatic organisms. Furthermore, the biological opinion stated that the activities would not have a cumulative impact on the SONCC ESU of coho salmon. Since a primary objective of the TRRP is restoring the form and function of physical processes and riparian communities in the Trinity River basin, the projects and programs described above have a collective purpose of restoring the fishery resources in the Trinity River. Appropriate implementation of prescribed mitigation measures, coordinated by the TRRP, will adequately mitigate for potential impacts associated with removal of vegetation, loss of habitat, and effects on wetlands and short-term degradation of water quality. The cumulative effect of these identified actions within the scope of this analysis is considered less than significant.

In short, either action alternative as mitigated would benefit, rather than adversely affect, fishery resources in the long term, as would most of the other related projects and programs described in this chapter. Instead of creating adverse impacts that would compound or exacerbate the adverse impacts of other projects, either action alternative would contribute to long-term fishery resources benefits.

Vegetation, Wildlife, and Wetlands

Under the No-Action Alternative, the Proposed Action would not be implemented, and the effects on vegetation, wildlife, and wetlands would be similar to those that have occurred since the construction and operation of the TRD. The potential for continued encroachment and conversion of these resources is directly related to the ability to provide a flow regime designed to restore certain habitat components. No significant cumulative impacts to these resources are anticipated to result from the No-Action Alternative. The selection of the No-Action Alternative could limit the ability of the TRRP to achieve the overall goal of restoration of the Trinity River.

No significant cumulative impacts to vegetation, wildlife, and wetlands are anticipated to occur as a result of implementation of either action alternative. The action alternatives, in conjunction with the projects and programs described in the preceding section, are a direct result of years of legislative direction, legal decisions, scientific study, and public involvement that were directed at restoring the physical processes and biological resources of the Trinity River. Since a primary objective of the TRRP is restoring the form and function of physical processes and riparian communities in the Trinity River basin, the projects and programs described above have a collective purpose of restoring the mainstem Trinity River. Simultaneous implementation of these projects may result in short-term loss of upland, wetland, and riverine features, including Waters of the United States. In some instances, projects could result in a conversion of these features (e.g., riparian wetlands to “other waters”); however, these projects provide the foundation necessary to meet the primary objective of the TRRP. Most effects would be short-term and associated with construction related activities. Appropriate implementation of prescribed mitigation measures, coordinated by the TRRP, would adequately mitigate for potential impacts associated with

these activities (e.g., removal of vegetation, loss of habitat, and impacts on wetlands). The cumulative effect of these identified actions within the scope of this analysis is considered less than significant.

In short, the project as mitigated will benefit, rather than adversely affect, vegetation, wildlife, and wetlands in the long term, as will most of the other related projects and programs described in this chapter. Thus, far from creating adverse impacts that will compound or exacerbate the adverse impacts of other projects, either action alternative will contribute to long-term vegetation, wildlife, and wetlands benefits.

Recreation

Under the No-Action Alternative, the Proposed Action would not be implemented, and the effects on recreation would be similar to those that have occurred since the construction and operation of the TRD. No significant cumulative impacts to recreation resources are anticipated to result from the No-Action Alternative.

No significant cumulative impacts to recreational resources are anticipated to occur due to implementation of either action alternative. The projects and programs described above are intended to benefit the aquatic environment and the Trinity River fishery. Benefits to recreational values may be achieved through the implementation of the TRRP over time.

In short, the project as mitigated will benefit, rather than adversely affect, recreation in the long term, as will most of the other related projects described in this chapter. Instead of creating adverse impacts that will compound or exacerbate the adverse impacts of other projects, either action alternative will contribute to long-term recreation benefits.

Socioeconomics, Population, and Housing

Under the No-Action Alternative, the Proposed Action would not be implemented, and the effects on socioeconomics, population, and housing would be similar to those that have occurred since the construction and operation of the TRD. No significant cumulative impacts to recreation resources are anticipated to result from the No-Action Alternative.

No significant cumulative impacts to socioeconomics, population, and housing are anticipated to occur as a result of implementation of either action alternative. The projects and programs described above are intended to benefit the Trinity River fishery, with projected benefits to the residents and communities in the general area. Some socioeconomic benefits are expected through the implementation of the TRRP, including short-term demand for construction labor and potential for increased long-term recreational use as the fishery rebounds in response to TRRP restoration activities.

Tribal Trust Assets

Under the No-Action Alternative, the Proposed Action would not be implemented, and the effects on Tribal Trust Assets would be similar to those that have occurred since the construction and operation of the TRD. The status of the Tribal Trust Assets will be related to the level of restoration achieved by the

TRRP. No significant cumulative impacts to Tribal Trust Assets are anticipated from the No-Action Alternative.

No significant cumulative impacts to Tribal Trust Assets are anticipated to occur as a result of implementation of either action alternative. The projects and programs described above are intended to benefit the Tribal Trust Assets, including the Trinity River fishery, through the implementation of the TRRP over time.

In short, either action alternative as mitigated will benefit, rather than adversely affect, Tribal Trust Assets in the long term, as will most of the other related projects and programs described in this chapter. Either action alternative will contribute to long-term environmental benefits and benefits to Tribal Trust Assets.

Cultural Resources

Under the No-Action Alternative, the Proposed Action would not be implemented, and the impacts on cultural resources would be similar to those that have occurred since the construction and operation of the TRD. No significant cumulative impacts to cultural resources are anticipated as a result of the No-Action Alternative.

No significant cumulative impacts to cultural resources are anticipated to occur as a result of implementation of either action alternative. The focus of the projects and programs described in the preceding section is on restoration efforts on the bed and banks of the Trinity River. The proximity of anticipated restoration efforts to the floodplain reduces the likelihood that cultural resources may be encountered. The PA (Appendix F) described in Section 3.11 was intended to address the multiple elements of the TRRP. Appropriate implementation of prescribed mitigation measures, in coordination with the SHPO, will adequately mitigate for potential impacts.

Air Quality

Under the No-Action Alternative, the Proposed Action would not be implemented, and the effects on air quality would be similar to those that have occurred since the construction and operation of the TRD. No significant cumulative impacts to air quality are anticipated as a result of the No-Action Alternative.

No significant cumulative impacts to air quality are anticipated to occur as a result of implementation of either action alternative. The NCUAQMD requirements will be addressed by appropriate implementation of prescribed mitigation measures.

Although, as explained in Section 3.12, either action alternative would generate some temporary air emissions, these emissions would be too limited to rise to the level of being “cumulatively considerable.” In part, this is because they would be temporary, but also because the projects and programs described in the preceding section are not anticipated to generate any long-term air pollutants. Moreover, construction activities associated with these projects and programs are not likely to occur at the same time, and the locations of the activities themselves are generally far enough apart to allow for considerable dissipation and dispersion of construction-related pollutants.

Environmental Justice

Under the No-Action Alternative, the Proposed Action would not be implemented, and the effects on environmental justice would be similar to those that have occurred since the construction and operation of the TRD. No significant cumulative impacts to environmental justice are anticipated to occur as a result of the implementation of any of the alternatives evaluated in this EA/DEIR.

Aesthetics

Under the No-Action Alternative, the Proposed Action would not be implemented, and the effects on aesthetic resources would be similar to those that have occurred since the construction and operation of the TRD. No significant cumulative impacts to aesthetic resources are anticipated to result from the No-Action Alternative.

No significant cumulative impacts to aesthetics are anticipated to occur as a result of implementation of either action alternative. The short-term effects that would result from other restoration and watershed projects in the river corridor will be consistent with federal and state requirements for Wild and Scenic Rivers and the Trinity County General Plan.

In short, either action alternative will benefit, rather than adversely affect, aesthetics in the long term, as will most of the other related projects described in this chapter. Instead of creating adverse impacts that will compound or exacerbate the adverse impacts of other projects, the action alternatives will contribute to long-term aesthetic values.

The aesthetic impacts of the projects are not “cumulatively considerable,” in large part because their impacts will not compound or exacerbate the aesthetic impacts of the previously identified related future projects, which are located in areas that are physically separated from the project. Because people will not be able to see all of these projects, or even many of these projects, at the same time, their visual impacts are individualized and limited to the geographic settings in which they are located.

Hazardous Materials

No significant cumulative impacts relative to hazardous materials are anticipated through the implementation of any of the alternatives evaluated in this EA/DEIR.

Noise

Under the No-Action Alternative, the Proposed Action would not be implemented and the noise effects would be similar to those in the ambient environment. No significant cumulative noise effects are anticipated to result from the No-Action Alternative.

No significant cumulative impacts related to noise are anticipated through the implementation of either action alternative. The TRRP will coordinate the implementation of other restoration projects to ensure that construction noise is minimized through project scheduling.

The noise impacts of the projects are not “cumulatively considerable,” in large part because their impacts will not compound or exacerbate the noise impacts of the previously identified related future projects,

which are located in areas that are physically separated from the location of the project. Since noise is typically a short-term impact, if the project was not constructed simultaneously with other projects, there would not be a cumulative contribution. Similarly, because people would not be able to hear noise from more than one of these projects at the same time, the separate noise sources—all of which are temporary—would not contribute to any cumulative noise impacts. Rather, each project would create only very localized noise levels.

Public Services and Utilities/Energy

No significant cumulative impacts related to Public Services and Utilities/Energy are anticipated through the implementation of any of the alternatives evaluated in this EA/DEIR.

Transportation/Traffic Circulation

Under the No-Action Alternative, the Proposed Action would not be implemented, and the effects associated with transportation/traffic circulation would be similar to those in the surrounding area. No significant cumulative impacts to aesthetic resources are anticipated to result from the No-Action Alternative.

Although, as explained in Section 3.18, either action alternative would generate some temporary construction-related traffic, such traffic would not rise to the level of being “cumulatively considerable.” This is so in part because the traffic would be temporary, but also because the previously identified related future projects would also tend not to generate any long-term traffic. Moreover, construction activities for all of the various projects are not likely to occur at once, and the locations of the activities themselves are generally far enough apart to make it unlikely that trucks serving one construction location will cross paths with trucks serving a separate location.

No significant cumulative impacts related to transportation/traffic circulation are anticipated through the implementation of either action alternative. The TRRP will coordinate with appropriate road management agencies to ensure that the mitigation prescribed in this EA/DEIR is acceptable to these agencies.

4.2 Growth-Inducing Impacts

4.2.1 INTRODUCTION

This section evaluates the potential for growth that could be induced by implementation of the alternatives and assesses the level of significance of any expected growth inducement. The potential for growth inducement is limited by the nature and location of the rehabilitation activities described in Chapter 2.

River rehabilitation projects are typically implemented in specific areas during a finite time period. Although the TRRP was established to implement the ROD, thereby increasing the fishery resources of the Trinity River, growth-inducing impacts within Trinity County were not anticipated. Section 15126 (g) of the state *CEQA Guidelines* provides definitions and guidance in determining the growth-inducing impacts of a Proposed Action.

Specifically, a project is defined to be growth-inducing if it would

- accelerate the rate of planned growth
- remove obstacles to population growth
- tax existing community service facilities
- foster, promote, or sustain economic or population growth

Growth itself is not assumed to be beneficial, detrimental, or insignificant to the environment. If a project is determined to be growth-inducing, an evaluation is made to determine if significant impacts on the environment would result from that growth.

4.2.2 GROWTH AND DEVELOPMENT POTENTIAL

Trinity County Growth Policies

The Trinity County General Plan (Trinity County 2001) does not describe specific growth policies; however, it establishes general goals and policies related to housing and residential land use. Trinity County recognizes that more than one-half of its housing is located in remote, rural areas with a high level of individual self-reliance in meeting its infrastructure needs. The County also understands that a strong tradition exists of non-involvement of local government in the area of housing and residential development.

Population

Trinity County's population is concentrated in and around the communities of Weaverville, Hayfork, and Lewiston, as described in Section 3.9. The population in the county increased significantly between 1970 and 1980, from 7,615 to 11,858 (a 55 percent increase). Although growth continued through 1990, it was substantially less (a 12 percent increase to 13,300). The population growth was furthered by an influx of retirees and of people seeking an alternative lifestyle in the mountains of northern California and a reasonable cost of living.

Vacant Land and Projected Buildout

Approximately 14.6 percent of the land in Trinity County is potentially available for private development. The USFS, the BLM, and various timber production firms manage the balance of the lands within the county. The General Plan identifies 5,517 private parcels as unimproved and potentially available for development and suggests that the actual number may be significantly lower, based on requirements for waste disposal, slope, and water sources.

Trinity County's Constraints to Development

The General Plan identifies a number of existing or potential factors that could adversely affect future residential and commercial development. A number of state and local permits and fees are currently required for new developments. Building Construction Standards and compliance with CEQA are also identified as potential constraints to development. The ability to develop the necessary infrastructure (i.e., water, sanitation, energy, and access) continues to challenge developers throughout the county.

Proposed Land Uses

In general, all parcels within the site boundary established for the action alternatives have been fully subdivided to the extent possible under existing zoning designations; therefore, future rural residential development within the site boundary is unlikely. Located directly adjacent to the river, many of these parcels fall into the Flood Hazard and Scenic Overlay designation zones, making further development of these areas difficult. Several parcels zoned for residential use are currently vacant, and the potential for development of a single-family residence on such parcels does exist. The BLM manages public land within the site boundary consistent with the WSRA and its Resource Management Plan. In general, the parcels within the site boundary have no further potential for development. There will be no growth-inducing impacts as a result of this project.

4.3 Significant Irreversible and Irretrievable Commitments of Resources Which Would Result from the Proposed Action

Specific to the requirements of the President's CEQ NEPA Regulations, Section 102 and 40 C.F.R. 1502.16, an environmental document must include a discussion of "any irreversible and irretrievable commitments of resources which would be involved in a Proposed Action should it be implemented." Additionally, Section 15126.2(c) of the *CEQA Guidelines* requires a discussion of significant irreversible environmental changes that would result from a proposed project should it be implemented. This section states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvements which provide access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The No-Action Alternative would not directly involve the use of resources or cause significant irreversible environmental effects. Implementation of either action alternative would result in an irretrievable commitment of energy (i.e., fossil fuels) and other nonrenewable resources used in the excavation, disposal, and revegetation of the rehabilitation areas, as described in Chapter 1. Since these resources 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 these materials would not have a significant adverse effect on their continued availability. Additionally, the project purpose and need, as well as the project objectives discussed in Chapter 1, justify the need for the expenditure of these resources.

4.4 Relationship Between Local Short-Term Uses of the Environment And the Maintenance and Enhancement of Long-Term Productivity

Section 102 of the CEQ NEPA Regulations and CFR 1502.16 require that an environmental document include a discussion of “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity.”

The Proposed Action would not sacrifice the long-term productivity of the project area for short-term uses. The short-term impacts on the environment associated with implementation of the Proposed Action are considered minimal compared to the long-term benefit and productivity that would result from the Proposed Action in conjunction with other objectives of the TRRP. Construction-related impacts on natural resources, including water quality, fisheries, wildlife, vegetation, and wetlands, will be mitigated to a less-than-significant level. Land use conflicts associated with noise, aesthetics, air quality, and traffic would be short-term, occurring only during the construction phase of the project. This impact is considered less than significant, and no mitigation is required.

4.5 Mitigation Monitoring Program for CEQA-Mandated Mitigation

Under NEPA, there are no specific statutes or regulations that explicitly require that all significant project impacts be avoided or mitigated to a less-than-significant level, or that any adopted mitigation measures developed as part of an EA be “monitored” to ensure that they are carried out. Under CEQA, *Public Resources Code* 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 condition of project approval in order to mitigate or avoid significant effects on the environment.”

Throughout this EA/DEIR, mitigation measures have been clearly identified and presented in language that will facilitate establishment of a monitoring and reporting program. Any mitigation measures adopted by the Regional Water Board as conditions of project approval will be included in a Mitigation Monitoring and Reporting Program (MMRP) to verify compliance. The Draft MMRP is included as Appendix A to this document and the Final MMRP will be included as an appendix to the EA/Final EIR. The approval of such a program will be part of any action taken by the Regional Water Board with respect to the project. When other regional or state agencies subject to CEQA approve portions of the Proposed Action under their own jurisdiction or regulatory power, these “responsible agencies” will be required to adopt their own MMRPs (*CEQA Guidelines*, Section 15097(d)).

The MMRP will be used by Regional Water Board in conjunction with Reclamation staff, project contractors, participating agencies, and monitoring personnel during project implementation. The intent of the MMRP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMRP will provide for monitoring of construction activities as necessary, on-site identification of environmental problems, and proper reporting to Reclamation staff.

4.5.1 RESPONSIBILITIES AND AUTHORITY

Reclamation will have the primary responsibility for implementation of the MMRP. Reclamation will be responsible for the following tasks:

- ensuring the MMRP is incorporated into the construction bid documents
- coordination of monitoring activities
- direction of the preparation and filing of compliance reports
- maintenance of records concerning the status of all mitigation measures

4.5.2 MONITORING PLAN FORMAT

The MMRP includes a summary table that identifies the mitigation measures proposed for the Proposed Action. These mitigation measures will be excerpted from this EA/DEIR. The mitigation monitoring table includes the following columns:

- **Mitigation Measure:** Presents the mitigation measures identified the EA/DEIR for a specific impact, along with the number of each measure, as presented in the EA/DEIR.
- **Timing:** Identifies when the mitigation measures will be implemented.
- **Agency/Department Consultation:** References the specific agency(ies) with which coordination is required to satisfy the requirements of the mitigation measure.
- **Verification:** Spaces to be initialed and dated by the individual designated to verify compliance with a specific mitigation measure.

4.5.3 NONCOMPLIANCE COMPLAINTS

Complaints of noncompliance with adopted mitigation measures shall be directed to Reclamation in written form, providing specific information on the alleged violation. If any complaints are received, Reclamation and the Regional Water Board shall conduct an investigation and determine the validity of the complaint. If noncompliance with a mitigation measure has occurred, Reclamation shall take the appropriate action to remedy the violation. The complainant shall receive written confirmation indicating the results of the investigation or the final action corresponding to the particular noncompliance issue.

4.6 Significant Unavoidable Adverse Impacts

Public Resources Code Section 21100(b)(2)(A) requires that an EIR include a detailed statement that summarizes any significant effects on the environment that cannot be avoided if a Proposed Action is implemented. *CEQA Guidelines* Section 15126.2(b) states that such impacts include those that can be mitigated but not reduced to a level of insignificance. When there are significant impacts that cannot be fully mitigated to a less-than-significant level or minimized by changing the project design, the implications of the impacts and the reasons why the project is being proposed must be described. The environmental analysis conducted for the Proposed Action identified one significant unavoidable impact due to degradation of a scenic view with construction of the Proposed Action at the Conner Creek site. Implementation of Alternative 1 with mitigation measures, however, would not incur any significant unavoidable impacts.

4.7 CEQA Findings of Fact and Statements of Overriding Consideration

Section 15091 of the *CEQA Guidelines* states that “no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of these significant effects, accompanied by a brief explanation of the rationale for each finding.” For this EA/DEIR, the Regional Water Board would need to prepare written findings for each significant impact identified in this document before it can approve the project.

Section 15093(a) of the *CEQA Guidelines* allows the decision-making body of the lead agency to determine if the benefits of a Proposed Action outweigh the unavoidable adverse environmental impacts of implementing the project. The lead agency can approve a project with significant unavoidable impacts if it prepares a “Statement of Overriding Considerations” that sets forth the specific reasons for making such a judgment. Since no significant unavoidable impacts were identified for Alternative 1, a Statement of Overriding Considerations would not be required for this alternative.