

## 3.16 Noise

This section evaluates the potential noise impacts associated with implementation of proposed rehabilitation activities at the Lewiston–Dark Gulch Rehabilitation Project: Trinity River Mile 105.4–111.7. The following evaluation is based on a review of local land use plans and policies pertaining to noise and field reconnaissance to identify potential sensitive receptors within and adjacent to the project boundary.

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

<sup>a</sup>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.

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.

Table 3.16-2 lists the U.S. General Services Administration maximum noise levels allowed for government contract construction activities.

**Table 3.16-2. U.S. General Services Administration Maximum Noise Levels Allowable for Government Contracts**

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

Source: Sincero and Sincero 1996

Typical construction noise levels are shown in Table 3.16-3. The noise levels shown in this table assume the operation of various types of construction equipment, as shown in Table 3.16-4.

**Table 3.16-3. Typical Construction Noise Levels**

Construction Stage	Noise Level (dBA, L <sub>eq</sub> ) <sup>1</sup>
Ground clearing	84
Excavation	89
Hauling	88
Revegetation	65

<sup>1</sup> 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 environments). Source: (Bolt 1971)

**Table 3.16-4. 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)

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 in the general vicinity of the Lewiston site is primarily the result of local residential and commercial vehicle traffic and miscellaneous ambient sources such as river flow, river recreationists, overhead aircraft, barking dogs, and children at play. State Highway 3 (SR 3) (aka Trinity Dam

Boulevard) and several county arterial and secondary roads run parallel and adjacent to much of the Lewiston site boundary.

State Highway 3 crosses over the Trinity River near the upstream end of the site boundary, south of the USFS' Sven Olbertson Picnic Area. This crossing is known as the Deadwood Bridge. The relatively steep downhill descent to this bridge from the western approach may cause some truck drivers to use their "jake" brakes (a braking system that uses engine compression to slow the vehicle), which would be a significant source of noise. Conversely, vehicles heading to the west are inclined to accelerate after crossing the Deadwood Bridge in order to climb the hill. The canyon topography in this area is such that recreationists making use of the Lewiston Gage and Weir Fishing Access and the Sven Olbertson Picnic Area are affected by these short-lived increases in ambient noise levels.

A second river crossing (Turnpike Road) occurs via the Old Lewiston Bridge, a single lane wooden and steel structure that crosses the river near the community's historic hotel. Large trucks are prohibited from using this bridge; thus automobiles and motorcycles are the primary source of mechanized noise that emanates from this location. Large trucks and most vehicle traffic that pass through Lewiston use the SR 3 thoroughfare and the Deadwood Bridge, which provides a more direct and accommodating route through the Lewiston area.

Residential and commercial development occurs along much of the Trinity River's left bank as it passes through the Lewiston site. Several public and private river access areas also occur along the river, including the public access areas described in Section 3.8, Recreation. Use of these areas typically involves non-motorized recreational activities, which generally involve low noise levels..

Vehicles entering and leaving the FG activity areas would temporarily increase traffic levels and thus ambient noise levels along Cemetery Road. The Trinity River Resort and RV Park, located along Cemetery Road, would be the primary stationary receptor subject to this temporary increase in noise. Residences along the ridgeline above Cemetery Road may experience some increased ambient noise levels during construction, but noise levels would be buffered somewhat by topography and vegetation.

Sources of noise at the Dark Gulch site are primarily ambient noises such as river flow and recreational uses. Lands adjacent to this reach of the Trinity River are mostly undeveloped. Roads leading into the Dark Gulch activity areas are primarily unimproved and unpaved; therefore, noise associated with vehicle use on these roads is generally the result of recreational use (e.g., OHVs, fishermen and rafter access).

The Bucktail River Access is a popular BLM-maintained river access from which recreationists can launch small boats and rafts, or fish from the river bank. This semi-improved access point, which provides bathroom and garbage collection facilities, is in fairly close proximity to several residences located on the opposite side (right side) of the river, a short distance downstream from the access point's boat launch. These residences are located just outside of the site boundary. There is very little vegetation between the river and the downstream end of the Dark Gulch site, downstream of the Bucktail River Access, that would serve to buffer noise. Upstream of the boat launch, dense vegetation and topography serve as effective noise buffers for nearby residences.

A community noise survey was conducted in Trinity County in 2002 (Brown-Buntin 2002) as part of the update currently in progress for the noise element of the County's General Plan. Two survey points were established in Lewiston: (1) 307 2nd Avenue (approximately 0.5 mile east of the Trinity River); and (2) Lewiston Road (approximately 1.2 miles south of the Bucktail River Access). The community noise survey results indicate that typical noise levels in noise-sensitive areas range from approximately 44 to 52 dB  $L_{dn}$ <sup>1</sup>. These are low noise levels and are representative of small communities and rural areas. Maximum noise levels observed during the survey were generally caused by local automobile traffic or heavy trucks. Other sources of maximum noise levels included occasional aircraft and construction activities. 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. Noise-sensitive receptors that have been identified in the general vicinity of the project boundary include private residential areas, commercial enterprises, 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.

Stationary sensitive receptors are located throughout the extent of both the Lewiston and Dark Gulch sites. Commercial and residential areas, primarily those located along the mid- and southern ends of the Lewiston site, are subjected to varying degrees of ambient noise levels from the river, nearby SR 3, and intermittent traffic using county arterial and secondary roads in the project vicinity. The majority of these stationary sensitive receptors are located on the river left bank. Distance and vegetation serve as noise buffers for these sensitive receptors.

The Rush Creek access, the Lewiston Weir access, the Old Lewiston Bridge access, and the Cableway Fishing Access are located within the Lewiston project boundary; these access sites are frequently used by fishermen, rafters, and sightseers. The use of the public areas by such groups has little or no effect on noise levels reaching residences and commercial developments in their proximity. However, these access sites can themselves be considered sensitive receptors, particularly when they are used by parties such as fishermen and sightseers.

Residences at the northern and southern ends of the Dark Gulch site are also subject to ambient noise from the river, recreationists, and a few secondary roads located adjacent to portions of the project boundary. The few homes scattered at either end of the Dark Gulch boundary are generally set back some distance from the river and are buffered by vegetation and topography (e.g., bends in the river; large tailings piles). Vegetation and topography create buffers that reduce the intensity, duration, frequency, and time pattern of generated noise. These natural buffers would also aid in buffering noise from project

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<sup>1</sup>dB  $L_{dn}$  = 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.

construction activities. Much of this proposed project area is situated on private lands; thus, public use is limited to the river channel and Bucktail Hole, a popular fishing access site located at the downstream end of the project boundary.

Wildlife that use the Lewiston and Dark Gulch sites are also considered sensitive noise receptors. Bears, deer, foxes, and raccoons are among the common terrestrial species known to forage, hunt, and inhabit the banks of the river. Bats may be present in nearby structures, including residences, trees, and bridges, and avian species such as bald eagles and migratory birds have been observed foraging, roosting, and nesting in or adjacent to the river corridor. The presence of salmonids in the Trinity River is a driving force of the Lewiston community's economy. Land- and/or water-based noise sources will influence the habitation and travel behaviors of terrestrial and aquatic wildlife.

Maps illustrating sensitive noise receptor locations within the Lewiston and Dark Gulch sites are provided as Figures 3.16-1a through 1c.

### 3.16.2 Relevant Plans and Policies

#### Trinity County

Trinity County adopted a Noise Element in its the General Plan in October 2003 that contains standards for noise. A Draft County Noise Ordinance was considered by the County Board of Supervisors for approval in October 2003. That body instructed the County Planning Department to continue work on the ordinance and to present it again at some point in the future. Trinity County staff members indicate that there is no expectation that the Draft County Noise Ordinance will be approved prior to completion of the NEPA/CEQA process for this project. The implementing ordinance is not required by state law (Brown-Buntin 2002; Stokely, pers. comm. 2006), and projects subject to Trinity County approval are subject to the noise standards provided in the Noise Element.

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."

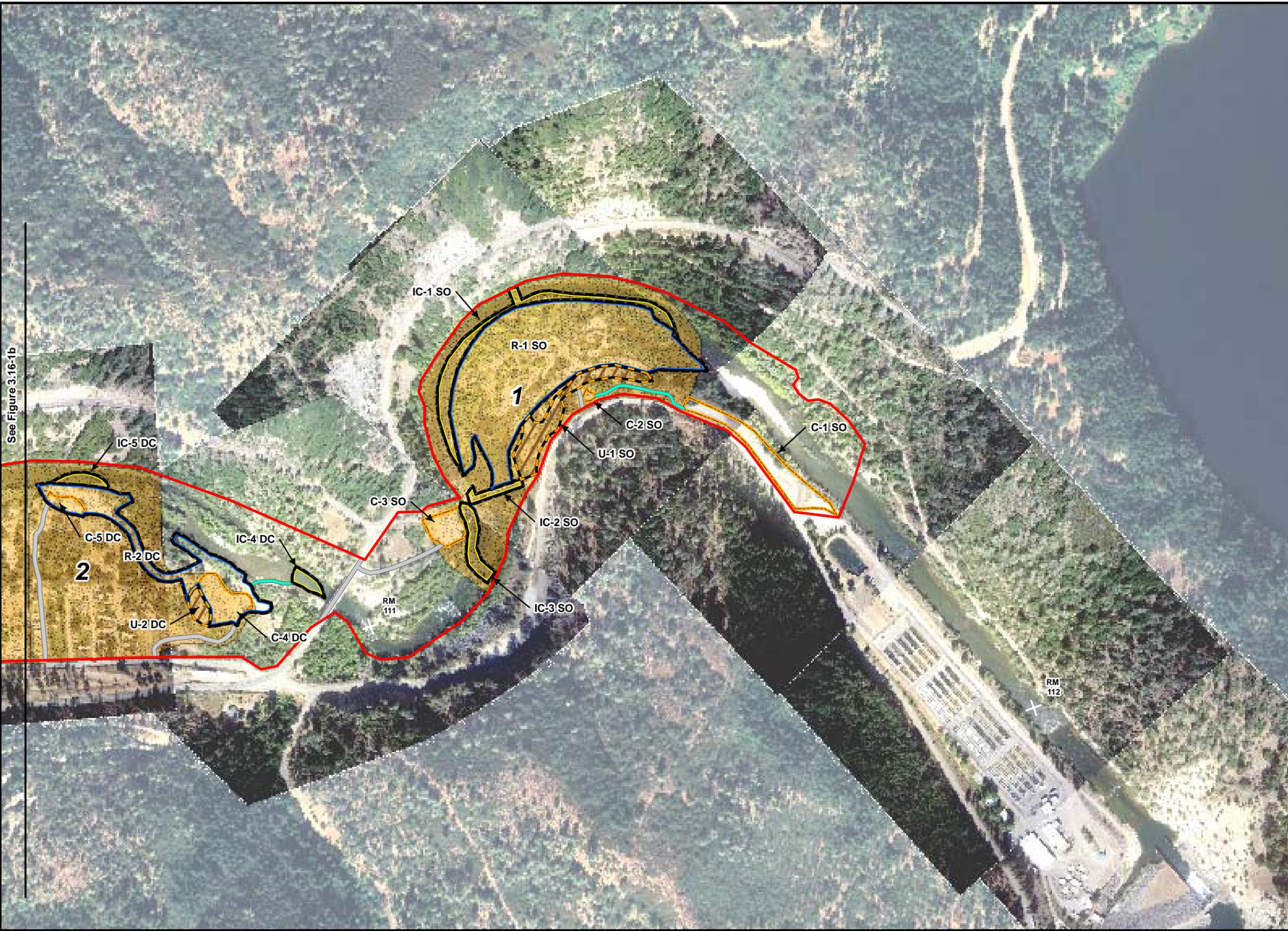
#### Lewiston Community Plan Goals and Objectives

The Lewiston Community Plan covers approximately 16 square miles (10,227 acres) centered on the Trinity River from Lewiston Lake to slightly downstream of Grass Valley Creek.

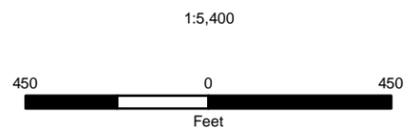
#### *Natural Resources*

**Goal:** Retain the quiet, unobtrusive nature of development in the Plan Area

- Review future development proposals for excessive noise impacts.

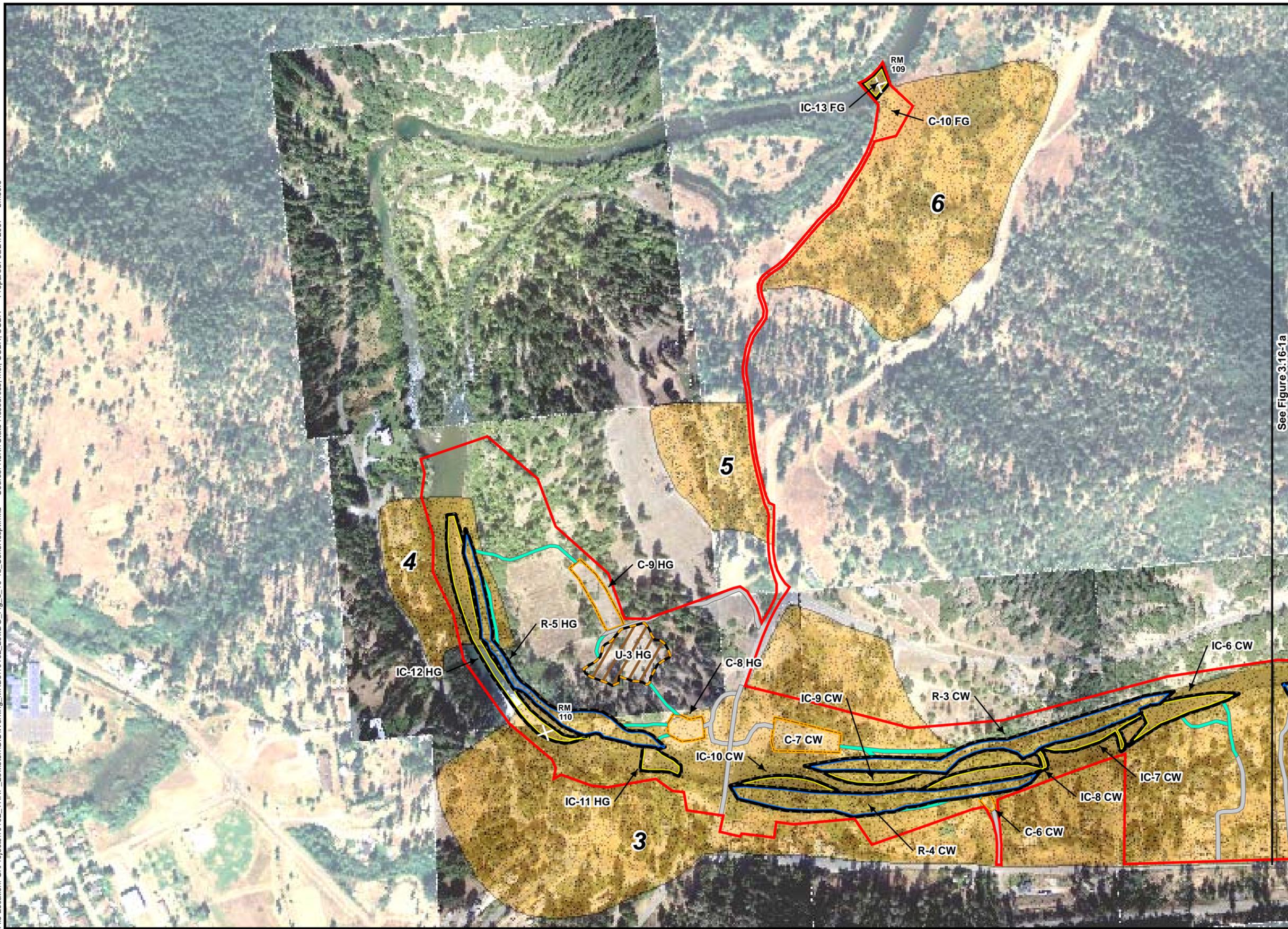


Site Boundary (131.5 acres)  
+ River Mile (RM)  
 Sensitive Receptor  
 Access Road - Existing  
 Access Road - New  
 Staging Area (C)  
**Activity Area**  
 In Channel (IC)  
 Riverine (R)  
 Upland (U)  
 CW - Cableway  
 DC - Deadwood Creek  
 FG - Dept. of Fish & Game  
 HG - Hoadley Gulch  
 SO - Sven Olbertson



Aerial photography:  
July 2005  
July 2006

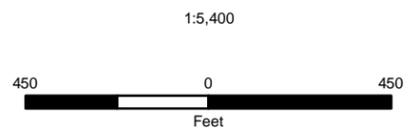
**Figure 3.16-1a**  
**Sensitive Receptor Locations**



- Site Boundary (131.52 acres)
  - River Mile (RM)
  - Sensitive Receptor
  - Access Road - Existing
  - Access Road - New
  - Staging Area (C)
- Activity Area**
- In Channel (IC)
  - Riverine (R)
  - Upland (U)

CW - Cableway  
 DC - Deadwood Creek  
 FG - Dept. of Fish & Game  
 HG - Hoadley Gulch  
 SO - Sven Olbertson

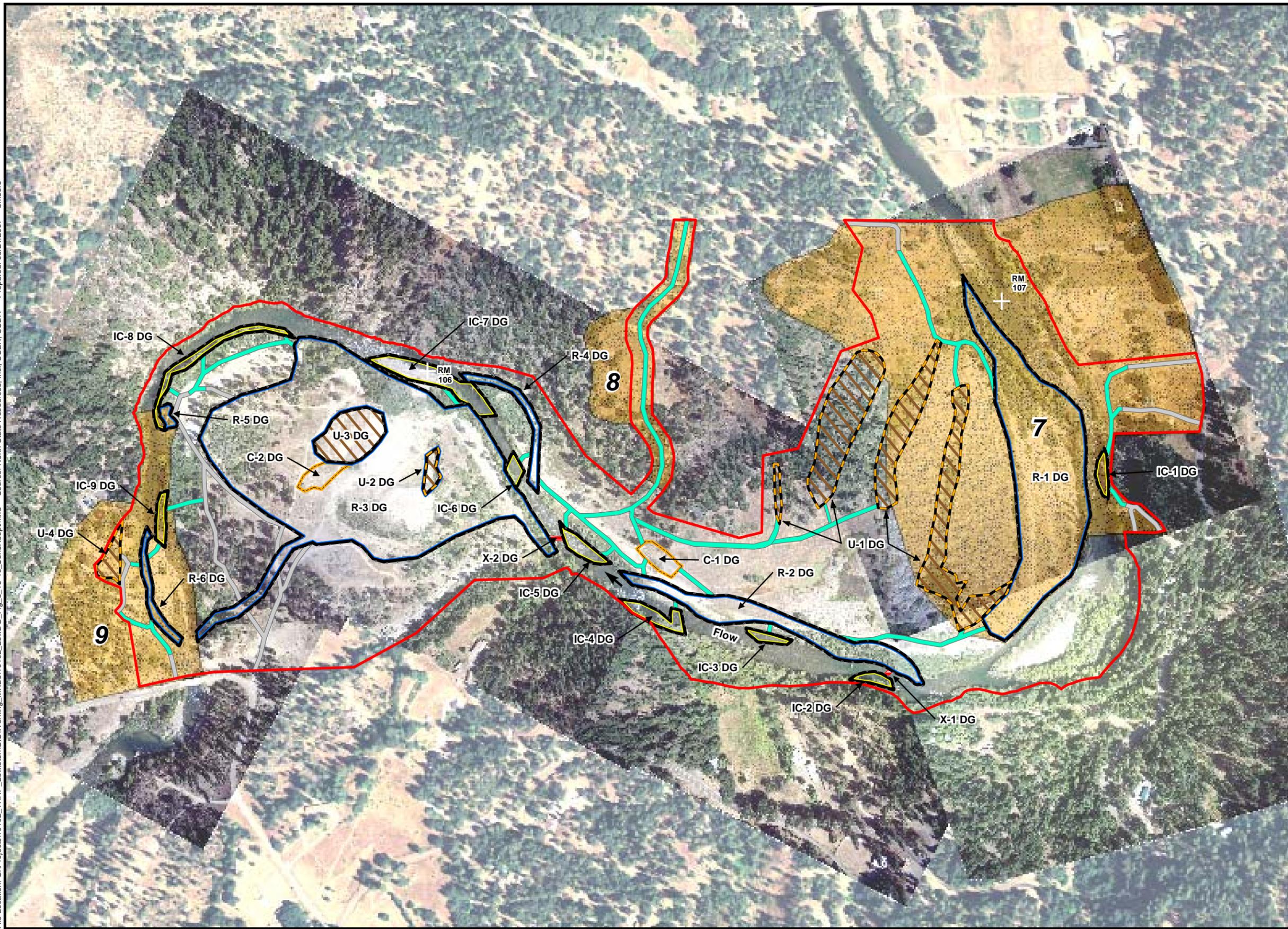
See Figure 3.16-1a



Aerial photography:  
2005  
2006

**Figure 3.16-1b**  
**Sensitive Receptor Locations**

File Location: G:\Projects\10102\_TRRP\_Lewisston\GIS\Working\_MXD\10102\_LewDG\_Fig\_3\_16-1c\_SensRecept.mxd Source: North State Resources, Inc.; USBR; USDA Prepared: 08/21/2007 bmoote



- Site Boundary (152 acres)
  - River Mile (RM)
  - Sensitive Receptor
  - Access Road - Existing
  - Access Road - New
  - Staging Area (C)
  - Crossing (X)
- Activity Area**
- In Channel (IC)
  - Riverine (R)
  - Upland (U)

CW - Cableway  
 DC - Deadwood Creek  
 FG - Dept. of Fish & Game  
 HG - Hoadley Gulch  
 SO - Sven Olbertson



1:5,400



Aerial photography:  
July 2005  
July 2006

Figure 3.16-1c  
Sensitive Receptor Locations



### 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, namely, the Trinity County General Plan and the Lewiston 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 and associated alternatives is to rehabilitate each site so that it functions 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 and Alternative 1 would not result in a noticeable increase in traffic volume, construction-related noise is the focus of this impact analysis. Construction noise impacts are based on an assumed mixture of construction equipment and related noise levels. Noise levels of individual types of equipment as described in Table 3.16-4 are based on industry averages. Assumptions related to construction equipment and industry noise averages were used to evaluate construction-related noise impacts, including noise levels at the nearest sensitive receptors.

#### Significance Criteria

Based on Appendix G of the CEQA Guidelines, the Proposed Action and Alternative 1 would be considered to have a significant direct noise impact if they would result 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 3.16-5 summarizes the potential noise impacts resulting from implementation of the No-Action Alternative, Proposed Action, and Alternative 1.

**Table 3.16-5. Summary of Noise Impacts for the No-Action Alternative, Proposed Action, and Alternative 1**

No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
Impact 3.16-1.	Construction activities associated with the project would result in noise impacts to nearby sensitive receptors.			
NI	S	S	LS	LS

Notes:

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

**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 and Alternative 1*

During the construction phase of the project, noise from construction activities would dominate the noise environment in the immediate area. As shown in Table 3.16-3, construction activities would generate maximum noise levels ranging from 65 to 84 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 occur over 140 days between March 1 and December 31, 2007. There would be no permanent noise impacts resulting from implementation of either action alternative.

Residences and commercial enterprises located primarily on the left side of the river at the Lewiston site and lightly scattered along both sides of the river at the Dark Gulch site (Figures 3.16-1a through 1c) would be subjected to varying degrees of construction noise under either action alternative. Both the Proposed Action and Alternative 1 would make use of existing access roads, although several new access roads, particularly within the Dark Gulch project area, would also need to be constructed to allow equipment access into proposed activity areas.

Intermittent construction traffic accessing the Lewiston and Dark Gulch sites could result in an intermittent and temporary increase in noise levels at nearby residences and businesses. These sensitive receptors would also experience intermittent and temporary noise associated with excavation and other construction activities. This noise source would be considered a significant impact.

Recreational users of areas adjacent to activity areas could encounter increased ambient noise levels during construction activities. While such an increase in noise would be significant, its impact would be temporary and localized.

Under either of the action alternatives, it is anticipated that ground vibration associated with project rehabilitation activities would not result in any structural damage nor would it be detectable at any sensitive receptor location.

#### 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, utilities, and energy resources from implementation of the Lewiston–Dark Gulch Rehabilitation Project: Trinity River Mile 105.4–111.7. The analysis provided in this section is based on a review of applicable local planning documents, communication with local service providers, and field reconnaissance within the general vicinity of the project.

### 3.17.1 Affected Environment/Environmental Setting

#### Regional Setting

##### *Water Supply and Distribution*

Community service districts provide water service 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 county's 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 project boundary 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. Additional information on this subject is provided in Sections 3.3 and 3.4.

##### *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 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 area encompassed by the project.

### *Gas Supply and Distribution*

Natural gas providers do not serve 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 the Anderson-Cottonwood Disposal Service landfill in Anderson, California.

### *Law Enforcement*

The Trinity County Sheriff's Department (TCSD) provides law enforcement for the entire county. TCSD's 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.

CDFG has wardens in Trinity County who also provide law enforcement coverage in association with their fish and wildlife protection responsibilities.

### *Fire Protection/Emergency Services*

Sixteen volunteer fire departments are located throughout Trinity County. These departments work closely with the California Department of Forestry (Cal Fire) and the USFS to 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 located in the communities of 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. These departments currently have a membership of approximately 200 to 225 volunteers. The Trinity Center, Hayfork, Lewiston, and Weaverville departments receive tax revenues to support their organizations, although these revenues are limited. These 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, Cal Fire 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. Cal Fire and USFS fire

stations are staffed only during the summer fire season, which normally lasts from May to late October. During the summer fire season, all fire agencies in the county respond to any reported fire, regardless of legal jurisdiction. Cal Fire 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 wildfires or other incidents, such as traffic accidents. Cal Fire 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. Two health clinics run by Trinity County Public Health Department are 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 a Search and Rescue Team.

#### *Telephone Service*

Trinity County residents receive telephone service through AT&T [formerly SBC] and Happy Valley Phone Company; cellular telephone service is provided by Verizon Wireless and Cal North Cellular. At the present, no high-speed or fiber optic services are available in the county, and cellular telephone service is limited to select areas (e.g., Weaverville, Junction City.) 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.

#### *Schools*

The Lewiston Elementary School District operates a primary school (grades K-8) in Lewiston. It is associated with the community of Lewiston and serves residents along Rush Creek, along Highway 299 West between Buckhorn Summit and Poker Bar, and along the Trinity River below Trinity Dam. Students in this elementary school attend ninth through twelfth grades at Trinity High School in Weaverville. Due to the remote location and isolation of some residents, bus service is provided for residents throughout the project area.

#### **Local Setting**

##### *Water Supply and Distribution*

The majority of the development in the Lewiston community is served by mutual or private water systems. Bucktail Mutual Water Company, which is regulated by the State of California, is one community system that serves the entire Bucktail subdivision. Development outside of the Lewiston community core area and Bucktail subdivision relies primarily upon individual wells, springs, and river intake systems; however, several other smaller community well systems are also maintained. Water is

generally plentiful throughout the Lewiston Plan Area, although care must be taken to protect the water supply from contamination from septic systems and other sources.

#### *Surface Water*

The primary surface water source is the Trinity River, which bisects the project area. The Trinity River is subject to dramatic changes in flow on a reoccurring basis. A number of residents use water from the Trinity River, 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 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 and surface waters are closely associated within the project sites. Project geologic investigations identified alluvial material with groundwater levels that are expected to fluctuate seasonally along with river levels. All identified local domestic water sources collect water that is obtained primarily via infiltration of surface (river) water rather than tapping underground aquifers.

#### *Wastewater Treatment and Collection*

Two community sewage disposal systems are located in the community core area. The major constraints to on-site sewage disposal are poor soils, saturated soils, and steep slopes. According to the Natural Resources Conservation Service (NRCS), most of the soils in the Lewiston Plan Area are moderately to severely restricted for home site development. The predominance of decomposed granite soils in the Plan Area presents significant problems for on-site sewage disposal.

#### *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 the landfill located in Anderson, California.

#### *Fire Protection*

Cal Fire has identified all of the Lewiston Plan Area as being a high fire hazard area. The rural character of the Plan Area and limited fire station locations result in relatively slow response times, particularly during the winter.

Fire protection within or adjacent to the Plan Area is provided by the LCSD and Cal Fire. LCSD maintains three engines, a rescue vehicle, and an ambulance at its Texas Street station and responds to fires and aid calls year-round. The station has a 23-person volunteer crew and chief. LCSD crews respond to approximately four structure fires (not including flue fires) and 10 wildland fires a year.

Cal Fire coverage of the Lewiston area varies by season. During the winter, Cal Fire responds from Weaverville with one engine, if personnel are present. In the summer, Cal Fire is equipped to provide a

total of three engines with 2,250 gallons of water and 12 to 13 fire fighters; two engines respond from Fawn Lodge, and another engine can respond from Weaverville. Minimum response time in the Lewiston Plan Area is 10 to 15 minutes or longer, depending on access (15 to 20 minutes on average). Half of these responses are typically for structure or flue fires, and half are for wildland fires.

During the summer, a USFS helicopter and five-person crew are available during daylight hours. During daylight, Cal Fire also can provide automatic dispatch of a fire retardant bomber and lead plane from Redding. Three fire lookouts (Weaver Bally, Bully Choop, and Bonanza King) allow for quick fire detection throughout the Plan Area.

### *Schools*

The Lewiston area currently has a student K-8 population of 92 (California Department of Education 2006). Students in grades 9-12 attend Trinity High School in Weaverville.

## **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 and alternatives were taken from the applicable elements of the General Plan, including the Lewiston Community Plan (Trinity County 1987).

### **Lewiston Community Plan Goals and Objectives**

Goal: To guide development in such a manner that an acceptable balance is achieved between the costs for public facilities and services and revenues or improvements required of new developments.

- Encourage development within or adjacent to areas already served with public facilities or services.
- Discourage development which requires expensive facilities or long-range service costs unless an adequate funding source can be assured.

### **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). The project would not increase a demand for public services (e.g., utilities, emergency services) within the project area.

### 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 Public Services and Utilities Impacts for the No-Action Alternative, Proposed Action, and Alternative 1**

No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
Impact 3.17-1.	Implementation of the project could potentially disrupt existing electrical and phone service during the construction phase.			
NI	LS	LS	N/A <sup>1</sup>	N/A <sup>1</sup>
Impact 3.17-2.	Construction of the project could result in the generation of increased solid waste.			
NI	LS	LS	N/A <sup>1</sup>	N/A <sup>1</sup>
Impact 3.17-3.	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.			
NI	S	S	LS	LS
Impact 3.17-4.	Construction of the project could result in a substantial use of nonrenewable energy resources.			
NI	LS	LS	N/A <sup>1</sup>	N/A <sup>1</sup>

Notes:

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

<sup>1</sup>Because this potential impact is less than significant, no mitigation is required.

**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; Less-than-Significant Impact for the 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. Power poles and/or underground lines located within the site boundaries of the project sites have been identified and activities described in Chapter 2 have been designed to avoid impacts to these facilities. Thus, no impacts to these utilities 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, 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 and Alternative 1*

Under the Proposed Action and Alternative 1, 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., garbage, cans, buckets). Vegetative materials (e.g., stumps, roots, branches) would be disposed of within the site boundaries. Disposal methods may include vegetative chipping to provide mulch, burial, piling to provide wildlife habitat on site, burning, or being left in the floodplain to provide structural habitat for juvenile fish.

The temporary access routes utilized for project implementation will be closed and/or decommissioned to ensure that public access points provided on lands managed by BLM and the STNF will not expand the requirement to provide public services (e.g., solid waste disposal) at locations that are inconsistent with agency guidelines and policies

Solid waste generated by construction activities will be disposed of at either the Weaverville transfer station or 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.

### 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 project boundaries described in Chapter 2, access for mobilization and demobilization of heavy equipment may require traffic control for Trinity Dam Boulevard, Trinity Hatchery Road, Old Lewiston Road, Rush Creek Road, and Goose Ranch Road. Traffic control would be minimal. In addition, construction personnel and service vehicles would use designated routes 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 law enforcement, 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, Cal Fire, Lewiston Volunteer 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 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 an 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 power equipment during construction would be relatively minimal.

Construction energy consumption would be a short-term impact and would not be an ongoing drain on finite natural resources. The Proposed Action would use slightly less energy than Alternative 1 during the construction phase since there would be slightly less earthwork under the Proposed Action. Construction under 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 and Traffic Circulation

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

### 3.18.1 Affected Environment/Environmental Setting

#### Regional Setting

##### *Regional Roadway Network*

The USFS Scenic Byway 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 Trinity Heritage Byway along SR 3.

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.

The Trinity Heritage Scenic Byway is along SR 3. It begins in Weaverville, and ends north of Weed. The byway detours from SR 3 at several locations. It leaves SR 3 seven miles north of Weaverville and turns east onto County Road 204 for nine miles to the town of Lewiston. The route provides opportunities for sightseeing in Lewiston and a side trip to the Trinity River Hatchery. The byway then heads north on County Road 105 paralleling Lewiston Lake to Trinity Dam and the southern tip of Trinity Lake before rejoining SR 3. It continues north on SR 3 to Guy Covington Drive and the historic Bowerman Barn. The Trinity Heritage Scenic Byway then backtracks to SR 3 north and passes through the communities of Trinity Center, Carrville, and Coffee Creek. Ten miles north of Coffee Creek at the base of Scott Mountain, it veers northeast along Parks Creek Road and the upper Trinity River. The route travels another 40 miles from the Parks Creek Road intersection to Interstate 5.

#### Local Setting

The Lewiston community is a collection of residential and commercial areas connected by Trinity Dam Boulevard. Rush Creek Road, Lewiston Road, Brown Mountain Road, and Goose Ranch Road provide access to one or more activity areas within the two project sites. These roads are part of the Trinity County road system.

Trinity Dam Boulevard and Hatchery Road provide access to Lewiston activity areas along the left side of the river, and Rush Creek Road provides access to activity areas located along the right side of the river. Brown Mountain Road via Goose Ranch Road provides access to Dark Gulch activity area along the left side of the river. Salt Flat Road via Goose Ranch Road could provide access to activity areas on the right side of the river. Crossings X-1 and X-2 DG also provide access to activity areas within the Dark Gulch

site. Figure 3.18-1 shows the local roadways within the vicinity of the project. Table 3.18-1 characterizes the roadways that provide access to the project sites.

**Table 3.18-1. Roadway Characteristics for Access Roads Required for the Project**

Road Name	Owner-ship	Number of Lanes	Surface Type	Traffic Counts (ADT)	Cross Streets
Trinity Dam Blvd	Trinity County	2	Paved	897	Lewiston Road
Rush Creek Road	Trinity County	2	Paved	409	Trinity Dam Blvd
Lewiston Road	Trinity County	2	Paved	827	Trinity Dam Blvd
Goose Ranch Road	Trinity County	2	Paved	Not Available	Brown's Mountain Road
Hatchery Road	Trinity County	2	Paved	90	Trinity Dam Blvd
Brown's Mountain Road	Trinity County	2	Paved	Not Available	Goose Ranch Road
Salt Flat Road	Private	1	Rock	Not Available	Goose Ranch Road

Source: Moodie 2007, pers. comm.

### Designated Truck Routes

None of the roads characterized in Table 3.18-1 are designated truck routes.

### Public Health

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

### Bikeways/Pedestrian Circulation

Bikeways and pedestrian circulation routes are not present within the project boundaries.

### Parking

Public parking is available within the project boundaries at the Bucktail Hole River Access and Sven-Olbertson Watchable Wildlife Area, and adjacent to Old Lewiston Bridge and the Lewiston gage and weir.

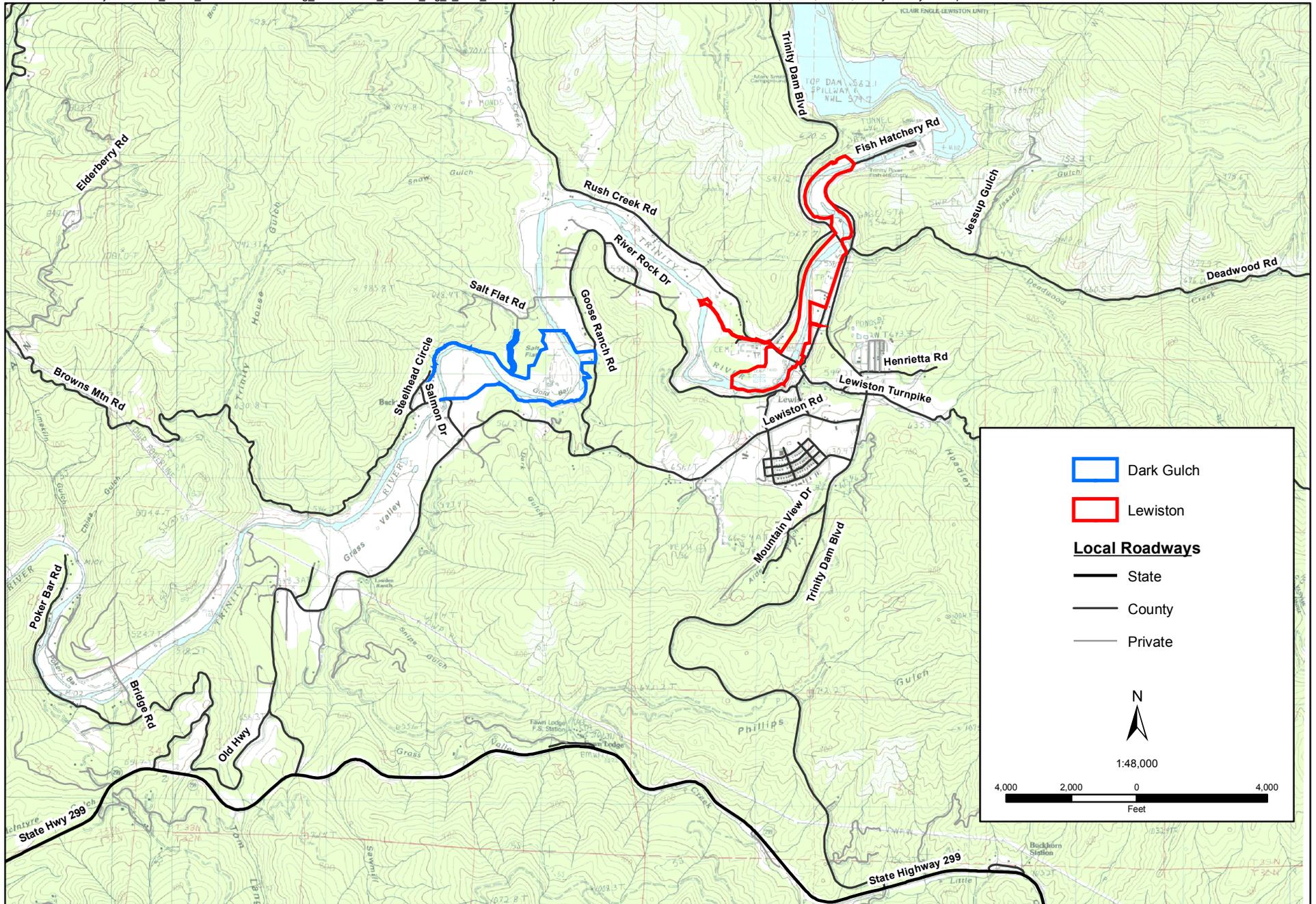


Figure 3.18-1  
Local Roadways



### 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 Lewiston Community Plan (Trinity County 1986).

#### *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.

#### Lewiston Community Plan Goals and Objectives

This plan includes the area centered on the Trinity River from Lewiston Lake to slightly downstream of the confluence of Grass Valley Creek and the Trinity River.

#### *Transportation*

**Goal:** To improve the safety characteristics of identified roadways based upon average daily traffic and public safety requirements.

- Develop a second point of access to Salt Flat for emergency purposes.

#### 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, Lewiston Community Plan) to determine if there are any inconsistencies.

The following project objectives apply to the lead and 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.

### 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, review of existing conditions, and traffic levels on 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;
- affect the form or function of Lewiston Bridge and Old Lewiston Bridge extending over the Trinity River;
- 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 and traffic impacts that would result from implementation of the project.

**Table 3.18-2. Summary of Transportation and Traffic Impacts for the No-Action Alternative, Proposed Action, and Alternative 1**

No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
Impact 3.18-1. Construction activities would reduce the capacity of or close existing traffic lanes.				
NI	LS	LS	N/A <sup>1</sup>	N/A <sup>1</sup>
Impact 3.18-2. Construction activities would generate short-term increases in vehicle trips.				
NI	LS	LS	N/A <sup>1</sup>	N/A <sup>1</sup>

**Table 3.18-2. Summary of Transportation and Traffic Impacts for the No-Action Alternative, Proposed Action, and Alternative 1**

No-Action Alternative	Proposed Action	Alternative 1	Proposed Action with Mitigation	Alternative 1 with Mitigation
Impact 3.18-3.	Implementation of the project would obstruct access to adjacent land uses.			
NI	S	S	LS	LS
Impact 3.18-4.	Construction activities would increase wear-and-tear on local roadways.			
NI	S	S	LS	LS
Impact 3.18-5.	Construction activities could pose a safety hazard to motorists, bicyclists, equestrians, pedestrians, and construction workers.			
NI	S	S	LS	LS
Impact 3.18-6.	Construction activities would affect the Lewiston Bridge and Old Lewiston Bridge.			
NI	LS	LS	N/A <sup>1</sup>	N/A <sup>1</sup>

## Notes:

LS = Less than Significant      S = Significant      SU = Significant Unavoidable

NI = No Impact      B = Beneficial      N/A = Not Applicable

<sup>1</sup> Because this potential impact is less than significant, no mitigation is required.

**Impact 3.18-1: Construction activities would reduce the capacity of or 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 would be no construction-related reduction in the capacity of or closure of traffic lanes because the project would not be constructed.

*Proposed Action and Alternative 1*

Project construction activities associated with the Proposed Action or Alternative 1 would be managed to ensure that Trinity Dam Boulevard, Hatchery Road, Rush Creek Road, Lewiston Road, Brown's Mountain Road, and Goose Ranch Road 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 Trinity Dam Boulevard, Hatchery Road, Rush Creek Road, Lewiston Road, Brown’s Mountain Road, and Goose Ranch Road. In the event Salt Flat Bridge is used to access the activity areas on the river right portion of the Dark Gulch site, agreements for road and bridge use will be made with the Salt Flat Homeowners Association. Heavy equipment (e.g., large trucks, excavators, back-hoes) 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 sites 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 the project boundary for the duration of work. 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 increase in traffic from construction on 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 in and adjacent to the rehabilitation sites consist mainly of residential areas interspersed with some commercial development. As previously described, construction equipment and workers' vehicles would use primary access points on Hatchery Road, Trinity Dam Boulevard, Rush Creek Road, Old Lewiston Road, and Goose Ranch Road. Access to adjacent lands may be restricted if traffic control measures are being used. This would constitute a significant impact.

Recreational access to the Trinity River could be restricted within the project boundaries on both sides of the river during the construction period; however, affected public access points would not all be closed at the same time. In addition, other public access points in the project vicinity would not be affected. Impacts related 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.

Significance after Mitigation

N/A

*Proposed Action and Alternative 1*

- 3a** Construction bid documents will require that access be maintained throughout the construction period for all private residences adjacent to the project boundary 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 within the project boundary throughout the work period.

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; 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 from construction activities because no construction activities would occur.

*Proposed Action and Alternative 1*

The rural county roads over which construction equipment must pass are built to withstand occasional use by heavy equipment, but could not withstand substantial volumes of heavy truck traffic. Because of the planning that has occurred to minimize heavy equipment use on the rural county roads needed to access the sites, however, the project is not expected to significantly add to roadway wear-and-tear on county roads. Several state and federal access roads (e.g., to access IC-3 SO and IC-13 FG) as well as private access roads (e.g., Salt Flat private road, which would be used to reach right-side DG areas) will be used for various aspects of the project. These roads may not have been built to withstand prolonged use by heavy equipment. Use of these roads to move material to and from the work sites or to supply fuel for equipment left on-site could adversely affect road conditions. The degree to which this impact would occur depends on the design (pavement type and thickness) and the existing condition of the road.

For the reasons described above, the impacts of the project related to wear-and-tear on rural county roads in the project vicinity would be less than significant, and the impacts to unimproved federal, state, and private roads are potentially 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*

**4a** Reclamation or its contractor shall perform a pre-construction survey of federal, state, and private roads to determine the existing roadway conditions of the construction access routes. An agreement would be entered into prior to construction that would detail the pre-construction conditions and post-construction requirements for potential roadway rehabilitation.

**Impact 3.18-5: Construction activities could pose a safety hazard to motorists, bicyclists, equestrians, pedestrians, and construction workers. *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, equestrians, pedestrians, and construction workers because the project would not be constructed.

*Proposed Action and Alternative 1*

Traffic safety hazards could arise for motorists, pedestrians, equestrians, bicyclists, and construction workers in the vicinity of the construction access routes when heavy construction equipment is entering or leaving the project sites. Access to the Trinity River may be limited to identified routes during construction activities to minimize public exposure to construction traffic. Although this impact would be limited to brief and intermittent time periods, it is 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

**Impact 3.18-6: Construction activities could affect the Lewiston Bridge and Old Lewiston Bridge. *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 affect on the form or function of the Lewiston Bridge and the Old Lewiston Bridge because there would be no construction activities.

*Proposed Action and Alternative 1*

Lewiston Bridge and Old Lewiston Bridge would be used to access treatment areas during construction; however, no modification of the form or function of either structure would occur as a result of project implementation. Use of the bridges would be consistent with load and size restrictions. Therefore, the form and function of the Lewiston Bridge and the Old Lewiston Bridge would not be affected as a result of the project.

**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

# Chapter 4

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## **Other Statutory Considerations**

This chapter addresses other statutory considerations that must be evaluated pursuant to NEPA and CEQA. The following sections address these 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 That 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 the impacts of 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 president’s Council on Environmental Quality (CEQ) NEPA regulations and the State of California’s CEQA Guidelines require that the cumulative impacts of a proposed action be addressed in an environmental document when the cumulative impacts are expected to be significant (40CFR 1508.25[a][2], 14 CCR 15130[a]). 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/Draft EIR addresses the cumulative impacts of the Proposed Action, as well as those of 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 at Helena, California, because this is the area designated for river restoration activities under the Trinity River Mainstem Fishery Restoration Project FEIS/EIR (U.S. Fish and Wildlife Service et al. 2000a). Downstream of the North Fork Trinity River, mainstem Trinity River flows remain adequate to maintain the alluvial river attributes (see Chapter 3.3 for a description of these attributes) central to restoring the Trinity River fishery. The non-flow measures incorporated into the Flow Evaluation Alternative described in the ROD are specifically intended to restore the 40-mile reach of the mainstem Trinity River below the TRD. The geographic scope of this EA/Draft EIR precludes consideration of the impacts of other past, present, and reasonably foreseeable future actions upstream of Lewiston Dam or other elements of the CVP outside the Trinity River basin.

The following section summarizes the projects and programs that, along with the Proposed Action, could 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/Draft EIR is the fourth 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, NMFS, USFS, BLM, the Regional Water Board, DWR, Trinity County, and the Hoopa Valley and Yurok Tribes.

Several projects identified in the ROD have been completed and an additional project (Indian Creek Rehabilitation Site) is currently under construction and expected to be completed in spring 2008. 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 and third of these completed projects were mechanical channel rehabilitation projects at Hocker Flat and Canyon Creek. The rehabilitation activities proposed in

this EA/Draft EIR are similar to those described in the EA/Draft EIRs for the Canyon Creek and Indian Creek projects.

Since July 2006, the STNF, in conjunction with Reclamation, has implemented two sequential coarse sediment enhancement projects downstream of the TRSSH. Collectively, these projects introduced 12,000 tons of coarse sediment into the Trinity River. Consistent with the ROD, these projects are intended to enhance the development of alternate point bars, thereby increasing the available habitat for anadromous salmonids.

Additional mechanical channel rehabilitation projects (consisting of work at numerous rehabilitation sites originally defined in the FEIS/EIR) are slated for implementation by the TRRP between 2008 and 2010. Projects that include eight additional original locations identified in the ROD have been conceptualized and the NEPA/CEQA process for these projects will be initiated late in 2007. These projects, located between Lewiston Dam and Junction City, are similar in size and character to the project activities described in Chapter 2. In addition to the recent STNF efforts, the TRRP has been augmenting coarse sediment in the mainstem Trinity River to enhance alluvial processes and provide juvenile and spawning habitat for anadromous salmonids. In late summer 2003, 2,000 cubic yards of coarse sediment (gravel) were placed in the Trinity River at the Lewiston cableway.

In addition to the river rehabilitation projects, the TRRP has completed projects to modify local infrastructure (e.g., raising roads at Poker Bar, moving a residence downstream of Indian Creek, relocating pumps and pump houses) between Douglas City and Lewiston Dam to accommodate future ROD flow releases of up to 11,000 cfs.

The success of future rehabilitation projects 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 anadromous 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.

Future projects are intended to encourage desirable geomorphic features. Design criteria have been established to:

- increase channel sinuosity;
- increase diversity in the longitudinal profile of the Trinity River;
- enhance conditions that result in dynamic alternate bar sequences;
- ensure functional floodplains over a range of flows;
- provide side channels that function over a range of flows; and
- enhance or create off-channel wetlands.

During summer 2007, the TRRP, in cooperation with the Yurok Tribe, dredged the Hamilton sediment ponds at the mouth of Grass Valley Creek. This activity removed about 12,000 cubic yards of fine sediment (sand) and restored the capacity of these retention structures.

In conjunction with members of the TMC, the TRRP is developing a Coarse Sediment Management Plan for the Trinity River that is anticipated to 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 AEAM program.

#### Trinity River Mainstem Fishery Restoration Project

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 for its adverse effects on salmonid habitat. The 2000 ROD (U.S. Department of Interior 2000; U.S. Fish and Wildlife Service et al. 2000) 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.”

The FEIS acknowledged a broad spectrum of cumulative impacts, including impacts in the Trinity River basin and the Central Valley of California. The discussion of cumulative impacts in Section 4.1 of the Trinity River Mainstem Fishery Restoration Draft EIS/EIR (DEIS/EIR) was focused on the managed flow releases, primarily with regards to water supply and power production outside the Trinity River basin. As a programmatic document, the FEIS satisfied the disclosure requirements of the lead agencies under NEPA. Because Trinity County did not certify the EIR portion of the environmental document, the CEQA component of the document cannot serve as a Tier 1 EIR. Irrespective of this fact, the FEIS is incorporated by reference into this EA/Draft EIR, including Section 4.1, Cumulative Impacts. A copy of this document is available at the TRRP office in Weaverville, California.

The DEIS/EIR considered a number of related actions in its discussion of cumulative impacts. These actions include:

- implementation of the Central Valley Project Improvement Act
- State Water Resources Control Board water rights process and CALFED Bay-Delta Program
- deregulation of the electric industry in California
- changes in demand for agricultural products
- changes to fisheries management
- changes in demand/supply for timber products
- changes in demand for recreational activities in the Trinity River basin not related to the Trinity River and the TRD
- changes in Trinity River basin consumptive water use

While the purpose of the DEIS/EIR was to evaluate alternatives to restore the Trinity River fishery, the cumulative impacts section of the DEIS/EIR contained only a limited discussion of cumulative impacts specific to the Trinity River basin, particularly with regards to non-flow measures (e.g., mechanical channel rehabilitation).

Section 4.1.14 of the DEIS/EIR emphasized the reliance on predictive models that forecast conditions in 2020, typically using projections of state-wide population growth and associated demand for CVP water supplies. To a lesser degree, this section identified six specific resource issues and discussed their relationship to the Trinity River basin in terms of cumulative impacts. Table 4-1 summarizes this information.

**Table 4-1. Issue-Specific Cumulative Impacts**

Issue	Summary Statement
Fishery resources	Cumulatively beneficial impact to anadromous fish production; also recognizes a benefit to recreation.
Agricultural land use	No discussion of impacts to land use within the Trinity River basin. Water supply issues focused on irrigated lands in the Central Valley of California.
Groundwater resources	No discussion of impacts to land use within the Trinity River basin. Groundwater resource issues were limited to the Central Valley of California.
Water quality	Trinity River water temperatures associated with TRD releases are expected to improve (decrease). Temperatures in Trinity Lake are assumed to degrade (increase) under normal and dry conditions due to assumed increases in CVP demands.
Power resources	Power production from the TRD is an integral component of the CVP. The analysis did not identify any relationship between power production and the non-flow measures described in the FEIS.
Recreation	Beneficial recreation impacts and associated economic benefits are expected to occur as a result of increased fish production in the Trinity River. Potential recreational impacts to various CVP reservoirs (e.g., Trinity Lake) are anticipated to be very minor.

In conjunction with the preparation of the FEIS, a Biological Opinion issued by NMFS found that the preferred alternative identified in the ROD “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.” 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.” This Biological Opinion included an incidental take statement that established terms and conditions to implement reasonable and prudent measures, including the mechanical channel rehabilitation projects. Reasonable and prudent measures related to the Trinity River Mainstem Fishery Restoration Project are:

- THE USFWS and Reclamation shall complete “the first phase of the channel rehabilitation projects” (i.e., 24 channel projects within 3 years of issuance of the ROD).

- 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.

During the technical team’s annual review (2006) of TRRP’s planned projects, it was determined that in-river work was clearly consistent with the reasonable and prudent measures described in the preceding paragraphs. Consequently, at the request of Reclamation, NMFS amended its 2000 Biological Opinion to clarify its original intent that in-river work required during such channel rehabilitation projects as the Proposed Action and the coarse sediment augmentation projects (i.e., Lewiston Gravel Project) are consistent with the 2000 Biological Opinion. A copy of the amended Biological Opinion is on file at the TRRP office in Weaverville, California.

#### California Coastal Salmonid Restoration Program/Five Counties Salmonid Conservation Program

As a result of the proposed listing under the ESA 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 salmon and, more recently, 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 NMFS, 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 oversees state watershed protection and enhancement activities, and 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 (5C Program.) The 5C 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. NMFS has nominated the 5C 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 5C Program 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.

#### Trinity Management Council

An ad hoc committee of the TMC, in conjunction with the TCRCDD, identified a list of potential watershed improvement projects for consideration in the TRRP 2007 budget review process. These projects have been considered as potentially foreseeable and are considered from a cumulative perspective.

- Indian Creek Road Project, Trinity County
- Dark Gulch Sediment Basin Enlargement, Trinity County Resource Conservation District
- Oregon/Junction Fire Riparian Treatment, Shasta-Trinity National Forest
- Brown’s Mountain Road, Bucktail Culvert Replacement, Trinity County
- Upper Union Hill Road Storm Proofing, Trinity County Resource Conservation District
- Grub Gulch Erosion Control, Trinity County Resource Conservation District
- Union Gulch Fish Passage, Trinity County Resource Conservation District
- Little Browns Creek Migration Barrier Removal Project, Shasta-Trinity National Forest

#### Clean Water Act, 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 using a 10-year rolling average.

A number of contributing causes for excessive sediment have been 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 Trinity River.

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 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.

#### Western Area Power Administration

The Western Area Power Administration (WAPA) is currently preparing an EIS to support the construction of the Trinity Public Utility District (PUD) Direct Interconnection Project. This project is intended to supply the PUD with power from the CVP. This project would require construction of several structures (pads/poles) to support an overhead line spanning the Trinity River in the vicinity of the SO activity area near the TRSSH.

### 4.1.3 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. 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, significant cumulative 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. Notably, however, “[a]n EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.” (CEQA Guidelines, Section 15130, subd. (a)(1).) Thus, where the impacts of a proposed project are beneficial rather than adverse, the EIR need not address adverse effects that might arise due to other projects in the vicinity of the project at issue.

#### Land Use

Under the No-Action Alternative, the Proposed Action would not be implemented and the Trinity River within and downstream of the site boundaries 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. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects. The selection of the No-Action Alternative, however, 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 either of the action alternatives. Therefore, no significant or substantial 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 subject to changes in the managed flow authorized in the ROD. No significant cumulative impacts are anticipated to result from the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects. The selection of the No-Action Alternative, however, 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. Long-term effects will be beneficial. The fluvial geomorphic processes embodied in the Healthy River Attributes would be affected at the local level (i.e., 40-mile reach of the mainstem Trinity River); however, these effects would not be adverse, and certainly not 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 as modified by the ROD. No significant cumulative impacts to water resources are anticipated to result from the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects. The selection of the No-Action Alternative, however, 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 are anticipated due to implementation of either action alternative. Since some activities associated with the project are within the floodplain of the Trinity River, it is subject to the jurisdiction of the Trinity County Floodplain Management Ordinance. However, there would be no increase in the 100-year flood line within the site boundary illustrated on Figures 2.2a, 2.2b and 2.2c. The increased channel capacity provided by either action alternative 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 as modified by the ROD. No significant cumulative impacts to water quality are anticipated to result from the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects. The selection of the No-Action Alternative, however, 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 ways that minimize the potential short-term 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 as a result of sedimentation could occur within the Trinity River during the construction and implementation periods. However, implementation of the prescribed mitigation measures, coordinated by the TRRP, will adequately mitigate for potential short-term 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 because they will occur only during construction periods and thus will be short-term.

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 of the action alternatives 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 as modified by the ROD. No significant cumulative impacts to fishery resources are anticipated to result from the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects. The selection of the No-Action Alternative, however, 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. NMFS' 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. Even so, however, 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 short-term impacts associated with removal of vegetation, loss of habitat, 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 of the action alternatives 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 as modified by the ROD. The potential for continued encroachment on 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. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects. The selection of the No-Action Alternative, however, 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 (i.e., temporary) 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. Effects would be short-term and primarily 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 of the action alternatives 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 as modified by the ROD. No significant cumulative impacts to recreation resources are anticipated to result from the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects.

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 of the action alternatives 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 as modified by the ROD. No significant cumulative impacts to socioeconomics, population, and housing are anticipated to result from the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects.

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 economic and social 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 a potential for increased long-term recreational use as the fishery responds to various 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 as modified by the ROD. 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. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects.

No significant cumulative impacts to Tribal Trust Assets are anticipated to occur as a result of implementation of any of either action alternative. The projects and programs described above are intended to benefit the Tribal Trust Assets, including the Trinity River fishery under the auspices 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 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 as modified by the ROD. No significant cumulative impacts to cultural resources are anticipated as a result of the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects.

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 would 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 (e.g., surveys of potential impact areas by a professional archaeologist prior to construction, protection of potentially significant cultural sites, and coordination with local tribes), 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 as modified by the ROD. No significant cumulative impacts to air quality are anticipated as a result of the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects.

No significant cumulative impacts to air quality are anticipated to occur as a result of implementation of either of the action alternatives. The NCUAQMD requirements will be addressed by implementation of prescribed mitigation measures.

Although, as explained in Section 3.12, either action alternative would generate some temporary air emissions as a result of grading activities, 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. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects.

Activities evaluated in the action alternatives are specific to a 6.3-mile reach of the Trinity River. Most of these activities, specifically those within the riverine areas, are intended to mimic the geomorphic processes that may occur during large flood events in order to restore the Trinity River fishery. Overall, the TRRP, in conjunction with the other projects and programs discussed in the preceding section, is anticipated to provide a net benefit to the local communities by restoring the Trinity River fishery. No significant cumulative impacts to environmental justice are anticipated to occur as a result of the implementation of either action alternative evaluated in this EA/Draft EIR.

### 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 as modified by the ROD. No significant cumulative impacts to aesthetic resources are anticipated to result from the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects.

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. Overall the project will enhance vegetative diversity as historic variability in plant species and age class composition is restored. This will support the visual objective of maintaining the aesthetic qualities of a free-flowing river within the Wild and Scenic River corridor. 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 are limited to the geographic settings in which they are located.

#### **Hazardous Materials**

Under the No-Action Alternative, the Proposed Action would not be implemented, and the effects associated with hazardous materials would be similar to those in the surrounding area. No significant cumulative impacts related to hazardous materials are anticipated to result from the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects.

No significant cumulative impacts related to hazardous materials are anticipated through the implementation of either of the action alternatives evaluated in this EA/Draft EIR. Grading activities associated with the project would not involve the inordinate use, production, or disposal of materials that would pose a hazard to the environment in the affected area (Trinity River corridor). All activities are intended to minimize potential public health or safety hazards (e.g., fires, accidents), and are specifically designed to ensure that emergency response plans or emergency evacuation plans are not affected.

#### **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. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects.

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 action alternatives would not be “cumulatively considerable,” in large part because the 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**

Under the No-Action Alternative, the Proposed Action would not be implemented, and the effects on Public Services and Utilities/Energy would be similar to those in the surrounding area. No significant cumulative impacts to Public Services and Utilities/Energy are anticipated to result from the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects.

No significant cumulative impacts related to Public Services and Utilities/Energy are anticipated through the implementation of either action alternative. The project is designed in a manner that ensures that emergency services would not be disrupted; that public services (e.g., school bus routes) would not be adversely affected; and that waste material generated from project activities would be transported to authorized locations. The nature of the project (grading activities) will not result in the use of large amounts of fuel or energy, nor would fuel or energy be used in a wasteful manner.

### 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 transportation/traffic circulation are anticipated to result from the No-Action Alternative. Since no action would be taken, there would be no impact that could contribute to a larger cumulative effect due to other projects.

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 measures prescribed in this EA/Draft EIR are 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 either of the action 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. The TRRP was established to implement the ROD, thereby increasing the fishery resources of the Trinity River; growth-inducing impacts within Trinity County are not anticipated. Section 15126 (g) of the state CEQA Guidelines provides definitions and guidance in determining the growth-inducing impacts of a proposed project.

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, and
- 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. Trinity 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, Douglas City, Lewiston, and Hayfork, 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 has continued sporadically the rate of increase has been substantially lower. 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 Trinity County.

### Proposed Land Uses

In general, all parcels within the site boundaries described in Chapter 2 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, though unlikely, does exist. However, such development would not be a result of the Proposed Action. The STNF, BLM, and Reclamation manage federal lands within the site boundaries consistent with the direction provided by the respective agency planning processes. There will be no growth-inducing impacts as a result of this project.

### 4.3 Significant Irreversible and Irretrievable Commitments of Resources

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 other than those previously described in the FEIS (U.S. Fish and Wildlife Service et al. 2000) and incorporated by reference in other sections of this document. 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 sites, as described in Chapter 2. 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/Draft EIR, 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 TCRCDD 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 EA/Draft EIR, 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 TCRCDD 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 the TCRCDD in conjunction with Reclamation staff, project contractors, cooperating and 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 that the MMRP is incorporated into the construction bid documents,
- coordinating monitoring activities,
- directing the preparation and filing of compliance reports, and
- maintaining 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 have been excerpted from this EA/Draft EIR. The mitigation monitoring table includes the following columns:

- **Mitigation Measure:** Presents the mitigation measures identified the EA/Draft EIR for a specific impact, along with the number of each measure, as presented in the EA/Draft EIR.
- **Timing:** Identifies when the mitigation measures will be implemented.
- **Agency/Department Consultation:** References the specific agency or agencies 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 TCRCDD 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 did not identify 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/Draft EIR, the TCRCD 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 whether 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 the Proposed Action, a Statement of Overriding Considerations would not be required.



# Chapter 5

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## Consultation and Coordination

This chapter summarizes the scoping process, consultation, coordination, and applicable laws, policies, and regulations used to develop this EA/DEIR.

### 5.1 Lead and Participating Agencies

The co-lead agencies for this EA/DEIR are Reclamation and, for that part of the Project that is on Forest Service Managed Lands, the U.S. Forest Service, as defined by NEPA, and the Trinity County Resource Conservation District (TCRCD), as defined by CEQA. The primary cooperating (NEPA) and responsible and trustee (CEQA) agencies are:

- U.S. Department of Interior, Bureau of Land Management (BLM)
- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service (USFWS)
- National Marine Fisheries Service (NMFS)
- California Department of Fish and Game (CDFG)
- California Regional Water Quality Control Board, North Coast Region (Regional Water Board)

### 5.2 Project Scoping

#### 5.2.1 Summary of Public Scoping Meetings

The following is a summary of the public scoping process that has been completed to date:

- **Fall 2005** – An initial project planning meeting was held at the TRRP office in Weaverville, California, to discuss the nature of the Proposed Action with technical staff representing the TMC.
- **Winter 2006** – A Project Kick-Off meeting was held with representatives from Reclamation, TCRCD, the California Department of Water Resources (DWR), BLM, CDFG, Trinity County, and the environmental consulting team to discuss the project, potential alternatives, the timing requirements for the environmental review process, the scope of technical studies, and potential permitting requirements.
- **Spring 2007** – Reclamation conducted a meeting that included potential lead and cooperating agencies to discuss the type and degree of NEPA and CEQA compliance required by the project. The review resulted in revising the site boundaries for the Proposed Action and working with various stakeholders to refine design concepts. Reclamation staff met with local landowners and incorporated their concerns into project designs.

- **May 1, 2007** – The TCRCD, the CEQA lead agency, submitted an NOP to the State of California, Governor’s Office of Planning and Research, State Clearinghouse (SCH) for the Proposed Action. The NOP encouraged full public participation to promote open communication on the issues surrounding the Proposed Action. All federal, state, and local agencies and other persons or organizations were urged to participate in the scoping process.
- **May 2 and May 9, 2007** – In conjunction with the issuance of the NOP, a Public Notice was published in the *Trinity Journal*, the newspaper that serves Trinity County. The notice included information on the Proposed Action, as well as the date and location of the public scoping meeting.
- **May 15, 2007** – A Public/Agency Scoping Meeting was held at the Lewiston Community Center in Lewiston, California. The purpose of the meeting was to outline the objectives of the TRRP; identify the types of actions and alternatives that might be evaluated in the joint NEPA/CEQA document; describe the nature, scope, and timing of the environmental process; and solicit comments on the NOP. In addition to TRRP staff, stakeholders residing in the project vicinity attended this meeting.

### **5.2.2 Comments on the Notice of Preparation**

On May 1, 2007, the TCRCD circulated an NOP to the public and to local, state, and federal agencies to solicit comments. The only written comment received on the NOP was from the California Native American Heritage Commission. This comment letter requested that: 1) appropriate record searches and physical surveys be conducted in order to mitigate potential cultural resource related impacts, and 2) the Lead agency contact an enclosed list of Native American tribes in order assure proper Native American information on the Project site.

### **5.2.3 List of Agencies and Organizations Contacted**

Following is a list of agencies and organizations that were consulted during the preparation of this EA/DEIR:

- California Air Resources Board
- California Department of Fish and Game
- California Department of Transportation
- California Division of Mines and Geology
- California Highway Patrol
- California Native American Heritage Commission
- California State Lands Commission
- California Resources Agency
- California Water Quality Control Board, North Coast Region
- National Marine Fisheries Service (Arcata)
- Trinity County Building and Development Services, Environmental Health Division
- Trinity County General Services Department

- Trinity County Transportation Department
- Trinity County Sheriff's Office
- U.S. Army Corps of Engineers (San Francisco District – Eureka Field Office)
- U.S. Department of Transportation, U.S. Coast Guard
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service (Arcata Field Office)
- U.S. Forest Service (Shasta-Trinity National Recreation Area)
- U.S. Forest Service (Shasta-Trinity National Forest)

### **5.3 Agency Consultation and Coordination**

Provided below is a list of the laws, rules, regulations, and federal executive orders that were considered in the preparation of this EA/DEIR.

#### **5.3.1 Consistency with Environmental Laws**

Provided below is a discussion of how this EA/DEIR is consistent with NEPA and CEQA.

##### **National Environmental Policy Act**

This EA/DEIR was prepared pursuant to NEPA and the regulations implementing that statute. NEPA provides a commitment that federal agencies will consider the environmental effects of their actions and disclose their environmental effects. This EA/DEIR provides detailed information regarding project alternatives, the effects of these alternatives on the environment, and potential mitigation measures. Chapter 1 provides a comprehensive discussion of the NEPA requirements pertaining to the Proposed Action.

##### **California Environmental Quality Act**

This EA/DEIR was prepared to comply with CEQA, based on the TCRCD's determination that the Proposed Action constitutes a "project" under CEQA (CEQA Guidelines Section 15378[a]). Key among the CEQA provisions is the requirement to identify all significant impacts. Significance thresholds are identified for each issue area to allow the reader to clearly see at what point a given environmental impact is considered significant. CEQA and NEPA are similar in many ways, including in terms of identification of alternatives, potential mitigation measures, and adverse environmental impacts that cannot be avoided (see Chapter 1). However, to the extent possible, CEQA requires mitigation measures to be incorporated into a proposed project. This joint NEPA/CEQA document was prepared to comply with both laws while reducing redundancy and providing the necessary documentation for both processes.

#### **5.3.2 Discretionary Approvals**

The various discretionary approval processes that have been completed or are being coordinated concurrent with the NEPA/CEQA environmental review process are summarized below.

### U.S. Army Corps of Engineers

Reclamation will be required to obtain a Section 404 permit from USACE. Discharge of fill material into “waters of the United States,” including “wetlands,” is regulated by the USACE under Section 404 of the federal CWA (33 USC 1251-1376). Projects are permitted under either individual or general (e.g., nationwide) permits. USACE, on a case-by-case basis, determines the specific applicability of permit type. Communication with the U.S. Coast Guard confirmed that the Trinity River is not under its jurisdiction as “navigable waters of the United States.” Therefore, the Trinity River is not subject to USACE jurisdiction under Section 10 of the federal Rivers and Harbors Act (33 USC 401 et seq.).

The location and boundaries of wetlands and other waters potentially affected by the Proposed Action were evaluated based on field surveys, aerial photograph interpretation, and existing published information. Wetlands are defined for regulatory purposes as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.3; 40 CFR 230.3).” “Other waters” are stream channels, drainages, open water habitats, and other surface water features that do not support positive indicators for the three mandatory technical criteria. The jurisdictional wetland delineation report is included in Appendix C. The delineation was conducted using methods specified in USACE’s 1987 guidelines (Environmental Laboratory 1987).

In September 2006, the delineation was verified in the field by USACE (File No. 2992N). However, written verification of that day’s field changes have not yet been confirmed. The jurisdictional wetland delineation report is intended for use by USACE in determining the location and extent of Section 404 jurisdiction. Reclamation will continue to coordinate with the USACE to determine the appropriate permit for the project, as well as potential mitigation measures. It is anticipated that the Proposed Action will be permitted under Nationwide Permit Number 27 (Wetland and Riparian Restoration and Creation Activities).

### U.S. Fish and Wildlife Service/National Marine Fisheries Service

Section 7 of the ESA requires federal agencies, in consultation with the Secretary of the Interior, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of designated critical habitat for these species. Reclamation, as the federal lead agency for this project, is required to consult with NMFS concerning project effects to the SONCC ESU coho salmon, which is federally listed as threatened, and its designated critical habitat.

During review of TRRP’s planned 2006 projects, NMFS determined that its Biological Opinion for the Trinity River Mainstem Fishery Restoration Program did not explicitly cover in-river construction activities for channel rehabilitation projects, although it did clearly cover in-river construction activities for coarse sediment projects. In discussions between Reclamation and NMFS concerning this issue, NMFS clarified that it had considered the mechanical channel rehabilitation projects in its opinion along with other non-flow measures. At the request of Reclamation, however, NMFS amended the Biological Opinion to clearly articulate that in-channel activities for mechanical channel rehabilitation projects are consistent with the intent of the original opinion. NMFS also confirmed that the incidental take statement

in the opinion is adequate for all activities associated with the mechanical rehabilitation projects. The mechanical channel rehabilitation projects were specifically included as reasonable and prudent measures (RPMs) in the original opinion. The Amended Biological Opinion is on file at the TRRP office in Weaverville.

Additional RPMs described in Chapter 2 were incorporated into the project. As a result of the informal consultation between Reclamation and NMFS, NMFS determined that re-initiation of formal consultation was unnecessary.

Informal consultation with the USFWS concerning effects to the northern spotted owl was conducted by Reclamation. Based on this informal consultation and Trinity River bird distribution data provided by USDA Forest Service, Redwood Sciences Laboratory, Reclamation determined that a biological assessment is not required because the Proposed Action would have no effect on northern spotted owl or its critical habitat.

#### **NOAA Fisheries – Magnuson-Stevens Fishery Conservation and Management Act**

The MSA, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance essential fish habitat (EFH) for species regulated under a federal fisheries management plan (FMP). For the Pacific Coast (excluding Alaska), there are three FMPs covering groundfish, coastal pelagic species, and Pacific salmon. The analyses in this EA/DEIR satisfy the requirement to consider the impact of the Proposed Action on EFH for both SONCC ESU coho salmon and Chinook salmon in the Trinity River, pursuant to the Pacific Coast Salmon FMP.

EFH refers to those waters and substrate necessary for spawning, breeding, feeding, or growth to maturity. “Waters” include aquatic areas and associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate. “Substrate” includes sediment, hard bottom, structures underlying the waters, and associated biological communities. “Necessary” means the habitat required to support a sustainable fishery and the managed species’ contribution to a healthy ecosystem. “Spawning, breeding, feeding, or growth to maturity” covers a species’ full life cycle.

The MSA requires federal agencies to consult with NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH (MSA Section 305[b][2]). “Adverse effect” means any impact that reduces the quality and/or quantity of EFH, and may include direct, indirect, site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. A component of the consultation process is the preparation and submittal of an Essential Fish Habitat Assessment (EFHA). An EFHA must include the following information: 1) a description of the proposed action; 2) an analysis of the effects, including cumulative effects, of the proposed action on EFH, the managed species, and associated species, such as major prey species, including affected life history stages; 3) the federal agency’s views regarding the effects of the proposed action on EFH; and 4) proposed mitigation, if applicable. In instances where MSA and ESA issues overlap, NMFS encourages an integrated approach for consultation.

In an effort to integrate the consultation process with the environmental review process, Section 3.6 of this EA/DEIR was prepared to satisfy the requirements of the MSA.

#### **California Department of Fish and Game**

##### *California Endangered Species Act*

State-listed species are fully protected under the mandates of the CESA. In 2000, the California Fish and Game Commission (Commission) received a petition to list coho salmon north of San Francisco as an endangered species under provisions of the California Endangered Species Act (CESA). The Commission required that a comprehensive, state-wide coho salmon recovery strategy and plan be developed while it considered the petition. The coho salmon recovery plan was adopted by the Commission in February 2004 (California Department of Fish and Game 2004). However, the Commission declined to list the coho under CESA in June 2004 on a split vote, noting that existing federal protections and voluntary conservation measures and efforts guided by the recovery plan appear sufficient at this time to stem declines of coho salmon in California. On August 5, 2004, the Commission voted to list the coho as threatened from Punta Gorda north to the Oregon border.

#### **California State Lands Commission**

Since the State of California maintains ownership of the bed of the Trinity River, placement of structures in the river may require a public agency lease from the SLC. The SLC reviewed the NOP for the project in May 2007 during the scoping process. Since the state interest has not been defined (jurisdiction has not been determined for the project area), a lease application from the SLC will not be required for the Proposed Action. The SLC maintains, however, that a retroactive lease application may be required if, in the future, jurisdiction is determined for the area in question.

#### **California Regional Water Quality Control Board**

The Regional Water Board requires that a project proponent obtain a Section 401 (CWA) water quality certification for Section 404 permits granted by the USACE. Since the project would have the potential to affect water quality in the Trinity River, the Regional Water Board is likely to impose water quality limitations on the project, either through water quality certification and/or a waste discharge requirement.

Reclamation will prepare and submit to the Regional Water Board a request for water quality certification or waste discharge requirements. The request will be submitted to the Regional Water Board when the pre-construction notification is sent to the USACE for the Section 404 permit. A likely condition of the Section 401 certification is the preparation of an erosion and sedimentation control plan and a spill prevention and containment plan.

#### **California Reclamation Board**

The Trinity River basin does not have any flood control project levees and floodways. Therefore, the California Reclamation Board does not have jurisdictional authority over the Trinity River. No encroachment permit from the Reclamation Board will be required for this project.

### Trinity County Ordinances

The Trinity County Floodplain Management Ordinance, found in Section 29.4 of the County Zoning Ordinance, requires a Floodplain Development Permit for projects that would alter the Trinity River floodplain on private lands within the jurisdiction of Trinity County. The principal requirement of the permit is certification by a registered professional engineer or architect that construction will not adversely affect the flood-carrying capacity of any altered portion of the watercourse, and will not cumulatively raise the 100-year flood elevation by more than 1 foot in the project area. The ordinance also requires notification of adjacent communities, the CDFG, the USACE, the Regional Water Board, and the DWR prior to any alteration or relocation of a watercourse, and the submission of evidence of such notification to the Federal Insurance Administration and the Federal Emergency Management Agency (FEMA).

### 5.3.3 Consistency Determinations

Governing laws for which a consistency determination will need to be made are summarized below.

#### Federal Emergency Management Agency

Trinity County implements FEMA's National Flood Insurance Program (NFIP) through its Floodplain Management Ordinance, which is contained in Section 29.4 of the Zoning Ordinance (Ordinance No. 315). County participation in the NFIP is voluntary, but if the County elected to not participate, landowners in Trinity County would be ineligible for flood insurance and the County would be ineligible for disaster relief payments when flood or other damages occur to facilities such as county roads.

Under the County's Floodplain Management Ordinance, projects must not increase the 100-year flood elevation, otherwise known as base flood elevation (BFE), by more than 12 inches. The general concept of mechanical channel rehabilitation is to remove riparian berms and to lower floodplain elevations in a manner that allows the river to regain some degree of alluvial form and function (build point bars and scour pools). At the level of engineering analysis associated with this EA/DEIR, the alternatives that remove material from the floodplain to upland locations would result in lowering or having no detrimental effects on floodplain elevations within the boundary of the Proposed Action. Prior to issuance of a Floodplain Development Permit for the Proposed Action, the County must receive engineering data to certify that the project will not negatively affect the BFE by more than 12 inches.

#### Section 106 of the National Historic Preservation Act

Section 106 of the NHPA requires federal agencies to evaluate the effects of federal undertakings on historical, archaeological, and cultural resources. Agencies are required, within the vicinity of Proposed Actions, to identify historical or archeological properties, including properties on the National Register of Historic Places (NRHP), and those that the agency and the State Historic Preservation Officer (SHPO) agree are eligible for listing on the NRHP. If the federal project is determined to have an adverse effect on properties listed on the NRHP or those eligible for listing on the NRHP, the agency is required to consult with the SHPO and the Advisory Council on Historic Preservation (ACHP) to develop alternatives or mitigation measures to allow the project to proceed.

An archeological survey report and historic property survey report have been prepared for the Area of Potential Effect encompassed by the Proposed Action and Alternative 1. This report documents the findings of the cultural resources reconnaissance, which was conducted according to the protocol outlined in the Programmatic Agreement among the Reclamation, USFWS, BLM, Hoopa Valley Tribe, California State Historic Preservation Office, and the ACHP regarding Implementation of the Trinity River Mainstem Fishery Restoration. The conclusion of this evaluation was that two cultural resources sites identified within the APE defined for the Proposed Action do not meet the criteria for eligibility for inclusion on the NRHP; the eligibility of a third site has not yet been determined. With implementation of mitigation measures identified in Section 3.11, however, the Proposed Action would have no effect on cultural resources.

#### **Federal Wild and Scenic Rivers Act**

The federal WSRA designates qualifying free-flowing river segments as wild, scenic, or recreational. The WSRA establishes requirements applicable to water resources 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 effect on the free-flowing, scenic, or 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 is designated for its outstandingly remarkable anadromous fishery values and has been classified as a Recreational River from Cedar Flat to Lewiston Dam. Appendix D includes a Wild and Scenic River Section 7 Analysis and Determination for the Proposed Action, which concludes that the Proposed Action would not affect the free-flowing condition of this segment of the Trinity River and would therefore be in compliance with the STNF LRMP and BLM RMP guidelines for Wild and Scenic Rivers.

#### **State Wild and Scenic Rivers Act**

Under the California WSRA, the segment of the Trinity River associated with the Proposed Action is designated as “scenic” and “recreational.” This classification was designated in 1980, a year prior to the federal designation. Public Resources Code Section 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 as “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 for the Proposed Action specific to the state WSRA.

### **5.3.4 Federal Executive Orders**

The project is required to comply with the following federal executive orders and implementing policies.

### **Executive Order 11990 for Wetlands**

Executive Order 11990 requires federal agencies to prepare wetland assessments for federally funded projects located within or affecting wetlands. Agencies must avoid undertaking new construction in wetlands unless no practicable alternative is available and the proposed action includes all practicable measures to minimize effects to wetlands. The Proposed Action will affect a small area of jurisdictional wetlands (wetlands under the jurisdiction of the USACE). The loss of wetland habitat will be addressed through avoidance and habitat restoration within areas temporarily disturbed during construction. Reclamation will continue to coordinate with the USACE regarding the Section 404 permit and potential mitigation measures.

### ***Executive Order 11988 for Floodplain Management***

Executive Order 11988 requires federal agencies to prepare floodplain assessments for projects located within or affecting floodplains. If an agency proposes an action within a floodplain, it must consider alternatives to avoid adverse effects and incompatible development of the floodplain. If the only practicable alternative involves siting in a floodplain, the agency must explain why the action is proposed in the floodplain and must minimize potential harm to or within the floodplain. As discussed in Section 3.4, “Water Resources,” the hydraulic information indicates that the Proposed Action would not constitute a significant encroachment on the base floodplain.

### ***Executive Order 12898 for Environmental Justice***

Executive Order 12898 requires federal agencies to identify and address disproportionately high and adverse human health and environmental effects of federal programs, policies, and activities on minority and low-income populations. Federal agencies are required to provide opportunities for input in the NEPA process by affected communities and to evaluate significant and adverse effects of proposed federal actions on minority and low-income communities during the preparation of NEPA documents. The NEPA scoping process can be used to solicit information on the concerns of minority and low-income populations. If a proposed federal action will not result in significant adverse impacts on minority and low-income populations, the environmental document must describe how Executive Order 12898 was addressed during the NEPA process. Section 3.13 of the EA/DEIR contains a specific section on environmental justice, including details concerning federal responsibilities. The preliminary findings indicate that the Proposed Action will not have an adverse effect on minority and low-income populations.

### **Executive Order 13007 for Indian Sacred Sites on Federal Land**

Executive Order 13007 provides that each federal agency with statutory or administrative responsibility for management of federal lands shall, to the extent practicable and as permitted by law, accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners, and shall avoid adversely affecting the physical integrity of such sacred sites. The potential for any such sites to occur within the boundary established for the project is discussed in Section 3.11. The preliminary findings indicate the Proposed Action will not have an adverse effect on Indian Sacred Sites on federal land.

### Executive Order 12373 for State, Area-Wide, and Local Plan and Program Consistency

Agencies must consider the consistency of a proposed action with approved state and local plans and laws. In accordance with Executive Order 12372, this EA/DEIR has been prepared with input from the cooperating, responsible, and trustee agencies. Additionally, Trinity County policies that would affect or be affected by any of the alternatives are discussed in Chapter 3. During the public review period, the EA/DEIR will be circulated to the appropriate state and local entities to satisfy review and consultation requirements.

### Executive Order 13443 (Facilitation of Hunting Heritage and Wildlife Conservation)

Executive Order 13443 directs federal agencies that have programs and activities that have a measurable effect on public land management, outdoor recreation, and wildlife management, including the Department of the Interior and the Department of Agriculture, to facilitate the expansion and enhancement of hunting opportunities and the management of game species and their habitat. The proposed project is in compliance with this order. Restoration of the Trinity River will improve recreational opportunities, including hunting where legal, on and adjacent to the sites.

### Executive Order 13112 (Invasive Species)

Executive Order 13112 requires federal agencies to use relevant programs and authorities to:

- prevent the introduction of invasive species;
- detect and control populations in a cost-effective and environmentally sound manner;
- provide for restoration of native species;
- promote public education on invasive species; and
- not authorize, fund or carry out actions to cause or promote the spread or introduction of invasive species.

Restoration of the Trinity River will improve recreational opportunities, including hunting where legal, on and adjacent to the sites.

### Indian Trust Assets

The United States Government's trust responsibility for Indian Trust Assets requires federal agencies to take measures to protect and maintain trust assets. These responsibilities include taking reasonable actions to preserve and restore tribal resources. Indian Trust Assets are legal interests in property and rights held in trust by the United States for Indian tribes or individuals. This EA/DEIR contains a specific section on Tribal Trust (Section 3.10) that details federal responsibilities with regard to the Hoopa Valley and Yurok tribal resources. The preliminary findings indicate the Proposed Action will not have an adverse effect on Indian trust assets.

# Chapter 6

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## Chapter 7

### List of Acronyms and Abbreviations

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°C	degrees Celsius
°F	degrees Fahrenheit
5C Program	Five Counties Salmonid Conservation Program
ACHP	Advisory Council on Historic Preservation
ADT	average daily traffic
AEAM	Adaptive Environmental Assessment and Management
af	acre-feet
afa	acre feet annually
a.m.	morning
APE	Area of Potential Effect
BA	Biological Assessment
Basin Plan	Water Quality Control Plan for the North Coast Region, as amended June 28, 2001
BA/EFHA	Biological Assessment/Essential Fish Habitat Assessment
BEA	U.S. Bureau of Economic Analysis
BFE	base flood elevation
BIA	U.S. Bureau of Indian Affairs
BLM	U.S. Bureau of Land Management
BMP	best management practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
CalFire	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFA	California Department of Food and Agriculture
CDFG	California Department of Fish and Game
CED	Center for Economic Development
Census	U.S. Bureau of the Census
CEQ	President's Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System

CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CHP	California Highway Patrol
CLOMR	conditional letter of map revision
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
Commission	California State Fish and Game Commission
County	Trinity County
CRA	California Resources Agency
CRHR	California Register of Historic Resources
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWA	Clean Water Act
d <sub>50</sub>	mean diameter of channel bed material
dB	logarithmic decibel
dba	“A-weighted” decibel scale
DEIS	Draft Environmental Impact Statement
DOI	U.S. Department of the Interior
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EA	Environmental Assessment
EA/DEIR	Environmental Assessment/Draft Environmental Impact Report
EDD	California Employment Development Department
EFH	essential fish habitat
EFHA	Essential Fish Habitat Assessment
e.g.	for example
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
et al.	and others
et seq.	and the following ones
FDA	Food and Drug Administration
FEIS/EIR	Final Environmental Impact Statement/Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHO	Flood Hazard Overlay
FIRM	Flood Insurance Rate Maps

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FMP	Fishery Management Plan
FONSI	Finding of No Significant Impacts
FR	Federal Register
FY	fiscal year
GIS	geographic information system
H <sub>2</sub> S	hydrogen sulfide
HEC-RAS	Hydraulic Engineering Center River Analysis System
Hg	mercury
HVT	Hoopa Valley Tribe
i.e.	that is
ISMS	Interagency Species Management System
KFMC	Klamath Fishery Management Council
kg	kilogram
KMP	Klamath Mountains Province
KOP	key observation point
L <sub>dn</sub>	day-night average sound level
L <sub>eq</sub>	equivalent noise levels
LOMP	letter of map revision
LRMP	Land and Resource Management Plan
LWD	large woody debris
m	meter
MBTA	Migratory Bird Treaty Act
maf	million acre-feet
MCE	maximum credible earthquake
MCL	maximum contaminant level
MDBM	Mount Diablo Base and Meridian
mg	milligram
ml	milliliters
MMRP	Mitigation Monitoring and Reporting Program
MOU	memorandum of understanding
mph	miles per hour
MSA	Magnuson-Stevens Fishery Conservation and Management Act
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
NAD	North American Datum

NAHC	Native American Heritage Commission
NCAB	North Coast Air Basin
NCRWQCB	North Coast Regional Water Quality Control Board
NCUAQMD	North Coast Unified Air Quality Management District
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NO <sub>x</sub>	nitrogen oxide gases
NO <sub>2</sub>	nitrogen dioxide
NOD	Notice of Determination
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSR	North State Resources, Inc.
NTU	nephelometric turbidity unit
O <sub>3</sub>	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OHP	Office of Historic Preservation
ORVs	Outstandingly Remarkable Values
OSHA	Occupational Safety and Health Administration
PA	Programmatic Agreement
Pb	lead
PFMC	Pacific Fishery Management Council
pga	peak ground acceleration
p.m.	night
PM <sub>2.5</sub>	fine particulate matter (particulate matter less than 2.5 microns in aerodynamic diameter)
PM <sub>10</sub>	particulate matter less than 10 microns in aerodynamic diameter
ppb	parts per billion
ppm	parts per million
Q	flow rate (typically expressed in cfs)
Q <sub>50</sub>	50-year flood flow
Q <sub>100</sub>	base or 100-year flood flow
Q <sub>max</sub>	maximum unobstructed flow
Q <sub>MCR</sub>	maximum controlled-flow release
Q <sub>1997</sub>	estimated flow during 1/1/97
ORV	outstandingly remarkable values

PA	Programmatic Agreement
PFMC	Pacific Fishery Management Council
PL	Public Law
RCRA	Resource Conservation and Recovery Act
Reclamation	U.S. Bureau of Reclamation
REIS	Regional Economic Information System
Regional Water Board	North Coast Regional Water Quality Control Board
RM	River Mile
RMP	Resource Management Plan
ROD	Record of Decision
ROW	right-of-way
RPM	reasonable and prudent measures
RSL	Redwood Sciences Laboratory
RVD	Recreational Visitor Day
RWQCB	Regional Water Quality Control Board
SCH	State Clearinghouse
SEIS	Supplemental Environmental Impact Statement
SHPO	California State Historic Preservation Officer
SLC	California State Lands Commission
SO <sub>2</sub>	sulfur dioxide
SMARA	Surface Mining and Reclamation Act
SONCC	Southern Oregon/Northern California Coasts
SR	State Route
SRA	shaded riverine aquatic
State Water Board	State Water Resources Control Board
STNF	Shasta-Trinity National Forest
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCLP	Toxicity Characteristic Leaching Procedure
TCRCD	Trinity County Resource Conservation District
TCSD	Trinity County Sheriff's Department
TCWMC	Trinity County Weed Management Cooperative
TMC	Trinity Management Council
TMDL	Total Maximum Daily Load
TRD	Trinity River Diversion
TRFE	Trinity River Flow Evaluation
TRFES	Trinity River Flow Evaluation Study
TRMFR	Trinity River Mainstem Fishery Restoration
TRRP	Trinity River Restoration Program
TRSSH	Trinity River Salmon and Steelhead Hatchery

## 7. List of Acronyms and Abbreviations

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USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VAU	visual assessment unit
VRM	Visual Resource Management
WCB	California Wildlife Conservation Board
WDR	Waste Discharge Requirements
WMA	Weed Management Area
WQC	Water Quality Certification
WSE	water-surface elevation
WSRA	Wild and Scenic Rivers Act

# Chapter 8

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# Chapter 9

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## **Distribution List**

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- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Department of Interior, Bureau of Land Management
- National Marine Fisheries Service
- U.S. Department of Agriculture, Forest Service

### **9.2 State Agencies**

- California Department of Fish and Game
- California Regional Water Quality Control Board, North Coast Region
- California State Lands Commission
- California Department of Water Resources
- California Department of Forestry and Fire Protection

### **9.3 Local Agencies**

- North Coast Unified Air Quality Management District
- Trinity County Planning Department

### **9.4 Other Agencies, Organizations, and Individuals**

- Hoopa Valley Tribe
- Yurok Tribe
- Western Area Power Administration

