

EXHIBIT A
CEQA FINDINGS OF FACT

for the Final Environmental Impact Report on the

INDIAN CREEK REHABILITATION SITE: TRINITY RIVER MILE 93.7–96.5

May 1, 2007

I.

INTRODUCTION

The Environmental Assessment – Finding of No Significant Impact/Final Environmental Impact Report (“EA–FONSI/FEIR”) prepared for the Indian Creek Rehabilitation Site: Trinity River Mile 93.7 to 96.5 (the “proposed project” or “proposed action”) addresses the environmental effects associated with rehabilitation activities along a 2.8-mile reach of the Trinity River beginning at its confluence with Weaver Creek and extending upstream of its confluence with Indian Creek in the general vicinity of Douglas City, Trinity County, California. The proposed project addressed in these Findings of Fact corresponds to Alternative 3 in the EA–FONSI/FEIR. These findings have been prepared to comply with requirements of the California Environmental Quality Act (“CEQA”) (Pub. Resources Code, § 21000 et seq.) and the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.). CEQA applies to the EIR portion of the EA–FONSI/FEIR.

II.

DEFINITIONS

°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
Caltrans	California Department of Transportation
CARB	California Air Resources Board

CCAA	California Clean Air Act
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Protection
CDFA	California Department of Food and Agriculture
CDFG	California Department of Fish and Game
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 ₂	carbon dioxide
Commission	California State Fish and Game Commission
Corps	U.S. Army Corps of Engineers
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 ₅₀	mean diameter of channel bed material
dB	logarithmic decibel
dBA	"A-weighted" decibel scale
DEIS	draft environmental 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.	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
FMP	Fishery Management Plan
FONSI	Finding of No Significant Impact
FR	Federal Register
FY	fiscal year
GIS	geographic information system
H ₂ 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
JCVFD	Junction City Volunteer Fire Department
KFMC	Klamath Fishery Management Council
kg	kilogram
KMP	Klamath Mountains Province
KOP	key observation point
L _{dn}	day-night average sound level
L _{eq}	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 (now NOAA Fisheries)
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NO _x	nitrogen oxide gases
NO ₂	nitrogen dioxide
NOD	Notice of Determination
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NSR	North State Resources, Inc.
NTU	nephelometric turbidity unit
O ₃	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 _{2.5}	fine particulate matter (particulate matter less than 2.5 microns in aerodynamic diameter)
PM ₁₀	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 ₅₀	50-year flood flow
Q ₁₀₀	base or 100-year flood flow
Q _{max}	maximum unobstructed flow
Q _{MCR}	maximum controlled-flow release
Q ₁₉₉₇	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 Science Laboratory
RVD	Recreational Visitor Day
RWQCB	Regional Water Quality Control Board
SCH	State Clearinghouse
Sec	section
SEIS	Supplemental Environmental Impact Statement
SHPO	California State Historic Preservation Officer
SLC	California State Lands Commission
SO ₂	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

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
WDRs	Waste Discharge Requirements
WMA	Weed Management Area
WQC	Water Quality Certification
WSE	water-surface elevation
WSRA	Wild and Scenic Rivers Act

III.

PROJECT DESCRIPTION

Overview

The project is one part of a larger effort to restore the anadromous fishery of the Trinity River, as described in the Secretary of the Interior's 2000 Trinity River Record of Decision ("ROD"). (EA/Draft EIR (EA/DEIR), at pp. 1-1 to 1-2, EA/Final EIR, at pp. 3-3.)

Project Objectives

The following goals of the Trinity River Restoration Program are derived from the EA/DEIR. (EA/DEIR, at pp. 1-13 to 1-14.) These goals support the project and provide a framework for the development of alternatives required by CEQA:

- protect and/or enhance the ORVs associated with the designation of a Wild and Scenic River (federal and California);
- induce changes in channel geometry in response to constructing channel and floodplain features designed for the river's current and future hydrologic regime;
- evaluate the evolution of channel planform features in response to designing and implementing the Proposed Action at a river segment (1 mile) scale;

- evaluate the biological response (aquatic, riparian, upland) to changes in the physical environment and incorporate this information into the AEAM Program;
- expand the understanding of the role that tributaries such as Indian Creek and Weaver Creek play in terms of accretion flow relative to mainstem flows;
- 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;
- design the project to function with the river's current hydrology (post-ROD) estimated at the site;
- integrate known fluvial and ecological theories and relationships with the site's measured physical and biological attributes and evaluate the response over a definitive time frame;
- conduct in-channel activities in a manner that reduces construction-related impacts, maximizes the river's ability to rehabilitate itself during high flows, and reduces the cost and complexity of implementation;
- attempt to preserve unique and valuable geomorphic and biological features wherever practicable (e.g., hydraulic controls, high-quality spawning or adult holding habitat, cottonwood galleries); and
- allow dam operators maximum flexibility to provide instream flow releases from Lewiston Dam adequate to meet fishery and geomorphic flow needs for the mainstem Trinity River and to maximize sediment transport in support of meeting Trinity River Total Maximum Daily Load (TMDL) objectives to restore the coldwater fishery beneficial use.

The following project objectives apply to the project's lead agency for CEQA purposes:

- minimize the threat to public safety and potential damage to property posed by the existing high likelihood of flooding;
- provide maximum flexibility for implementing a variety of potential Trinity River fishery flow alternatives, as well as other flow alternatives outside the ROD, such as increasing dam releases during periods of high downstream tributary inflows;
- allow for high-efficiency sediment transport in the Trinity River to maximize the amount of sediment transported on a per acre-foot basis so that the Trinity River can be removed from California's Clean Water Act Section 303(d) Impaired Waterbodies List, while minimizing the total amount of water necessary to transport sediment through the river system;

- provide maximum flexibility for operations of the Trinity River Division during periods of high runoff and flooding, which could result in increased water in storage available for multiple beneficial uses (i.e., fisheries, recreation, water supply, water quality, and power production).
- facilitate recovery of fish and wildlife resources that are listed as threatened and endangered.

The following objectives apply to the responsible and trustee agencies for the Proposed Action, including the California Regional Water Quality Control Board – North Coast Region (Regional Water Board), the State Lands Commission (SLC), CDFG, and the Hoopa Valley Tribe (HVT):

- compliance with the California Water Code and Basin Plan to ensure the highest reasonable quality of waters of the state and allocation of those waters to achieve the optimum balance of beneficial uses;
- protection of the public trust assets of the Trinity River watershed;
- conservation, restoration, and management of fish, wildlife, native plant, and jurisdictional wetland resources; and
- compliance with the Water Quality Control Plan for the Hoopa Valley Indian Reservation to preserve and enhance water quality on the Reservation, and to protect the beneficial uses of water.

Project Description

Initially, 44 potential channel rehabilitation sites and three potential side channel sites between Lewiston Dam and the North Fork Trinity River were identified (U.S. Fish and Wildlife Service 2000). Subsequently, in a detailed review of potential river rehabilitation areas, a total of 104 potential rehabilitation sites were identified.

Ultimately, the sites were selected using criteria that identified physical features and processes such as channel morphology, sediment supply, and high-flow hydraulics that would encourage a dynamic alluvial channel. Factors such as property ownership, access to the sites, and engineering and economic feasibility were also considered in the site selection process. The project boundary encompasses portions of two channel rehabilitation sites (Nos. 19 and 20) and one side channel (No. 3) identified in the FEIS. Of the 104 sites identified in subsequent efforts, eight of them are located within the project boundary.

In general, the approach to the channel rehabilitation effort is to selectively remove fossilized riparian berms that developed after the Trinity River Diversion (TRD) was completed as a result of the loss of scour associated with peak flows. Along with berm removal, physical alteration of other alluvial features (i.e., floodplains) and removing riparian vegetation at strategic locations would promote the alluvial processes necessary for the restoration and maintenance of alternate bar riverine habitats.

As described in the FEIS/EIR, the rehabilitation sites exhibit a variety of conditions that require site-specific designs. The FEIS/EIR also recognized that, in many instances, the entire site would not require treatment to facilitate rehabilitation. This is because strategically treating certain areas is expected to result in a dynamic alluvial channel that will promote the formation and maintenance of an alternate bar channel in both treated and untreated areas.

The EA-FONSI/FEIR identifies 24 discrete activity areas within the site boundary defined for the Proposed Action. The type, extent, and level of activity at these activity areas may be different, depending on the alternative. These areas were defined by the interdisciplinary design team to include riverine areas, upland areas, access areas (roads and river crossings), and construction support areas. These activity areas are labeled as “riverine – R”; “dredge tailing deposits – T”; “upland – U”; and “construction use/staging – C.” Additional activity areas are labeled as roads or crossings. Figures 2.1a and 2.1b illustrate these activity areas and their relationship to the Trinity River. Table 2-1 identifies the activity areas, shows their size (acres), quantifies the treatment area (acres), indicates location relative to the Trinity River (river right/left), and provides a general characterization of the existing geomorphic features at each site.

The activities included in the Proposed Project emphasize selective removal of fossilized riparian berms; reconnecting the river’s floodplain with the river at intermediate flows (between 450 and 6,000 cubic feet/second (cfs)); and enhancing the bed and banks of the Trinity River to promote well-distributed aquatic habitat over a range of intermediate flows. Removing the berms and vegetation at strategic locations will promote the river processes necessary for the restoration and maintenance of Trinity River alternate bars, thereby enhancing salmonid rearing habitat.

The Trinity River Restoration Program (TRRP) has developed a number of programmatic objectives for channel rehabilitation projects. These objectives are described in Chapter 2 of the EA/DEIR. The programmatic objectives were used to identify a number of specific activities that could be applied at one or more sites. Each activity area was established to meet a suite of specific objectives in conformance with the overall goals and objectives outlined for the TRRP. Ultimately, the goal of these channel rehabilitation efforts is to provide suitable rearing habitat for anadromous salmonids and to reestablish geomorphic processes associated with an alluvial river (alternate point bars).

Alternative 3 was developed as a result of public comments on potentially significant impacts from the Proposed Action and Alternatives 1 and 2, as well as the need for spawning gravel to place in upstream areas for fish habitat. The difference between Alternative 3 and the other alternatives is that in-channel work is significantly reduced or eliminated, and allows processing of gravel and transport to up-river stockpile areas over a 5 year period. Alternative 3 is the environmentally preferred alternative.

IV.

BACKGROUND

Trinity River Restoration

Completion of the Trinity River Diversion in 1964 blocked migratory fish access to habitat upstream of Lewiston Dam, eliminated sediment transport from over 700 square miles of the upper watershed, and restricted anadromous fish populations to the remaining habitat below Lewiston Dam. Trans-basin diversions from Lewiston Reservoir to the Sacramento River altered the hydrologic regime of the Trinity River, resulting in riparian encroachment and fossilization of point bars and riparian berms from Lewiston downstream to the confluence with the North Fork Trinity River.

Encroachment of riparian vegetation into the former active channel promoted the deposition of fine-textured sediments, resulting in the formation of linear berms that further confined and simplified the channel, reduced the diversity of riparian age classes and riparian vegetation species, impaired floodplain access, and adversely affected fish habitat.

In 1981, in response to these adverse impacts on fish habitat and subsequent declines in salmon runs, the Secretary of the Interior directed the U.S. Fish and Wildlife Service (USFWS) to initiate a 12-year flow study to determine the effectiveness of flow restoration and other mitigation measures for impacts of the TRD. Then, in 1984, Congress enacted the Trinity River Fish and Wildlife Program to further promote and support management and fishery restoration actions in the Trinity River basin. Under this program, nine pilot bank rehabilitation projects between Lewiston Dam and the North Fork Trinity River were implemented between 1991 and 1993, among other actions.

In 1992, Congress enacted the Central Valley Project Improvement Act (CVPIA). One purpose of the CVPIA (Section 3406) was to protect, restore, and enhance fish, wildlife, and associated habitats in the Trinity River basin. The act also directed the Secretary to finish the 12-year Trinity River Flow Evaluation Study (TRFES) and to develop recommendations “regarding permanent instream fishery flow requirements, Trinity River Division operating criteria, and procedures for the restoration and maintenance of the Trinity River fishery.” The Trinity River Flow Evaluation Final Report was ultimately published in 1999 by the USFWS and the HVT, providing a framework for restoration activities below Lewiston Dam.

In 1994, the USFWS as the National Environmental Policy Act (NEPA) lead agency and Trinity County as the CEQA lead agency began the public process for developing the Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Trinity River Mainstem Fishery Restoration Program. The FEIS, published in October 2000, functions as a project-level NEPA document for policy decisions associated with managing Trinity River flows and as a programmatic NEPA document providing first-tier review of other potential actions, including the Proposed Project. The EIR portion of the joint document, however, has no legal standing, as Trinity County, the CEQA lead agency, chose not to complete the document for CEQA purposes. This decision by the County prevents the County or any other agency subject to CEQA from using the

EIS/EIR as a “first tier” CEQA document. For this reason, the EIR for the Indian Creek Rehabilitation Site is intended to function as a complete, stand-alone CEQA document that is not dependent on any prior CEQA document for addressing impacts that must be analyzed under CEQA.

In conjunction with the planning and implementation of the Indian Creek Channel Rehabilitation Project, the TRRP has issued a Notice of Preparation for the Lewiston–Dark Gulch Channel Rehabilitation Project. This project is intended to provide juvenile fish habitat in the Trinity River Mile 105.4 to 111.7. Meanwhile, design options and implementation of other proposed Trinity River restoration components, including coarse sediment/spawning gravel supplementation, infrastructure improvement projects to protect private and public property from damage by ROD flows, and watershed improvement projects are proceeding. Since these projects may occur simultaneously, the members of the Trinity Management Council (TMC) in conjunction with Trinity County are making a concerted effort to ensure that the models, data, assumptions, and analyses for these projects are fully coordinated.

Numerous other watershed restoration projects are being planned and implemented throughout the Trinity River basin. The Trinity County Resource Conservation District (TCRCD), the Five Counties Salmonid Conservation Program, the U.S. Bureau of Land Management (BLM), and the Shasta-Trinity National Forest (STNF), with funding provided by the CDFG’s Coastal Salmon Recovery Program, the State Water Resources Control Board (State Water Board), the U.S. Department of Agriculture, the BLM’s Jobs in the Woods Program, and the National Fish and Wildlife Foundation are implementing numerous upslope watershed restoration projects throughout the basin, including the South Fork Trinity River watershed.

Trinity County, with grant funding provided by CDFG and the State Water Board to the Five Counties Salmonid Conservation Program, has inventoried all county road crossings of fish-bearing streams in the Trinity River basin and is currently implementing the highest ranked migration barrier removal projects. Trinity County has also completed a sediment source inventory on county roads and is prioritizing and implementing projects to reduce road-related sediment sources. The BLM has completed a similar inventory of its roads in the Trinity River watershed. As needed, road rehabilitation projects will occur based on these inventories. Currently, the U.S. Forest Service (USFS) is planning and/or implementing timber management, fuels reduction, and watershed improvement projects in the Weaver Creek and Rush Creek watersheds. NEPA and CEQA review is being provided on a project-by-project basis by the appropriate agencies. State, regional, or local entities could be the CEQA lead agency for those projects. In general, the USFS acts as the NEPA lead agency for projects on National Forest lands, and BLM acts as NEPA lead agency for projects on BLM lands.

V. RECORD OF PROCEEDINGS

The record of proceedings for Trinity County's decision on the project consists of the following documents, at a minimum:

- The NOP, including related comments from agencies, organizations and individuals and all other public notices issued by Trinity County in conjunction with the project;
- The Environmental Assessment/Draft Environmental Impact Report for the Indian Creek Rehabilitation Site: Trinity River Mile 93.7 to 96.5, Volumes 1–3 (July 2006);
- The Supplemental Environmental Assessment/Recirculated Partial Draft Environmental Impact Report (SEA/RPDEIR) for the Indian Creek Rehabilitation Site: Trinity River Mile 93.7 to 96.5 (December 2006);
- All comments submitted by agencies or members of the public during the 45-day comment period on the EA/Draft EIR and the separate 45-day comment period on the SEA/RPDEIR;
- All comments and correspondence submitted to Trinity County with respect to the project, in addition to timely comments on the EA/Draft EIR and the SEA/RPDEIR;
- The mitigation monitoring and reporting plan for the project;
- All findings and resolutions adopted by Trinity County in connection with the Indian Creek Rehabilitation Site project, and all documents cited or referred to therein;
- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the project prepared by Trinity County, consultants to Trinity County, or responsible or trustee agencies with respect to Trinity County's compliance with the requirements of CEQA and with respect to Trinity County's action on the Indian Creek project;
- All documents submitted to Trinity County by other public agencies or members of the public in connection with the Indian Creek project, up through the close of the EA/DEIR comment period on September 18, 2006, and the close of the SEA/RPDEIR comment period on February 14, 2007.
- Any minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by Trinity County in connection with the Indian Creek Rehabilitation Site project;
- Any documentary or other evidence submitted to Trinity County at such information sessions, public meetings, and public hearings;

- Matters of common knowledge to Trinity County, including, but not limited to Federal, State, and local laws and regulations;
- Any documents expressly cited in these findings, in addition to those cited above; and
- Any other materials required for the record of proceedings by Public Resources Code section 21167.6, subdivision (e).

The official custodian of the record is the Trinity County Planning Department located at 60 Glen Road, Weaverville, CA 96093-2819.

VI. **FINDINGS REQUIRED UNDER CEQA**

Public Resources Code Section 21002 provides that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would *substantially lessen* the significant environmental effects of such projects[.]” (Emphasis added.) The same statute states that the procedures required by CEQA “are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will *avoid* or *substantially lessen* such significant effects.” (Emphasis added.) Section 21002 goes on to state that “in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.”

The mandate and principles announced in Public Resources Code Section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required. (See Pub. Resources Code, § 21081, subd. (a); CEQA Guidelines, § 15091, subd. (a).) For each significant environmental effect identified in an EIR for a proposed project, the approving agency must issue a written finding reaching one or more of three permissible conclusions. The first such finding is that “[c]hanges or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.” (CEQA Guidelines, § 15091, subd. (a)(1).) The second permissible finding is that “[s]uch changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.” (CEQA Guidelines, § 15091, subd. (a)(2).) The third potential conclusion is that “[s]pecific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the

final EIR.” (CEQA Guidelines, § 15091, subd. (a)(3).) Public Resources Code section 21061.1 defines “feasible” to mean “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors.” CEQA Guidelines section 15364 adds another factor: “legal” considerations. (See also *Citizens of Goleta Valley v. Board of Supervisors* (“*Goleta II*”) (1990) 52 Cal.3d 553, 565.)

The concept of “feasibility” also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417.) “[F]easibility” under CEQA encompasses “desirability” to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors.” (*Id.*; see also *Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715.)

The CEQA Guidelines do not define the difference between “avoiding” a significant environmental effect and merely “substantially lessening” such an effect. Trinity County must therefore glean the meaning of these terms from the other contexts in which the terms are used. Public Resources Code section 21081, on which CEQA Guidelines section 15091 is based, uses the term “mitigate” rather than “substantially lessen.” The CEQA Guidelines, therefore, equate “mitigating” with “substantially lessening.” Such an understanding of the statutory term is consistent with the policies underlying CEQA, which include the policy that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.” (Pub. Resources Code, § 21002.)

For purposes of these findings, the term “avoid” refers to the effectiveness of one or more mitigation measures to reduce an otherwise significant effect to a less than significant level. In contrast, the term “substantially lessen” refers to the effectiveness of such measure or measures to substantially reduce the severity of a significant effect, but not to reduce that effect to a less than significant level. These interpretations appear to be mandated by the holding in *Laurel Hills Homeowners Association v. City Council* (1978) 83 Cal.App.3d 515, 519-521, in which the Court of Appeal held that an agency had satisfied its obligation to substantially lessen or avoid significant effects by adopting numerous mitigation measures, not all of which rendered the significant impacts in question less than significant. For this project all potential significant impacts identified in the EIS/EA will be avoided.

Moreover, although section 15091, read literally, does not require findings to address environmental effects that an EIR identifies as merely “potentially significant,” these findings will nevertheless fully account for all such effects identified in the Final EIR.

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Project modification or alternatives are not required, however, where such changes are infeasible or where the responsibility for modifying the project lies with some other agency. (CEQA Guidelines, § 15091, subd. (a), (b).)

With respect to a project for which significant impacts are not avoided or substantially lessened, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a statement of overriding considerations setting forth the specific reasons why the agency found that the project's "benefits" rendered "acceptable" its "unavoidable adverse environmental effects." (CEQA Guidelines, §§ 15093, 15043, subd. (b); see also Pub. Resources Code, § 21081, subd. (b).) The California Supreme Court has stated, "[t]he wisdom of approving . . . any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced." (*Goleta II*, 52 Cal.3d at p. 576.)

These findings constitute Trinity County's best efforts to set forth the evidentiary and policy bases for its decision to approve the project in a manner consistent with the requirements of CEQA. To the extent that these findings conclude that various proposed mitigation measures outlined in the Final EIR are feasible and have not been modified, superseded, or withdrawn, Trinity County hereby binds itself to implement these measures. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when Trinity County adopts a resolution approving the project.

VII.
MITIGATION MONITORING
AND REPORTING PROGRAM

A Mitigation Monitoring and Reporting Program (“MMRP”) was prepared for the project, and was approved by Trinity County by the same resolution that has adopted these findings. (See Pub. Resources Code, § 21081.6, subd. (a)(1); CEQA Guidelines, § 15097.) As a condition of the EIR approval process, Trinity County must adopt the MMRP. Through this condition, Trinity County has ensured the implementation of all identified mitigation measures. Trinity County will use the MMRP to track compliance with project mitigation measures. The MMRP will remain available for public review during the compliance period.

VIII.
SIGNIFICANT EFFECTS, FINDINGS, AND MITIGATION MEASURES

The Draft EIR and the SEA/RPDEIR identified a number of significant environmental effects (or “impacts”) that the project will cause. All of these significant effects can be fully avoided (i.e., rendered less than significant) through the adoption of the feasible mitigation measures identified in the MMRP (Appendix 1 of the Final EIR). In summary, the mitigation measures have been adopted by Trinity County and incorporated into the project to avoid the significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Geology, Fluvial Geomorphology, and Soils

Significance Criteria

Adverse impacts are considered significant if implementation of project alternatives could subject people, structures, or other resources to geologic or seismic hazards or disrupt, eliminate, or otherwise render unusable geologic or soil resources. (EA/DEIR, at p. 3.3-16.) Significant impacts would occur if the project would:

- Expose people, structures or critical utility facilities to major geologic hazards (including seismicity, landslides, seiches, and liquefaction);
- Involve changes in topography that would result in unstable soil conditions;

- Increase erosion rates to a level in which associated sedimentation levels could affect streams, rivers, or other water bodies;
- Interfere with existing, proposed, or potential development of mineral resources; or
- Be inconsistent with the 10 Trinity River healthy alluvial river attributes.

Impact 3.3-2:

Construction activities associated with the project could potentially result in increased erosion and short-term sedimentation of the Trinity River.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Alternative 3 would temporarily result in soil disturbance, soil compaction within proposed access road and construction staging areas, disruption of soil cohesion and armoring, and increased soil exposure to energetic weather conditions, which would increase the short-term potential for wind and water erosion. Increased wind and water erosion and associated downstream sedimentation within the Trinity River would occur if any soils were left exposed during the later winter and early spring periods of high precipitation. Impacts of turbidity levels specific to water quality degradation are analyzed in Section 3.5, Water Quality, and associated impacts to anadromous fisheries are analyzed in Section 3.6, Fishery Resources.

Susceptibility to erosion is controlled by several factors, including terrain, land use, vegetation, soil type, and local climate. A soil with high erodibility typically experiences more erosion than a soil with low erodibility. However, in the absence of an adverse condition (i.e., rainfall, lack of vegetation), a soil that is classified as highly erodible may not experience significant erosion. In general, significant soil erosion would occur only at locations at the margins of constructed features (e.g., feathered edges, side channels, floodplains) where a combination of fine sandy to silty soils occurs.

Mitigation Measures:

2a *Reclamation or its contractors shall implement the following measures throughout construction:*

- *Areas where ground disturbance will need to occur shall be identified in advance of construction and limited to only those areas that have been approved by Reclamation.*
- *All construction vehicular traffic shall be confined to the designated access routes and staging area.*
- *Disturbance shall be limited to the minimum necessary to complete construction activities.*
- *All supervisory construction personnel shall be informed of environmental concerns, permit conditions, and final rehabilitation specifications.*

2b *Reclamation or its contractors shall prepare an erosion and sedimentation control plan (Storm Water Pollution Prevention Plan [SWPPP]. Measures for erosion control will be prioritized based on proximity to the river. The following measures shall be used as a guide to develop this plan:*

- *Restore disturbed areas to pre-construction contours to the fullest extent feasible.*
- *Salvage, store, and use the highest quality soil for revegetation.*
- *Discourage noxious weed competition and control noxious weeds.*
- *Clear or remove roots from steep slopes immediately prior to scheduled construction.*
- *Leave drainage gaps in topsoil and spoil piles to accommodate surface water runoff.*
- *To the fullest extent possible, cease excavation activities during significantly wet or windy weather.*

- *Use bales and/or silt fencing as appropriate.*
- *Before seeding disturbed soils, work the topsoil to reduce compaction caused by construction vehicle traffic.*
- *Rip feathered edges (and floodplain surfaces where appropriate) to approximately 18 inches depth. The furrowing of the river's edge will remove plant roots to allow mobilization of the bed, but will also intercept sediment before it reaches the waterway.*
- *Spoil sites shall be located such that they do not drain directly into a surface water feature, if possible. If a spoil site drains into a surface water feature, catch basins shall be constructed to intercept sediment before it reaches the feature. Spoil sites shall be graded and vegetated to reduce the potential for erosion.*
- *Sediment control measures shall be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated. If work activities take place during the rainy season, erosion control structures must be in place and operational at the end of each construction day.*

Water Quality

Significance Criteria

The project would result in significant adverse impacts if it would result in any of the following:

- violations of state or federal numerical water quality standards or state or federal narrative water quality objectives for construction activities;
- substantial degradation of water quality, such that existing beneficial uses are precluded specifically because of adverse water quality;
- violation of any waste discharge requirements and/or Section 401 Certification conditions;
- substantial alterations of the course of a stream or river in a manner that would result in substantial erosion or siltation onsite or offsite;

- short-term or long-term increases in turbidity of 20 percent or more over naturally occurring background levels; or
- violation of site-specific temperature objectives for the Trinity River contained in the Water Quality Control Plan for the North Coast Region (North Coast Regional Water Quality Control Board, 1993, as amended) and included as Table 3.5-3 of this section.

Impact 3.5-1:

Construction of the proposed project could result in short-term, temporary increases in turbidity and total suspended solids levels during construction.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Temporary increases in turbidity or total suspended solids levels associated with construction of Alternative 3 would likely be similar to those under the Proposed Action. The primary difference between the Proposed Action and Alternative 3 involves the use of an alternative access route (including Weaver Creek Crossing, X-3) to activity areas on the left bank of the river (R-8, R-9, R-10, U-3, T-1, and T-2).

Similar to the Proposed Action, riverine activities under Alternative 3 would be staged to minimize potential turbidity effects. These activities could, however, result in short-term increases in turbidity and suspended solids concentrations in the water column that could potentially violate the Basin Plan objectives for turbidity in the Trinity River. In addition, Alternative 3 includes reductions of in-stream activity planned under the Proposed Action, including the reduction of activity at R-3, exclusion of activity at R-5, and reduction of activity at R-9. Short-term increases in turbidity and suspended solids levels during construction would be a significant impact.

Mitigation Measures:

- 1a. Turbidity increases associated with activities shall not exceed the water quality objectives for turbidity in the Trinity River basin. Turbidity levels are defined in nephelometric turbidity units (NTUs). The current threshold for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (2001), is summarized below.
- Turbidity shall not be increased by more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.
- 1b. To ensure that turbidity levels do not exceed the threshold listed above during river's edge project construction activities, Reclamation or its contractor shall monitor turbidity levels 50 feet upstream and 500 feet downstream of the point of river's edge construction activities. At a minimum, field turbidity measurements shall be collected on a daily basis during river's edge construction (within 10 ft of the water line). Whenever a visible increase in turbidity is observed, monitoring frequency shall be a minimum of every 2 hours during this period.
- If the grab sample results indicate that turbidity levels exceed the established thresholds identified in the Basin Plan, actions shall be implemented immediately to reduce and maintain turbidity at or below the thresholds. Potential remedial actions include temporarily halting construction activities and implementation of additional Best Management Practices (BMPs) until turbidity is at or below the thresholds.
- 1c. Fill gravels used on the streambeds, stream banks, and river crossing will be composed of washed, spawning-sized gravels from a local Trinity Basin source. Gravel will be washed to remove any silts, sand, clay, and organic matter and will be free of contaminants such as petroleum products. Washed gravel will pass Caltrans cleanliness test #227 with a value of 85 or greater.
- 1d. Reclamation or its contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) that describes BMPs for the project, including silt fences, sediment filters, and routine monitoring to verify effectiveness. Proper implementation of erosion and sediment controls shall be adequate to minimize sediment inputs into the Trinity River until vegetation re-growth occurs. All BMPs and sediment and erosion control devices will be inspected daily during the construction period to ensure that the devices are properly functioning. Excavated and stored materials will be kept in upland sites with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable upland sites. All applicable erosion control standards will be required during stockpiling of materials.

Impact 3.5-2:

Construction of the proposed project could result in short-term temporary increases in turbidity and total suspended solids levels following construction.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Implementing Alternative 3 could increase turbidity and total suspended solids in the river and on the floodplain following construction. Following construction, increases in turbidity levels could occur when newly excavated, devegetated areas are exposed to rainsplash erosion and runoff, or erosion by elevated river stages when flows increase in the river. Fine sediments may be suspended in the river for several hours following such exposure and erosion. The extent of downstream sedimentation would be a function of the rainfall intensity and/or instream flow velocity, as well as the particle size of exposed sediments. Lower intensity rainfalls would be less likely to mobilize fine sediments. Similarly, if fine sediments are mobilized by streamflow over newly exposed streambank areas, they could be carried several thousand feet downstream of the construction zones, while larger-sized sediments like sands and gravels would tend to drop out of the water column within several feet of the construction zone.

Post-construction exposure of sediments to rainfall and/or flows could result in short-term increases in turbidity and suspended solids concentrations in the water column that could potentially be in violation of the Basin Plan turbidity objective for the Trinity River. A short-term increase in turbidity and suspended solids levels following construction would be a significant impact.

Mitigation Measures:

- 2a. Turbidity increases associated with activities shall not exceed the water quality objectives for turbidity in the Trinity River basin. Turbidity levels are defined in nephelometric turbidity units (NTUs). The current threshold for turbidity levels in

the Trinity River, as listed in the Basin Plan for the North Coast Region (2001), is summarized below.

- Turbidity shall not be increased by more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.

2b. To ensure that turbidity levels do not exceed the threshold listed above following construction, Reclamation or its contractor shall monitor turbidity during and after rainfall events for the first year following completion of the project or until the road is properly decommissioned and adequately revegetated, to observe if erosion attributable to the access roads is resulting in increases in turbidity and total suspended solids in the Trinity River. At a minimum, field turbidity measurements shall be collected whenever a visible increase in turbidity is observed.

- If increases in turbidity and total suspended solids are observed as a result erosion from access roads, then field turbidity measurements shall be collected 50 feet upstream of a point adjacent to the end of the access road and 500 feet downstream.
- If the grab sample results indicate that turbidity levels exceed the established thresholds identified in the Basin Plan, actions shall be implemented immediately to reduce and maintain turbidity at or below the thresholds. This would include addition of sediment control devices such as silt fences or sediment filters. The reason for, or source of, increased sediment input shall be identified and resolved to preclude further sediment input.

Impact 3.5-3:

Construction of the proposed project could cause contamination of the Trinity River from hazardous materials spills.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Construction staging activities could result in a spill of hazardous materials (e.g., oil, grease, gasoline, solvents) into the Trinity River. In addition, operation of construction equipment within or adjacent to the river would increase the risk of a spill of hazardous materials into the river (e.g., from leaking of fluids from construction equipment). Spills of hazardous materials into or adjacent to the Trinity River could degrade water quality in the Trinity River and have deleterious effects on salmonids of any life stage in close proximity to construction activities. Section 3.15 of the EA/DEIR and the SEA/RPDEIR evaluate potential effects associated with exposing the public to hazards associated with the transportation and use of hazardous materials at the site. Construction activities could result in a spill of hazardous material, which would be a significant impact.

Mitigation Measures:

- 3a. Reclamation shall require that the contractor prepare and implement a spill prevention and containment plan in accordance with applicable federal and state requirements.
- 3b. Reclamation shall include in the construction contract documents a requirement that any construction equipment that would come in contact with the Trinity River will need to be inspected daily for leaks prior to entering the flowing channel. External oil, grease, and mud will be removed from equipment using steam cleaning. Untreated wash and rinse water must be adequately treated prior to discharge if that is the desired disposal option.
- 3c. Reclamation shall include in the construction contract documents a requirement that hazardous materials, including fuels, oils, and solvents, not be stored or transferred within 150 feet of the active Trinity River channel. Areas for fuel storage, refueling, and servicing will be located at least 150 feet from the active river channel. In addition, the construction contractor shall be responsible for maintaining spill containment booms onsite at all times during construction operations and/or staging of equipment or fueling supplies. Fueling trucks will maintain a spill containment boom at all times.

Impact 3.5-5:

Construction and maintenance of the project could result in the degradation of Trinity River beneficial uses identified in the Basin Plan.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Under Alternative 3, significant impacts to beneficial uses of the Trinity River could potentially occur in the following categories of water quality objectives listed in the Basin Plan:

- sediment
- toxicity
- turbidity
- settleable material
- suspended material
- chemical constituents

Under Alternative 3, the impacts would be associated with the placement and deconstruction of the low-flow channel crossings (i.e., X-1 and X-3).

Mitigation Measures:

Mitigation measures for Impact 3.5-5 are the same as the mitigation measures for Impacts 3.5-1, 3.5-2, 3.5-3, and 3.5-4.

Fisheries**Significance Criteria**

Significance criteria used to assess the potential impacts of the Proposed Action on fisheries resources are based on the current scientific understanding of biological requirements and ecological status of the species of interest, and the regulatory standards of county, state, and federal agencies, including the *CEQA Guidelines*. A significant impact on anadromous salmonids and other native fish would occur if the project would result in any of the following:

- potential to substantially reduce the number or restrict the range of an endangered or threatened native fish species or a native fish species that is a candidate for state listing or proposed for federal listing as endangered or threatened;
- potential for substantial reductions in the habitat of any native fish species other than those that are listed as endangered or threatened or are candidates or proposed for endangered or threatened status;
- potential for causing a native fish population to drop below self-sustaining levels;
- substantial adverse effect, either directly or through habitat modifications, on any native anadromous species identified as a sensitive or special-status fish species in local or regional plans, policies, or regulations;
- substantial interference with the movement of any native anadromous or resident fish species;
- a conflict with, or violation of, the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan relating to the protection of native anadromous species or resident fish species;
- mortality of state- or federally listed fish species, or species that are candidates for listing or proposed for listing;
- reductions in the size of the population of a native fish species sufficient to jeopardize its long-term persistence;
- temporary impacts to habitats such that native fish species suffer increased mortality or lowered reproductive success that jeopardizes the long-term persistence of those local populations;
- permanent loss of designated critical habitat and/or essential habitat of a listed species or special-status native fish species; or
- reduction in the quantity or quality of habitats in which native fish species populations occur sufficient to reduce the long-term abundance and productivity of local populations.

Impact 3.6-1

Implementation of the project could result in effects on potential spawning and rearing habitat for anadromous fishes, including federally listed coho salmon.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Coho Salmon. No permanent adverse effects to spawning habitat for coho salmon within the project boundary will occur under Alternative 3. The long-term design objective is that implementation of Alternative 3 along with the flow management regime identified in the 2000 Record of Decision would re-activate channel migration across the floodplain within the project boundary. This dynamic fluvial channel would result in a net increase in point bar surface area through coarse sediment deposition, thereby increasing riffle-spawning habitat within the project boundary. Temporary effects on spawning habitat associated with construction of Alternative 3 are expected to be limited to short-term, localized sedimentation caused by settling of silt disturbed by bank-side excavation activities.

Additionally, installation of a temporary gravel berm crossing (i.e., X-1) for heavy equipment across the low-flow channel of the Trinity River could introduce a small amount of silt and cause streambed disturbance, resulting in re-suspension of fine substrate materials (i.e., silt) and create short-term, localized increases in turbidity and suspended sediments. Crossing locations (i.e., X-1 and X-3) were selected based on spawning data provided by member agencies of the TRRP. In essence, this information indicated that these locations have not been used by spawning salmonids. The river crossing would occur only during low-flow conditions (Trinity River flows of <1,500 cfs), which typically take place between July and December, but a few equipment crossings at low-flow conditions during other months (e.g., late winter/early spring) might also be required. Although the amount of silt mobilized by construction of these crossings is expected to be minimal, this silt could be deposited on either spawning habitat and/or on salmon redds downstream of the activity areas. The use of a temporary bridge across Weaver Creek will not require placement of material below the ordinary high water mark.

Construction in and near the low-flow channel is planned to occur during summer and fall months (between June 1, through Nov. 1). Project activities may require access to these riverine areas during other low-flow periods. Grading activities at R-8 are scheduled to begin during summer 2007. Additional grading activities could occur during the summer and fall periods over the course of the five-year construction period, as required to ensure project objectives are met.

Suitable rearing habitat for juvenile coho salmon and other salmonids occurs within the project boundary. However, rearing habitat for coho salmon is limited by the relatively small amount of pool and backwater habitat associated with suitable cover. Some temporary effects on the quality of juvenile salmonid rearing habitat will occur through removal of riparian vegetation that contributes to shaded riverine aquatic (SRA) habitat in the project reaches and through the placement of low-flow channel crossings on the Trinity River and Weaver Creek. These temporary effects range from elimination of stream shading that moderates localized water temperatures to removal of physical cover provided by overhanging riparian vegetation and associated roots protruding from eroding banks. The temporary effects of construction of low-flow channel crossings will range from reducing the stream depth at two narrow channel cross sections with gravel fill to physical disturbances associated with in-river work. The principal effects on fish include displacement of rearing salmonid fishes from the locations of low-water crossings by reducing the suitability of the habitat, and increased predation risk or reduced feeding efficiency through the loss of the cover function provided by the SRA habitat (Michney and Hampton 1984, Michney and Deibel 1986).

The limited and localized temporary impacts on rearing habitat are expected to be offset in the long-term by beneficial increases and improved suitability of physical rearing habitat associated with implementing Alternative 3. These benefits will accrue from the engineered improvements of floodplain connection to the river, channel migration through the upper elevation floodplain, and revegetation of the rehabilitated floodplain with native plant species that will eventually contribute shade and large wood to the river channel. Improved river connection with the floodplain during high spring-time flows is expected to increase areas of slow, shallow-water habitat preferred by salmonid fry. The process of channel migration through the floodplain may also create new shallow point bars, further increasing the availability of this preferred habitat. The channel migration process and engineered side channel habitats will collectively increase the relative abundance of this preferred salmon fry rearing habitat, compared to the existing condition within the project reaches. Alternative 3 will include construction of a side channel providing habitat at flows over 300 cfs at R-8. Ultimately, the collective changes in channel morphology as a result of Alternative 3 together with the planned future bank rehabilitation projects throughout the upper Trinity River will improve rearing habitat diversity for all anadromous salmonids (U.S. Fish and Wildlife Service and Hoopa Valley Tribe 1999).

Chinook Salmon. Potential impacts and benefits to Upper Klamath-Trinity Rivers evolutionarily significant unit (ESU) Chinook salmon populations in the Trinity River resulting from implementation of Alternative 3 would be generally similar to those

previously described for coho salmon. Spring- and fall-run Chinook salmon are known to spawn and rear within the project boundary. Additionally adult spring-run Chinook salmon over-summer in the deeper run and pool habitats near the R-1 rehabilitation unit where bank work may disturb staging fish using this area during the summer months; however, over-summering habitat is available to these fishes in adjacent river reaches upstream and downstream of the project site. Spring-run Chinook salmon juveniles can be expected to rear year-round within the project boundary and may be displaced by in-river work activities.

Steelhead. Potential impacts and benefits to the Klamath Mountains Province (KMP) ESU steelhead populations in the Trinity River resulting from implementation of Alternative 3 would be generally similar to those previously described for coho and Chinook salmon. Summer, fall, and winter runs of KMP ESU steelhead are known to migrate and stage, and may spawn (as adults) and rear (as juveniles), within the project boundary established for Alternative 3.

Pacific Lamprey. Potential impacts and benefits to Pacific lamprey populations in the Trinity River resulting from implementation of Alternative 3 would be similar to those previously described for coho salmon and other anadromous salmonids. Adult Pacific lampreys migrate upstream to spawn from spring through early summer and again in the fall. The removal of riparian vegetation that contributes to SRA habitat within the project boundary could also have a temporary impact on adult Pacific lamprey by reducing holding and hiding habitat, which is particularly important for upstream migrant adults. However, the implementation of the revegetation plan will alleviate this impact over the longer term.

Mitigation Measures

- 1a. Because the proposed construction schedule includes in-river work that could impact spawning spring- and fall-run Chinook salmon, coho salmon, and steelhead or their eggs once in the gravel, prior to the start of project construction, Reclamation or its contractor shall retain a qualified fisheries biologist to conduct a survey for active redds and potential spawning habitat 200 feet upstream and downstream of the proposed in-river construction activities. If required by the National Marine Fisheries Service (NMFS), anti-spawning mats (heavy-gauge wire fencing secured over streambed gravels) will be installed in areas identified as potential spawning sites within the immediate vicinity of the low-flow channel crossings at R-2 on the Trinity River and R-9 on Weaver Creek. These anti-spawning mats will temporarily preclude use of the area by spawning adults during project construction and will ensure that no impacts could occur to developing eggs that would otherwise be potentially laid in the gravel. Anti-spawning mats will be installed prior to the beginning of spawning (i.e., on/or before September 15), if determined necessary by NMFS.
- 1b. Fill gravels used on the streambeds, and river crossing will be composed of washed, spawning-sized gravels from a local Trinity Basin source. Gravel will be washed to

remove any silts, sand, clay, and organic matter and will be free of contaminants such as petroleum products. Washed gravel will pass Caltrans cleanliness test #227 with a value of 85 or greater. Alluvial material from on-sites sources will be used to construct embankments and abutments for the Weaver Creek crossing. This material will be removed and replaced coincident with the temporary crossing of Weaver Creek.

Impact 3.6-2:

Implementation of the project could result in increased erosion and sedimentation that could adversely affect fishes, including federally listed coho salmon.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Coho Salmon. Activities related to implementation of Alternative 3 would result in the localized loss of vegetation and general disturbance to the soil. Removal of vegetation and soil could accelerate erosion processes within the project boundary and increase the potential for sediment to enter the Trinity River. The turbidity of a water body is related to the concentration of suspended solids. Suspended solids and turbidity generally do not acutely affect aquatic organisms unless they reach extremely high levels (i.e., levels of suspended solids reaching 25 mg/L). At these high levels, suspended solids can adversely affect the physiology and behavior of aquatic organisms and may suppress photosynthetic activity at the base of food webs, affecting aquatic organisms either directly or indirectly (Alabaster and Lloyd 1980).

Within the project boundary, silt and sand in the river banks would be disturbed during excavation of the riverine activity areas. Exposed soils on the excavated surfaces are susceptible to mobilization from rainfall and during early season high flows. Fill placements and treatments in the upland spoils sites could be susceptible to erosion and runoff during rainfall events.

Approximately, 0.15 acres of mainstem Trinity River main channel habitat and 0.04 acres of Weaver Creek delta habitat will be temporarily affected during construction by

installation of gravel berms to create low-flow channel crossings for occasional equipment crossings. Removal and spreading of gravels composing the temporary low-flow channel crossing after construction will restore the bed of the Trinity River to its original grade. These activities will likely resuspend streambed sediments but are not likely to add silt material to the river. Use of washed, spawning-sized gravels and the cleaning of vehicle wheels prior to crossing the channel will minimize the effects of this action on fish habitat. Any juvenile coho salmon rearing in the area during gravel placement or vehicle crossings may be temporarily displaced or their social behavior may be temporarily disrupted by turbidity created during this activity.

Erosion and deposition of fine sediments associated with implementation of Alternative 3 are expected to be localized and temporary. Some fine-textured materials may settle near or on known spawning habitats located downstream of riverine rehabilitation areas, but these materials are not expected to impair redd excavation or spawning. The majority of grading activities at the river's edge is expected to be performed during low-flow periods during summer and fall periods, as weather permits, and thus would increase the potential for effects on adult coho migration, spawning, and smolt emigration. Any juvenile coho salmon rearing in the area during this timeframe could be temporarily displaced or their social behavior could be temporarily disrupted by an increase in turbidity. Behavioral disruption, even temporarily, could result in some increased vulnerability to competitive interactions or predation for juvenile coho salmon (Berg and Northcote 1985). These temporary impacts were anticipated and addressed in the 2000 Biological Opinion and associated incidental take statement for the ROD and amended Biological Opinion for in-stream work.

Chinook Salmon. Potential impacts to Upper Klamath-Trinity Rivers ESU Chinook salmon populations in the Trinity River resulting from implementation of Alternative 3 would be generally similar to those described for coho salmon. Consequently, resuspension of fine-textured sediment, potential erosion and sediment runoff, and elevated turbidity for short distances downstream could occur during the migration, spawning, and rearing seasons. Spring- and fall-run Chinook salmon are known to spawn in suitable habitats encompassed by the project boundary. Construction activities are proposed during the spawning period, and in-river construction may temporarily displace adult salmonids. Some fine-textured materials may settle near or on known spawning habitats located downstream of riverine rehabilitation areas, but these materials are not expected to impair redd excavation or spawning. Spring-run Chinook juveniles are expected to rear throughout the year within project boundary and transient increases in turbidity and resuspension of sediments are thought to have similar effects on juvenile Chinook salmon as on coho salmon. Adult spring-run Chinook salmon using holding habitat during the summer months may be displaced to other holding habitats either upstream or downstream by transient turbidity and sediment plumes created by construction activity.

Steelhead. Potential impacts to the KMP ESU steelhead populations in the Trinity River resulting from implementation of Alternative 3 would be similar to those previously described for coho and Chinook salmon. Summer, fall, and winter runs of KMP ESU

steelhead are known to migrate, stage (as adults), and rear (as juveniles) within the project boundary, throughout the proposed construction season. All three runs generally spawn during the winter.

Pacific Lamprey. Potential impacts on Pacific lamprey populations in the Trinity River resulting from implementation of Alternative 3 would be similar to those previously described for coho salmon and other anadromous salmonids. Adult Pacific lampreys migrate upstream to spawn from spring through early summer and again in the fall. Larval lampreys inhabit the river year-round. Siltation of nests that may be built in suitable habitats (i.e., low-gradient riffles) could occur. Filter feeding by larval lampreys could be disrupted by an increase in suspended sediments caused by construction-related erosion, although this impact would be very localized and temporary.

Mitigation Measures:

- 2a.** Turbidity increases associated with project construction activities shall not exceed the Regional Water Board water quality objectives for turbidity in the Trinity River basin. Turbidity levels are defined in nephelometric turbidity units (NTUs). The current threshold for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (2001), is summarized below.
- Turbidity shall not be increased by more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits.
- 2b.** To ensure that turbidity levels do not exceed the threshold listed above during project construction activities at the river's edge, Reclamation or its contractor shall monitor turbidity levels 50 feet upstream and 500 feet downstream of the point of river's edge construction activities. At a minimum, field turbidity measurements shall be collected on a daily basis during river's edge construction (within 10 ft of the water line). Whenever a visible increase in turbidity is observed, monitoring frequency shall be a minimum of every 2 hours.
- If the grab sample results indicate that turbidity levels exceed the established thresholds identified in the Basin Plan, actions shall be implemented immediately to reduce and maintain turbidity at or below the thresholds. Potential remedial actions include temporarily halting in-channel construction activities and implementation of additional Best Management Practices (BMPs) until turbidity is at or below the thresholds.
- 2c.** Proper implementation of erosion and sediment containment devices during and after construction shall be adequate to minimize sediment inputs into the Trinity River. Planting of native plants, hydroseeding, or other Type-D erosion control, shall be applied to areas where vegetation has been removed to reduce short-term erosion prior to the start of the rainy season. Soils shall not be left exposed during the rainy season.

- Because these activities must take place during the late fall, winter, and spring, temporary erosion and sediment control structures must be in place and operational at the end of each construction day and maintained until disturbed ground surfaces have been successfully revegetated upon completion of construction activities and/or decommissioning of the access road.

2d. Reclamation or its contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) that describes Best Management Practices (BMPs) for the project. Ripping of all riparian areas to create furrows parallel to the river is expected to stop delivery of storm water to the river; however, BMPs, including silt fences, sediment filters, and routine monitoring to verify effectiveness, may be necessary. Proper implementation of erosion and sediment controls and dewatering activities shall be adequate to minimize sediment inputs into the Trinity River until construction ends. All sediment containment devices and erosion control devices will be inspected daily during the construction period to ensure that the devices are functioning properly. Any erosion control devices found to be nonfunctional must be repaired or replaced following their discovery or by the end of the work day if rain is imminent or if a greater than 50 percent possibility of rain has been forecast within the following 24 hours by the National Weather Service. In those cases where, for safety reasons, repairs cannot be made immediately, they should be completed as soon as the work can safely be performed. Excavated and stored materials will be kept in upland sites with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable upland sites. All applicable erosion control standards will be required during stockpiling of materials.

Impact 3.6-3:

Construction activities associated with the project could potentially result in the accidental spill of hazardous materials that could adversely affect fishes, including federally listed coho salmon.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Coho Salmon. Construction activities typically include the refueling of construction equipment on location. As a result, minor fuel and oil spills could occur, and there would be a risk of larger releases. Without rapid containment and clean up, these materials could be toxic, depending on the location of the spill in proximity to surface water features, including the Trinity River, Indian Creek, and Weaver Creek. Oils, fuels, and other contaminants could have deleterious effects on all salmonid life stages within close proximity to construction activities.

Chinook Salmon. Potential impacts to Upper Klamath-Trinity Rivers ESU Chinook salmon populations in the Trinity River resulting from accidental spill of hazardous materials would be similar to those previously described for coho salmon.

Steelhead. Potential impacts to KMP ESU steelhead populations in the Trinity River resulting from accidental spill of hazardous materials would be similar to those previously described for coho salmon.

Pacific Lamprey. Potential impacts to Pacific lamprey populations in the Trinity River resulting from accidental spill of hazardous materials would be similar to those previously described for coho salmon.

Mitigation Measures:

Construction specifications shall include the following measures to reduce potential impacts associated with accidental spills of pollutants (fuel, oil, grease, etc.) to vegetation and aquatic habitat resources within the project boundary:

- 3a. Equipment and materials shall be stored away from wetland and surface water features.

- 3b. Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted in an area at least 150 feet away from waters of the Trinity River or within an adequate fueling containment area.
- 3c. The contractor will develop and implement site-specific Best Management Practices (BMPs), a water pollution control plan, and emergency spill control plan. The contractor will be responsible for immediate containment and removal of any toxins released.

EA/DEIR Sections 3.5, Water Quality, and 3.15, Hazards and Hazardous Materials, provide additional details on mitigation measures developed for water quality standards, hazards, and hazardous materials. The responsible agencies (i.e., Regional Water Board) will be involved in the development and approval of these plans and practices.

Impact 3.6-4:

Construction activities associated with the project could result in the mortality of rearing fishes, including federally listed coho salmon.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Coho Salmon. Coho salmon are known to occur throughout the Trinity River. Limited suitable coho salmon rearing habitat exists within the project boundary; however, juvenile coho salmon may be expected to rear within the project boundary year-round. Adult coho migrate through the project boundary, and suitable spawning habitat exists within the project boundary. Direct injury to, or mortality of, coho salmon may occur during in-river construction and construction of the low-flow channel crossings planned under Alternative 3. Construction in and near the low-flow channel is scheduled to occur during summer and fall months; however, access in and out of the sites might also be required during other times of low flows. The river crossing would likely occur only during low flow conditions (Trinity River flows of <1,500 cfs) which typically take place between July through December, but some equipment crossings at low flow conditions during other months (e.g., late winter/early spring) might also be required.

The use of a temporary bridge across Weaver Creek will be seasonal during low-flow conditions. Channel rehabilitation work planned at R-8 is scheduled primarily for summer and fall periods. Consequently, it is likely that some of this work would occur during the coho salmon spawning period.

A small, temporary, but uncertain level of stranding of coho salmon fry may occur on the newly excavated floodplains and side channels during rapidly receding flood-flow periods during the winter and early spring when fry are emerging. Additionally, construction of side channel features may result in stranding conditions as flows recede, particularly if the downstream end fills with fine sediments, potentially stranding coho salmon fry. Although stranding of fry under such receding flood conditions occurs on naturally shallow floodplains and in flood bypasses (Sommer 2001), the constructed features may increase this process to varying degrees. All of the floodplain designs incorporate a downstream slope equal to that of the river channel and would drain in a downstream direction that would be guided toward the river channel by earthwork contours to minimize the potential for stranding. As fluvial channel migration occurs through the floodplain, the potential for fry stranding on the floodplain is expected to equilibrate to that of a natural stranding risk.

Chinook Salmon. Potential impacts to Upper Klamath-Trinity Rivers ESU Chinook salmon populations in the Trinity River resulting from implementation of Alternative 3 would be similar to those previously described for coho salmon.

Steelhead. Potential impacts to the KMP ESU steelhead populations in the Trinity River resulting from implementation of Alternative 3 would be similar to those previously described for coho and Chinook salmon.

Pacific Lamprey. Potential impacts on Pacific lamprey populations in the Trinity River resulting from implementation of Alternative 3 would be similar to those previously described for coho salmon and other anadromous salmonids.

Mitigation Measures:

- 4a.** To avoid or minimize potential injury and mortality of fish during riverine activities (including in-channel activities at X-1 and X-3) equipment shall be operated slowly and deliberately to alert and scare adult and juvenile salmonids away from the work area.
- 4b.** Reclamation or its contractor shall minimize potential injury and mortality of fish during the use of low-flow channel crossings. This will be accomplished by minimizing vehicle traffic and by operating equipment and vehicles slowly and deliberately to alert and scare adult and juvenile salmonids away from the crossing area, or by having a person wade ahead of equipment to scare fish away from the crossing area.
- 4c.** To avoid or minimize potential injury and mortality of fish during excavation and placement of fill materials within the active low-flow channel, equipment shall be

operated slowly and deliberately to alert and scare adult and juvenile salmonids away from the work area. The contractor shall be instructed that before submerging an excavator bucket or laying gravel below the water surface, the excavator bucket will be operated to “tap” the surface of the water, or a person will wade ahead of fill placement equipment to scare fish away from the work area. To avoid impacts to mobile life stages of salmonids that may be present in the water column, the first layers of clean gravel that are being placed into the wetted channel shall be added slowly and deliberately to allow fish to move from the work area

- 4d.** Monitoring of the rehabilitated floodplain sites for salmon fry stranding shall be performed by a qualified fishery biologist immediately after recession of flood flow events designated as a 1.5- year or less frequent event (i.e., $Q \geq 6,000$ cfs) for a period of 3 years following construction. Such fry stranding surveys shall be performed during the months of January through May. If substantial stranding is observed, Reclamation will take appropriate measures to return stranded fishes to river habitats and to modify floodplain topography to reduce the likelihood of future occurrences of fry stranding.

Impact 3.6-5:

Implementation of the project would result in the permanent and temporary loss of shaded riverine aquatic habitat for anadromous salmonids.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Riparian habitat is a general term that encompasses the range of riparian vegetation conditions within the project boundary. It does not have a specific legal description or definition.

Coho Salmon. Removal of montane riparian wetland vegetation along the banks of the Trinity River could adversely affect the quality of rearing habitats used by salmonids. Riparian vegetation is important to the maintenance of healthy fish habitat. Riparian areas provide shade and temperature benefits; sediment, nutrient and chemical

regulation; stream bank stability; and inputs of large woody debris and organic matter to the channel. Riparian vegetation that is adjacent to the river, a component of SRA habitat, is included as an element of designated critical habitat for the Southern Oregon—Northern California Coast (SONCC) ESU coho salmon and a component of Essential Fish Habitat (EFH) for Chinook and coho salmon. However, complexity in the riparian environment, also important in fish habitat, will be increased under Alternative 3.

Removal of the riparian berm and re-activation of adjacent floodplains within riverine rehabilitation areas would allow for natural revegetation of most of the riparian habitat (mixture of willows, alders, and cottonwoods) estimated to be lost as a result of berm removal and floodplain contouring. Under Alternative 3, large seed trees (willow and cottonwood) and large nesting trees would be left intact. Additionally, riparian habitat removed under Alternative 3 would be replaced during the revegetation efforts. Therefore, no permanent net loss of SRA features would necessarily occur.

Mitigation Measures:

To maintain overall SRA habitat values within the project reach, the Proposed Action would be designed to minimize losses of riparian vegetation adjacent to the Trinity River channel, except where necessary to re-activate river access to the floodplain. Boundary markers shall be installed along all riparian areas outside of delineated rehabilitation areas. These markers will stop construction access so that impacts to riparian vegetation are minimized. To compensate for loss of riparian vegetation within project boundary, Reclamation shall implement the following measures:

- 5a.** To mitigate for the loss of riparian habitat, the Project would be designed to preserve riparian vegetation within the site boundaries, (1) to increase the diversity of native vegetation types and age classes available post-project and (2) to facilitate natural recolonization of constructed surfaces by native vegetation is appropriate for fish and wildlife species. Prior to the start of construction activities, Reclamation shall retain a qualified biologist to identify potential construction access routes that avoid and/or minimize, to the fullest extent, impacts to riparian habitat. In addition, Reclamation shall clearly identify and flag biologically sensitive areas (e.g., jurisdictional waters and riparian habitat) to be protected during construction activities. Each jurisdictional riparian feature to be avoided will be flagged, staked, or otherwise marked to ensure that construction activities do not encroach upon them. Reclamation shall inspect and maintained marked areas regularly throughout the construction phase.
- 5b.** Reclamation shall develop a Riparian Revegetation and Monitoring Plan (Plan), subject to approval by the Corps, Regional Water Board and CDFG, prior to implementing the proposed project. The Plan shall include measures that insure that all riparian vegetation removed by the TRRP projects within the 40 mile corridor of the Trinity River downstream of Lewiston Dam will be

replaced by natural recruitment, replanting, or any combination thereof, at an areal ratio of 1:1, within a five year time-frame. These measures shall support the TRRP objective to restore the existing homogeneous vegetation pattern with a more diverse assemblage of riparian vegetation, including provisions for incorporation of native species that can resist invasion by noxious plant species. Because the existing Trinity River channel is encroached (up to 300 percent) by a homogeneous riparian vegetation community thought to be less suitable for fish and wildlife habitat, the Plan need not require strict replacement based on original stem counts and species.

- 5c.** Reclamation shall initiate a 5-year mitigation monitoring program following the first growing season after project implementation. After a period of three years, Reclamation, in consultation with the Corps, Regional Water Board and CDFG will be determine the need, if any, for additional plantings and will assess and/or remedy any loss of riparian habitat, including jurisdictional wetlands within the site boundaries, defined in the EIR, to ensure that no-net loss of wetlands and riparian habitat occurs within the 5-year monitoring period. Monitoring the response of riparian habitat to the channel rehabilitation project after three years into the 5-year vegetation recovery period will allow Reclamation to take any additional necessary actions to meet the goal of no net-loss of riparian habitat within the boundaries of the Canyon Creek Suite of Rehabilitation Sites.
- 5d.** Reclamation shall complete a post-project wetland delineation and vegetation habitat evaluation as a basis for comparing pre and post-project conditions and submit the results to the Corps, Regional Water Board and CDFG. In the event that this delineation identifies a net loss in riparian habitat, Reclamation shall enhance or reestablish riparian vegetation that will function as SRA habitat within the boundaries of the rehabilitation sites. Potential options to accomplish this objective include increasing the density and diversity of riparian vegetation to supplement natural recruitment, and introducing riparian plants in locations to expand riparian habitat. In the event that conditions within the boundary of the Indian Creek site preclude the adequate onsite mitigation, Reclamation may consider alternate locations for riparian vegetation mitigation within the Trinity River corridor, subject to approval by the Corp, the Regional Water Board and CDFG.

Vegetation, Wildlife and Wetlands

Significance Criteria

Significance criteria used to analyze the potential impacts of the project on vegetation, wildlife, and wetland resources include factual and scientific information and regulatory

standards of county, state, and federal agencies, including the CEQA Guidelines. These criteria have been developed to establish thresholds to determine the significance of impacts pursuant to CEQA and should not be confused with a “take” or adverse effect under the ESA. Additionally, significance criteria do not apply for purposes of NEPA.

Impacts on vegetation would be significant if implementation of the project would result in any of the following:

- potential to substantially reduce the number or restrict the range of an endangered or threatened plant species or a plant species that is a candidate for state listing or proposed for federal listing as endangered or threatened;
- potential for substantial reductions in the habitat of any native plant species including those that are listed as endangered or threatened or are candidates or proposed for endangered or threatened status;
- potential for causing a native plant population to drop below self-sustaining levels;
- potential to eliminate a native plant community;
- substantial adverse effect, either directly or through habitat modifications, on any plant identified as a sensitive or special-status species in local or regional plans, policies, or regulations;
- substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations;
- a conflict with any local policies or ordinances regarding protection or control of vegetation resources;
- a conflict with, or violation of, the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, state, or federal habitat conservation plan relating to the protection of plant resources; or
- potential for spread of non-native and invasive plant species.
- Impacts on wildlife would be significant if implementation of the project would result in any of the following:
 - mortality of state or federally listed wildlife species, or species that are candidates for listing or proposed for listing;
 - potential for reductions in the number, or restrictions of the range, of an endangered or threatened wildlife species or a wildlife species that is a candidate for state listing or proposed for federal listing as endangered or threatened;
 - potential for substantial reductions in the habitat of any wildlife species, including those that are listed as endangered or threatened or are candidates or proposed for endangered or threatened status;
 - potential for causing a wildlife population to drop below self-sustaining levels;

- substantially block or disrupt major terrestrial wildlife migration, or travel corridors;
- substantial adverse effect, either directly or through habitat modifications, on any wildlife species identified as a sensitive or special-status species in local or regional plans, policies, or regulations;
- substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations;
- a conflict with any state or local policies or ordinances protecting wildlife resources; or
- a conflict with, or violation of, the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, state, or federal habitat conservation plan relating to the protection of wildlife species.

Impacts on wetlands would be significant if they would result in any of the following:

- substantial adverse effect on any riparian habitat;
- substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, etc.) through direct removal, filling, hydrological interruption, or other means;
- a conflict with any state or local policies or ordinances protecting wetland and/or riparian resources; or
- a conflict with, or violation of, the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, state, or federal habitat conservation plan relating to the protection of wetland resources.

Impact 3.7-3:

Construction activities associated with the project could result in the loss of jurisdictional waters (e.g., wetlands) and riparian habitat.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

A delineation of potential jurisdictional wetlands and other waters of the United States within the project boundary (following the methodology identified in the 1987 Corps guidelines), was conducted by North State Resources, Inc., on May 13 and 14, 2005. A total of 101.19 acres of potential jurisdictional waters of the United States composed of 100.62 acres of riverine (other waters), 0.10 acre of intermittent creek, 0.01 acre of ephemeral creek, 0.35 acre of riparian wetland, 0.10 acre of seasonal wet meadow, and 0.01 acre of intermittent pool were mapped within the project boundary (EA/DEIR, at p. 3.7-25). Table 3.7-7 in the SEA/RPDEIR lists impacts to these wetland features for Alternative 3.

Construction activities associated with Alternative 3 would result in temporary impacts to jurisdictional waters (e.g., wetland features) within the site. Revised Table 3.7-6 in the SEA/RPDEIR lists impacts to these wetland features for Alternative 3. Construction of Alternative 3 would result in a direct temporary impact to 13.48 acres of jurisdictional waters (13.40 acres of Riverine and 0.08 acres of riparian wetland; SEA/RPDEIR, Revised Figure 3.7-4d). Temporary impacts to jurisdictional waters would be considered significant.

Construction activities associated with Alternative 3 would also result in temporary impacts to up to 17.29 acres of riparian habitat as defined by the State [includes both riparian wetlands as defined by the U.S. Army Corps of Engineers and upland montane riparian vegetation described in California Wildlife Habitat Relationships (CDFG 2005; SEA/RPDEIR, Figures 3.6-10 a and b)]. Impacts to riparian habitat would be considered significant.

Mitigation Measures:

In order to avoid and minimize impacts to jurisdictional wetlands, the following measures will be implemented:

- 1a:** Prior to the start of construction activities, Reclamation shall retain a qualified biologist to identify potential construction access routes necessary for the project to ensure that these features avoid and/or minimize to the fullest extent impacts to jurisdictional waters. In addition, Reclamation shall clearly identify, and flag in the field, biologically sensitive areas (e.g., jurisdictional waters and riparian habitat) to be protected, and will provide the contractor specific instructions to avoid any construction activity within these features. Reclamation shall inspect and maintain marked areas on a regular basis throughout the construction phase.
- 1b:** Reclamation shall develop a Riparian Revegetation and Monitoring Plan, subject to approval by the Corps, Regional Water Board, and CDFG, prior to implementing the proposed project. The plan shall include measures that ensure that all riparian vegetation (a key parameter of jurisdictional wetlands) removed by TRRP projects within

the 40-mile corridor of the Trinity River downstream of Lewiston Dam is replaced by natural recruitment, replanting, or any combination thereof at an areal ratio of 1:1 within a 5-year time frame. Because the present Trinity River channel is encroached (up to 300 percent) with riparian vegetation that is homogenous in nature, this plan need not require strict replacement based on original stem counts and species. The plan shall acknowledge that the ultimate goals of the TRRP include functional riparian habitat and no net-loss of jurisdictional wetlands throughout the 40-mile reach of the Trinity River below the TRD. Because riparian habitat and jurisdictional wetlands will respond to river restoration with some degree of spatial and temporal variability, areal habitat coverages within a river reach will remain relatively consistent while habitat changes at specific locations may be measurable.

- 1c.** Floodplain values and functions will be enhanced by the Indian Creek Rehabilitation Site project as well as by ROD flows. Consequently, substantial new areas beyond those identified in pre-project plant community delineations are expected to convert to riparian habitats (in some cases, jurisdictional wetlands), both seasonal and perennial, within a 3–5 year post-project window. Reclamation will take advantage of opportunities during or after project construction to enhance wetland functions within project boundaries or to create conditions required for functional jurisdictional wetlands (i.e., hydrology, vegetation, and hydric soils) to persist over time. For example, excavation of areas upslope (beyond the 6,000 cfs OHWM line) to a depth coincident with low-flow (450 cfs) conditions may provide opportunities to establish the hydrologic conditions necessary for establishing functional jurisdictional wetlands.

Reclamation shall initiate a 5-year mitigation monitoring program after the first growing season following project implementation. After a period of three years, the need will be evaluated (if any) for additional wetland enhancement. At that time, Reclamation, in consultation with the Corps, Regional Water Board and CDFG, will determine the need to further enhance or create additional areas of jurisdictional wetlands within the project boundary defined in the EIR so that there will be no-net loss of wetlands at the end of the 5-year monitoring period. Determining the need to further enhance or create additional wetland areas after three years of monitoring will provide a two year period for Reclamation to take additional pro-active measures towards meeting the goal of no net-loss of jurisdictional wetland habitat within the boundaries of the Indian Creek site.

Reclamation shall conduct a post-project wetland delineation five years after project construction for comparison to the pre-construction wetland delineation. In the event that a post-project wetland delineation identifies a net loss of jurisdictional wetlands within the Indian Creek site, the TRRP, in consultation with the Corps, the Regional Water Board, and CDFG, will implement additional mitigation measures to further enhance or create additional jurisdictional wetlands within the boundary of the Indian Creek site. In the event the conditions within the boundary of this site precludes the ability to adequately mitigate onsite, Reclamation may consider alternate locations for jurisdictional wetland mitigation within the local Trinity River corridor, subject to approval by the Corps, the Regional Water Board, and CDFG.

Impact 3.7-4:

Construction activities associated with the project could result in impacts to the state-listed little willow flycatcher.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Suitable montane riparian habitat for the little willow flycatcher is present at the site, and willow flycatchers were detected in the study area during the 2005 breeding season (Herrera 2006). Alternative 3 would result in a small, temporary reduction of foraging habitat for this species. However, implementation of Mitigation Measures 3.7-1 a and b will ensure that there is no net loss of riparian habitat and a long-term increase in riparian habitat diversity. Thus, due to the small and temporary nature of the impacts and the regional abundance of similar habitats, the project is not expected to have a significant impact on habitat for the little willow flycatcher. However, the removal of riparian vegetation and the noise associated with construction activities could disturb individuals nesting on or adjacent to the sites. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or nesting little willow flycatchers or any activities resulting in nest abandonment would be considered a significant impact.

Mitigation Measures:

The following mitigation measures shall be implemented to avoid or minimize potential impacts to the little willow flycatcher:

- 4a:** Grading and other construction activities should be scheduled to avoid the nesting season to the extent possible. The nesting season for this species in Trinity County extends from June 15 through July 31 (P. Herrera, Redwood Sciences Laboratory, pers. comm.). If construction occurs outside of the breeding season, no further mitigation is necessary. If the breeding season cannot be completely avoided, mitigations 4b and 4c should be implemented.
- 4b:** A qualified biologist should conduct a minimum of one pre-construction survey for the little willow flycatcher within the project sites and a 250-foot buffer around the site. The survey should be conducted no more than 15 days prior to the initiation of construction in any given area. The pre-construction survey should be used to ensure that no nests of this species within or immediately

adjacent to the project sites would be disturbed during project implementation. If an active nest is found, CDFG will be contacted prior to the start of construction to determine the appropriate mitigation measures.

- 4c:** If vegetation is to be removed by the project and all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed by the project should be removed before the onset of the nesting season, if feasible. This will help preclude nesting and substantially decrease the likelihood of direct impacts.

Impact 3.7-5:

Construction activities associated with the project could result in impacts to the foothill yellow-legged frog.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

The project site provides suitable habitat for the foothill yellow-legged frog, and the species is known to occur in Indian Creek (Don Ashton, Redwood Sciences Laboratory, pers. comm.). Construction activities associated with Alternative 3 may affect foothill yellow-legged frogs directly and indirectly. Potential direct effects include mortality of individuals due to equipment and vehicle traffic, disturbance of boulders or cobbles that support egg masses, and the loss of riparian vegetation cover. The species may also be indirectly affected if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills. These impacts would be considered significant. However, over the long term, the project will benefit the species through the creation of additional and higher quality habitat, such as feathered edges and backwaters that will provide habitat for tadpoles.

Mitigation Measures:

In order to avoid and/or minimize impacts to the foothill yellow-legged frog, the following measures shall be implemented:

- 5a:** If any construction in the Trinity River and/or Indian Creek channel will occur prior to August 1 of any construction season, a pre-construction survey for yellow-legged frog larvae and/or eggs shall be conducted by a qualified biologist. This survey would need to be conducted within the construction boundary no more than 2 weeks prior to the start of in-stream construction activities. If larvae or eggs are detected, the biologist shall relocate them to a suitable location outside of the construction boundary.
- 5b:** In the event that a yellow-legged frog is observed within the construction boundary, the contractor shall temporarily halt in-stream construction activities until the frog has been moved to a safe location with suitable habitat outside of the construction limits.
- 5c:** Mitigation measures presented in Section 3.5 for addressing erosion and sedimentation and accidental spills shall be fully implemented to mitigate for potential indirect impacts to dispersal habitat for the yellow-legged frog due to sedimentation and accidental spills.
- 5d:** Mitigation measures associated with the disturbance to riparian habitat were previously discussed (Mitigation Measure 3.7-1) and will be fully implemented.

Impact 3.7-6:

Construction activities associated with the project could result in impacts to the northwestern pond turtle.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

The project site provides suitable habitat for the northwestern pond turtle, and this species has been observed in the project area (Herrera 2006). Construction activities associated with Alternative 3 could affect pond turtles directly and indirectly. Potential direct effects include mortality of individuals due to equipment and vehicle traffic, disturbance to nests in upland areas, and loss of riparian cover. The species may also be indirectly affected if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills. Thus, construction activities associated with the project may result in significant impacts to the

northwestern pond turtle. However, over the long term, the project will benefit the species through the creation of additional and higher quality habitat. For example, removal of riparian berms will improve access to potential upland nesting and overwintering sites, and the creation of side channels will provide slow-water basking and foraging habitat.

Mitigation Measures:

In order to avoid and/or minimize impacts to the northwestern pond turtle, the following measures shall be implemented:

- 6a:** A minimum of one survey for pond turtle nests shall be conducted a maximum of one week prior to construction. A qualified biologist shall be retained by Reclamation to conduct the survey. If a pond turtle nest is found, the biologist shall flag the site and determine whether construction activities can avoid affecting the nest. If the nest cannot be avoided, the nest should be excavated by the biologist and reburied at a suitable location outside of the construction limits.
- 6b:** In the event that a pond turtle is observed within the construction limits, the contractor shall temporarily halt construction activities until the turtle has been moved by a qualified biologist to a safe location within suitable habitat outside of the construction limits.
- 6c:** Mitigation measures presented in Section 3.5 (Water Quality) for addressing erosion and sedimentation and accidental spills shall be fully implemented to mitigate for the potential indirect impacts to potential dispersal habitat due to sedimentation and accidental spills.
- 6d:** Mitigation measures associated with the disturbance to riparian habitat were discussed previously in this section (Mitigation Measure 3.7-1) and will be fully implemented.

Impact 3.7-7:

Construction activities associated with the project could result in impacts to nesting California yellow warblers, yellow-breasted chats, Vaux's swifts, and ruffed grouse.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation

to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

The riparian habitat associated with the Trinity River corridor in the project area provides suitable nesting and foraging habitat for the California yellow warbler and yellow-breasted chat. Both of these species are designated as Species of Special Concern by the CDFG. Both species have been observed in the project area during the breeding season (Herrera 2006) and may nest on site. The conifer habitat in the project area provides habitat for the Vaux's swift and ruffed grouse. Vaux's swifts have been observed in the project area (Herrera 2006).

Alternative 3 would result in a small, temporary reduction of nesting, foraging, and/or roosting habitat for these species. However, implementation of Mitigation Measure 3.7-1 will ensure that there is no net loss of riparian habitat. Furthermore, Alternative 3 would result in a long-term increase in riparian habitat diversity, increasing the quality of the habitat for the California yellow warbler and the yellow-breasted chat. Thus, due to the small and temporary nature of the impacts and the regional abundance of similar habitats, the project is not expected to have a significant impact on habitat for the Vaux's swift, ruffed grouse, California yellow warbler, and yellow-breasted chat. However, the removal of riparian vegetation and the noise associated with construction activities could disturb individuals nesting on or adjacent to the sites. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or nesting individuals or any activities resulting in nest abandonment would be considered a significant impact.

Mitigation Measures:

In order to avoid and/or minimize impacts to nesting Vaux's swifts, ruffed grouse, California yellow warblers, and yellow-breasted chats, the following measures shall be implemented:

- 7a:** Grading and other construction activities should be scheduled to avoid the nesting season to the extent possible. The nesting season for these species in Trinity County extends from March 15 through August. If construction occurs outside of the breeding season, no further mitigation is necessary. If the breeding season cannot be completely avoided, measures 7b and 7c should be implemented.
- 7b:** A qualified biologist should conduct a minimum of one pre-construction survey for Vaux's swifts, ruffed grouse, yellow warblers, and yellow-breasted chats within the project site and a 250-foot buffer around the site. The survey should be conducted no more than 15 days prior to the initiation of construction in any given area. The pre-construction survey should be used to ensure that no nests of these species within or immediately adjacent to the project sites would

be disturbed during project implementation. If an active nest is found, a qualified biologist should determine the extent of a construction-free buffer zone to be established around the nest.

- 7c:** If vegetation is to be removed by the project and all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed by the project should be removed before the onset of the nesting season, if feasible. This will help preclude nesting and substantially decrease the likelihood of direct impacts.

Impact 3.7-9:

Construction activities associated with the project could disrupt nesting by special-status raptors.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Suitable nesting habitat for the northern goshawk, osprey, Cooper's hawk, and sharp-shinned hawk, which are designated as California Species of Special Concern, occurs at the site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or nesting raptors, or any activities resulting in raptor nest abandonment, would be considered a significant impact.

Mitigation Measures:

In order to avoid and/or minimize impacts to nesting special-status raptors, the following measures shall be implemented:

- 8a:** Construction should be scheduled to avoid the nesting season to the extent feasible. The nesting season for most raptors in Trinity County extends from February 15 through July 31. Thus, if construction can be scheduled to occur between August 1 and February 14, the nesting season would be avoided and no impacts to nesting raptors would be expected. If it is not possible to

schedule construction during this time, the following mitigation measures should be implemented.

- 8b:** Pre-construction surveys for nesting raptors should be conducted by a qualified biologist to ensure that no nests will be disturbed during project implementation. These surveys should be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the biologist should inspect all trees immediately adjacent to the impact areas for raptor nests. If an active raptor nest is found close enough (i.e., within 500 feet) to the construction area to be disturbed by these activities, the biologist, in consultation with the CDFG, shall determine the extent of a construction-free buffer zone to be established around the nest.
- 8c:** If vegetation is to be removed by the project and all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed by the project should be removed before the onset of the nesting season, if feasible. This will help preclude nesting and substantially decrease the likelihood of direct impacts.

Impact 3.7-11:

Construction activities associated with the project could result in BLM sensitive species.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Plant surveys for U.S. Bureau of Land Management (BLM) sensitive and Survey and Manage species were conducted at the site during the spring and summer of 2002 and fall 2003 (McFarland 2003). Neither of the two BLM sensitive plant species with the potential to occur at the site were identified during the focused plant surveys. Additionally, surveys for mollusks were conducted within the site during the spring 2006 survey period. No mollusks were located during either visit. None of the public lands at the site contains suitable habitat for BLM sensitive mollusks.

Seven of the wildlife species with potential to occur at the site are designated BLM sensitive species: foothill yellow-legged frog, Pacific fisher, small-footed myotis bat,

long-eared myotis bat, pallid bat, Townsend's western big-eared bat, and Yuma myotis bat (see SEA/RPDEIR, Revised Table 3.7-1). With the exception of the Pacific fisher, potential impacts to these species are discussed as separate impacts above. The Pacific fisher may use the Trinity River as a travel corridor; however, suitable denning habitat is not present at the site. Therefore, impacts would be less than significant, and mitigation measures are not required for the Pacific fisher.

Mitigation Measures:

Since no significant impacts for the Pacific fisher were identified, no mitigation is required. Mitigation measures 5a, 5b, and 5c on page 3.7-48 of the EA/DEIR will reduce the impacts to the foothill yellow-legged frog to a less-than-significant level. Mitigation measures 9a and 9b on pages 3.7-54, 55 of the EA/DEIR will reduce the impacts to special-status bat species to a less-than-significant level.

Impact 3.7-13:

Implementation of the project could result in the spread of non-native and invasive plant species.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Implementation of the proposed project could result in the spread of non-native and invasive plant species (e.g., dalmatian toadflax, yellow star-thistle, Himalayan blackberry, and Klamathweed) during ground-disturbing activities. This would be considered a significant impact. However, further spread of weeds is not anticipated with implementation of the mitigation measures described below.

Mitigation Measures:

In order to avoid and/or minimize the potential introduction and/or spread of noxious weeds, the following measures shall be implemented:

13a: When using imported erosion control materials (as opposed to rock and dirt berms), use only certified weed-free materials, mulch, and seed.

13b: Preclude the use of rice straw in riparian areas.

- 13c:** Limit any import or export of fill to material known to be weed free.
- 13d:** Require the construction contractor to thoroughly wash all equipment prior to entering the County. Equipment will be inspected to ensure that it is free of plant parts as well as soils, mud, or other debris that may carry weed seeds.
- 13e:** Utilize a mix of native grasses, forbs, and non-persistent non-native species (mix to be developed in cooperation with members of the Trinity County Weed Management Cooperative (TCWMC) for disturbed areas that are subject to infestation by non-native and invasive plant species. Where appropriate, a heavy application of mulch will be utilized to discourage introduction of these species.
- 13f:** After completion of final grading activities, Reclamation will coordinate with members of the TCWMC to identify high priority areas that will be treated using planting plugs of native grass species to accelerate occupation of disturbed sites and increase the likelihood of reestablishing a self-sustaining population of native plant species.
- 13g:** Within the first 3 to 5 years post-project, if it is determined that the project has caused non-native invasive vegetation to out-compete desired planted or native colonizing riparian vegetation, opportunities to control these non-native species may be considered. When implementing weed control techniques, the approach will consider using all available control methods known for a weed species. Control methods will be consistent with those adopted by the TCWMC and the Trinity County Board of Supervisors.

Recreation

Significance Criteria

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

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

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

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

Impact 3.8-1:

Construction associated with the project could disrupt recreation activities (boating, fishing, and swimming) in the Trinity River.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

The Trinity River supports in-stream recreational uses, primarily whitewater recreation and fishing. These in-stream recreational activities take place throughout the year, but are more prevalent between the months of May and December. Access to the Trinity River is available on public and private lands, including undeveloped foot paths and improved access points. Some of these access points prohibit public use. Public access is provided on lands owned by Trinity County and BLM lands. Where available, access to the river provides a variety of water-based recreational activities (e.g., boating, fishing, swimming).

During implementation of Alternative 3, there would be construction equipment and activity within the floodplain and immediately adjacent to the river bank. Actions within the activity areas described in Chapter 2 of the SEA/RPDEIR may result in short-term interruptions to public access. However, river access will remain available at the Bureau of Land Management's Douglas City Campground and Steel Bridge Campground along with several public and private access points to the east and west of these facilities. These facilities will ensure uninterrupted public access to the river on both sides of the project boundary. This impact is considered significant, even though potential disruptions to recreational activities within the project boundary would be temporary.

Mitigation Measures:

- 1a. Reclamation or their contractor shall provide precautionary signage to warn recreational users of the potential safety hazards associated with project construction activities. Signs and/or buoys shall be placed within and directly adjacent to the project boundary along the Trinity River in accordance with the requirements specified in Title 14, Article 6 of the California Code of Regulations. Notification signs shall be posted at the Steel Bridge and Indian Creek Boat launches, as well as at the private boat launch behind the Indian Creek Motel. Additionally, public notification of proposed project construction activities and associated safety hazards shall be circulated in the local Trinity Journal newspaper and posted on the bulletin board maintained by the TRRP in Weaverville, California at least two weeks prior to the start of construction activities.

Impact 3.8-2:

Construction of the project could result in an increased safety risk to recreational users.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

During construction of Alternative 3, there would be heavy equipment activity and construction vehicle traffic directly adjacent to the Trinity River. The river crossing (X-1) required for treatment area R-1 is expected to be in place for up to 4 weeks during the low flow period. This crossing would require the placement of gravel access pads within the river channel. These construction-related activities could distract recreational users (e.g., boaters, anglers) for a short period of time (approximately 3-6 weeks during the low flow period). The in-channel activities associated with the Weaver Creek crossing (X-3) would be accomplished in a way that minimizes impacts to navigation (i.e., safety) but this would still be considered a significant, albeit temporary, impact. Unlike the Proposed Action, Alternative 1, and Alternative 2, no in-channel activities would occur at R-5.

Mitigation Measures:

2a. Reclamation or their contractor shall provide precautionary signage to warn recreational users of the potential safety hazards associated with project construction activities. Signs and/or buoys shall be placed within and directly adjacent to the project boundary along the Trinity River in accordance with the requirements specified in Title 14, Article 6 of the California Code of Regulations. Notification signs shall be posted at the Steel Bridge and Indian Creek Boat launches, as well as at the private boat launch behind the Indian Creek Motel. Additionally, public notification of proposed project construction activities and associated safety hazards shall be circulated in the local Trinity Journal newspaper and posted on the bulletin board maintained by the TRRP in Weaverville, California at least two weeks prior to the start of construction activities.

Impact 3.8-3:

Construction activities associated with the proposed project could lower the river's aesthetic values for recreationists by increasing turbidity levels in the Trinity River.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Alternative 3 could increase turbidity in the Trinity River for some distance downstream. The level of this increase is largely dependent on the flow regime at the time of the discharge. The flows that typically contribute to good fishing tend to be clear, and nominal increases in turbidity may affect the recreational experience of anglers and the aesthetic values of other user groups. Water quality objectives for the Trinity River specifically prohibit increases in the levels of other materials in a way that causes nuisance or adversely affects beneficial uses (i.e., recreation).

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

- The discharge of soil, silt, bark, sawdust or other organic and earthen material from any logging, construction or associated activity of whatever nature into any

stream or watercourse in the basin in quantities deleterious to fish, wildlife or other beneficial uses is prohibited.

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

Implementing Alternative 3 has the potential to increase turbidity and total suspended solids during construction activities. Fine sediments may be suspended in the river for several hours following excavation activities. The extent of downstream sedimentation would be a function of the instream flow velocity and particle size. For example, fine-grained sediments like silts and clays can be carried several thousand feet downstream of the excavation areas, while larger-sized sediments like sands and gravels would tend to drop out of the water column within several feet of the construction limit. Increased turbidity and suspended solids levels would adversely affect water quality (refer to EA/DEIR, Section 3.5, Water Quality) and could also adversely affect anadromous fish species that are known to occur in the Trinity River (refer to EA/DEIR, Section 3.6, Fisheries Resources). This would therefore be considered a significant impact.

Mitigation Measures:

- 3a. Turbidity increases associated with project construction activities shall not exceed the Regional Water Board water quality objectives for turbidity in the Trinity River basin. Turbidity levels are defined in nephelometric turbidity units (NTUs). The current threshold for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (2001), is summarized below.
 - Turbidity shall not be increased by more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.
- 3b. To ensure that turbidity levels do not exceed the threshold listed above during river's edge and in-channel project construction activities, Reclamation or its contractor shall monitor turbidity levels 50 feet upstream and 500 feet downstream of the point of river's edge and in-channel construction activities. At a minimum, field turbidity measurements shall be collected whenever a visible increase in turbidity is observed. Monitoring frequency shall be a minimum of every 2 hours during periods of increased turbidity.
- 3c. Reclamation or its contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) that describes BMPs for the project. Ripping of all riparian areas is expected to stop delivery of storm water to the river;

however, BMPs, including silt fences, sediment filters, dewatering activities, and routine monitoring to verify effectiveness, may be necessary. Proper implementation of erosion and sediment controls and dewatering activities shall be adequate to minimize sediment inputs into the Trinity River until river levels rise and inundate the floodplain. All sediment containment devices and erosion control devices will be inspected daily during the construction period to ensure that the devices are functioning properly. Excavated and stored materials will be kept in upland sites with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable upland sites. All applicable erosion control standards will be required during stockpiling of materials.

Cultural Resources

Impact 3.11-1:

Implementation of the proposed project could cause a substantial adverse change in the significance of a known cultural resource.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Significance Criteria

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

For historical resources, the lead agencies have reviewed both the federal NHPA and CEQA in order to determine thresholds of significance. As noted above, CEQA provides that a project may cause a significant environmental effect if the project “may cause a substantial adverse change in the significance of an historical resource” (Public Resources Code, Section 21084.1). CEQA Guidelines Section 15064.5 defines a “substantial adverse change in the significance of an historical resource to mean “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired” (CEQA Guidelines, Section 15064.5, subd. (b)(1)).

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

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

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical

resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA. (CEQA Guidelines, Section 15064.5, subd. (b)(2))

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

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

In addition, based on CEQA Guidelines Section 15064.5 and Appendix G of the CEQA Guidelines, the Proposed Action and the alternatives would have significant effects if they would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

Impact 3.11-1:

Implementation of the proposed project could cause a substantial adverse change in the significance of a known cultural resource.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

The project boundary was surveyed for the presence of cultural resources that would be eligible for listing on the National Register of Historic Places (NRHP.) Based on the results of the surveys, two sites associated with the Union Hill Mine were recorded (Union Hill Terraces [06-TRRP-01] and a Conveyance Ditch [06-TRRP-06], and are therefore considered eligible for inclusion in the NRHP as contributing components to the Union Hill Mine complex. Placement of spoils piles near and within the Union Hill Terrace Mine historical site (06-TRRP-01) could result in significant impacts to sites eligible for inclusion on the NRHP. Site 06-TRRP-06 will not be affected by actions that will take place within the APE.

Mitigation Measures:

1a: Plans for spoiling excavated materials have been altered to place materials outside of the areas of the Union Hill Mine Terrace that contain distinct features that define the historic site. To ensure cultural resource protection, these sensitive areas within the Union Hill Mine Terrace will be flagged for avoidance by a Reclamation archaeologist prior to construction. Construction workers will be informed of the flagging and its purpose.

Impact 3.11-2:

Implementation of the proposed project could potentially result in disturbance of undiscovered prehistoric or historic resources.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

The APE was surveyed for the presence of cultural resources that would be eligible for listing on the NRHP. Based on the results of this survey, two sites associated with the Union Hill Mine were recorded (Union Hill Terraces [06-TRRP-01] and a Conveyance Ditch [06-TRRP-06], and are therefore considered eligible for inclusion on the NRHP as contributing components to the Union Hill Mine complex.

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

Mitigation Measures:

2a: Prior to initiation of construction or ground-disturbing activities, all construction workers shall be alerted to the possibility of buried cultural remains. This would include prehistoric and/or historic resources. Personnel shall be instructed that upon discovery of buried cultural materials, work within 50 feet of the find shall be halted and Reclamation's designated archaeologist consulted. Once the find has been identified, Reclamation will make the necessary plans for treatment of the finds(s) and for the evaluation and mitigation of impacts if the find(s) are found to be significant as defined in the PA.

2b: If buried human remains are encountered on non-federal lands during construction, work in that area must be halted, and the Trinity County Coroner's Office shall be immediately contacted. If the remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) will be notified within 24 hours of determination, as required by Public Resources Code, Section 5097. The NAHC will notify designated Most Likely Descendants, who will provide recommendations for the treatment of the remains within 24 hours. The NAHC will mediate any disputes regarding treatment of remains. For the discovery of Native American human remains and associated items on Federal lands, the Native

American Graves Protection Act (25 U.S.C. 3001) and its implementing regulations (43 CFR Part 10) will be followed.

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

Air Quality

Significance Criteria

Consistent with Appendix G of the CEQA Guidelines, the project will have an adverse impact on air quality if it would

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

Impact 3.12-1:

Construction activities associated with the project could result in an increase in fugitive dust and associated particulate matter (PM10; PM2.5) levels.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation

to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Construction associated with Alternative 3 would require the use of equipment that would temporarily contribute to air pollution within the Trinity River basin. Construction excavation and grading are sources of fugitive dust emissions (PM10) that could have a temporary impact on local air quality. Dust emissions would primarily be associated with removal of vegetation, excavation and disposal of earthen materials, and equipment travel on unpaved road surfaces.

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

Generation of fugitive dust and particulate matter levels associated with construction of Alternative 3 would be less than under Alternative 1 because this alternative would not include implementation of the proposed road access to the north of the activity areas and would therefore involve less earthwork. To the extent possible, revegetation would be coordinated with construction so that the amount of bare ground is limited. Revegetation would not commence until plants are dormant and fall wet conditions have returned. Short-term impacts associated with the generation of fugitive dust during construction would be considered a significant impact.

Mitigation Measures:

- 1a. Reclamation shall include provisions in the construction bid documents specifying that the contractor shall implement a dust control program to limit fugitive dust and particulate matter emissions. The dust control program may include, but will not be limited, to the following elements, as appropriate:
 - Inactive construction areas will be watered as needed to ensure dust control.
 - Pursuant to the California Vehicle Code (Section 23114), all trucks hauling soil or other loose material to and from the construction site shall be covered or shall maintain adequate freeboard to ensure retention of materials within the truck's bed (e.g., ensure 1-2 feet vertical distance between top of load and the trailer).
 - Excavation activities and other soil-disturbing activities shall be conducted in phases to reduce the amount of bare soil exposed at any one time.

Mulching with weed-free materials may be used to minimize soil erosion, as described in Section 3.3, Geology, Fluvial Geomorphology, and Soils, and Section 3.5, Water Quality.

- Watering with either equipment and/or manually shall be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.
- All paved access roads, parking areas, and staging areas shall be swept (with water sweepers), as required by Reclamation.
- Roads shall be swept (with water sweepers) if visible soil material is carried onto adjacent public roads, as required by Reclamation.
- All ground-disturbing activities with the potential to generate dust shall be suspended when winds exceed 20 miles per hour, as directed by the North Coast Unified Air Quality Management District (NCUAQMD).
- Reclamation or its contractor shall designate a person to monitor dust control and to order increased watering as necessary to prevent transport of dust offsite. This person will also respond to citizen complaints.

Impact 3.12-2:

Construction activities associated with the project could result in an increase in construction vehicle exhaust emissions.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

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

Construction vehicle exhaust emissions associated with Alternative 3 would be slightly less than under Alternative 1 because there would be no construction of the access road to the north of the activity areas and therefore slightly less construction work involved. However, Alternative 3 would have a significant impact on air quality.

Mitigation Measures:

- 2a: Reclamation shall include provisions in the construction bid documents specifying that the contractors shall comply with NCUAQMD Rule 104 (3.0) Particulate Matter. This compliance could occur through the use of portable internal combustion engines registered and certified under the state portable equipment regulation (Health & Safety Code 41750 through 41755).

Impact 3.12-3:

Construction activities associated with the project and removal of vegetation could result in vegetative materials that managers will decide to burn.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

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

Smoke associated with Alternative 3 would be less than under Alternative 1 because there would be no construction of the access road to the north of the activity areas and therefore less vegetation cleared and possibly burned. However, smoke associated with construction of Alternative 3 would be considered a significant impact.

Mitigation Measures:

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

penetrate the mineral soil layer to 1/4 inch or more will be present, wind speeds will be low (< 10 mph), and temperature will be low (< 80o F)

- Piles may be covered with a 5-foot x 5-foot sheet of 4-mil polyethylene plastic to promote drying of the slash. At least 3/4 of each pile surface would be covered and the plastic anchored to preserve a dry ignition point. Dry fuel conditions will minimize smoke emissions.
- Slash piles would not be constructed on logs, stumps, on talus slopes, within 25 feet of wildlife trees with nest structures, in roadways or in drainage ditches. Piles will not be placed within 10 feet of trees intended to be saved (reserved trees), or within 25 feet of a unit boundary.

3c: Notification of the public and the NCUAQMD will occur each day. Depending on wind direction and proximity to roads, signs or personnel will notify residents and traffic on nearby access routes.

Aesthetics

Significance Criteria

The proposed project would have a significant impact if it:

- obstructs a scenic view from public viewing areas;
- has a substantial adverse effect on a scenic vista;
- substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- substantially degrades the existing visual character or quality of the project site and its surroundings;
- introduces physical features that are substantially out of character with adjacent residential areas;
- alters the site so that the scale or degree of change appears as a substantial, obvious, and disharmonious modification of the overall scene (to the extent that it clearly dominates the view);
- creates substantial daytime glare associated with new construction;
- disrupts adjacent residential areas from new night-time lighting;
- creates a new source of substantial light or glare that would adversely affect day or nighttime views in the site;
- is inconsistent with the policies of the Trinity County General Plan relating to aesthetics; or
- is inconsistent with the goals and objectives of both the federal and state WSRAs with regards to the Trinity River.

Impact 3.14-1:

Implementation of the project could result in the degradation and/or obstruction of a scenic view from key observation areas.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

The project study area includes five distinct visual assessment units (VAUs). The potential effects of the Proposed Action on key observation points (KOPs) are discussed below by VAU.

VAU #1 (Steel Bridge Road Unit)

KOP 1 (Views of R-1 and U-1, and a Construction Access Road): Alternative 3 includes rehabilitation activities in R-1 and U-1 and a construction access road along the right bank of the river. As with all of the upland areas, U-1 would be used as a repository for excavated material (i.e., sand, gravel, and cobble) and vegetation. Currently, the lack of soil development in depositional environments throughout the VAUs inhibits recruitment and survival of native vegetation. Alternative 3 will increase the overall percentage of finer grained materials in the upland activity areas, resulting in more favorable vegetation recruitment and survival, which would increase the aesthetic quality of these areas in the long term. Noticeable changes in views of the project study area from KOP 1 would be less than significant.

Rehabilitation of R-1 would require some riparian vegetation removal and berm modification in addition to the placement of large woody debris into the channel for fish habitat. Some upland, riparian, and annual grassland vegetation removal would be necessary for the construction of the access road. Large willows and cottonwoods as well as other large nesting trees would be retained, and the floodplain would be revegetated with native riparian species and through natural recruitment. Visual impacts associated with R-1, as seen from KOP 1, would be less than significant.

VAU # 2: (SR 299 East End Unit)

KOPs 1 and 2 (Views of R-1, U-2, Access Roads, and a Construction Staging Area): The Proposed Action includes rehabilitation activities in R-1 and U-2, construction of access roads into R-1 and U-2, and use of an upland area above the river's right bank as a construction staging area. Similar to the Proposed Action, rehabilitation of R-1 would require some riparian vegetation removal and berm modification in addition to the placement of large woody debris into the channel for fish habitat. U-2 would be used

as a repository for excavated material (i.e., sand, gravel, and cobble) and vegetation. Excavated material and cleared vegetation would be placed at U-2 above the 100-year floodplain elevation.

Although a string of riparian vegetation, primarily cottonwoods and willows, extends along much of the river's left bank, glimpses of the R-1 activity area and access roads would be available to motorists traveling in both directions along SR 299. Both KOP 1 and KOP 2 are representative of river and right bank views that occur throughout the entirety of VAU #2. Topography and upland vegetation on the right side of the river obscure most views of U-2, the construction staging area, and portions of the access roads as seen from SR 299. There are no homes in this VAU.

No long-term visual impacts to key public viewing areas in VAU #2 are anticipated because one of the primary objectives of the project is to improve the visual attractiveness of the project area.

VAU # 3: (SR 299 – Indian Creek Delta Unit)

KOP 1 (View of R-1); KOP 2 (Views of R-2, U-4, Construction Access Road, and a River Crossing); KOPs 3 through 9 (Views of R-3, R-4, U-4, Construction Access Roads, and a Construction Staging Area); Alternative 3 includes rehabilitation of the floodplain and alcove at R-2 and berm removal at R-3 and R-4.

Views of the western end of R-1 from SR 299 are obscured by homes, vegetation, and distance. At this location, the river has meandered away from SR 299. The homes surrounding KOP 1 do not have a view of R-1.

None of the activities at R-2 would be visible from SR 299. At this location, the river continues to be some distance from SR 299, with residential development and upland and riparian vegetation minimizing views from all but the home off of River Ranch Road that backs up to the R-2 alcove. KOP 2, established at the back of this home, clearly shows that the alcove rehabilitation work in this area, the construction access road running through this property, and a river crossing allowing for construction access on the right side of the river, will have a temporary impact on views from the home. The R-2 floodplain rehabilitation work extending downstream from the alcove would not be visible from KOP 2, except for possibly a very small portion of the upstream end. Although it is expected that the channel will restore itself to a natural appearance over time, there would be a temporary, adverse visual impact associated with the Proposed Action, as viewed from KOP 2. Impacts to visual resources at this location are considered to be significant.

KOPs 3 through 9 were established primarily to assess visual impacts from SR 299 that would result from implementation of R-3 and U-4. KOP 7 is also intended to assess R-4, berm removal along the left bank of the river. R-3 activities involve the removal of the berm on the left bank of the Trinity River downstream of Indian Creek. Impacts to visual resources as viewed from KOPs 3, 4, 6, 8, and 9 are considered to be temporary, but

significant. Views from KOP 7 of R-4 are obscured by vegetation. Thus, visual impacts as seen from KOP 7 would be less than significant.

VAU # 4: (River Ranch Road Unit)

KOP 1; KOPs 3 and 4 (Views of R-6 and R-8); KOPs 5, 6, and 7 (Views of R-7, R-8, U-3, a Construction Access Road, and a Construction Staging Area): Alternative 3 consists of rehabilitation activities associated with R-6, R-7, R-8, R-10, and U-3, which include floodplain rehabilitation, vegetation removal, berm removal, alcove and side channel construction, upland disposal sites, construction staging areas, and construction access roads. None of the proposed activity areas in this VAU would be visible from SR 299 or River Ranch Road due to topography, vegetation, residential development, and distance from the river. There would be no impact to visual resources as viewed from KOP 1 since there would be no activities visible from this location or its immediate vicinity.

KOPs 3 and 4 were established at a homesite that has been abandoned and is now owned by Reclamation. This location, from which R-6 (vegetation removal) and the eastern end of R-8 (floodplain rehabilitation, vegetation removal, and side channel and alcove construction on the right bank of the river) are visible when viewed from KOPs 3 and 4, is not visible from SR 299 or any nearby homes. Therefore, any impacts to visual resources at this location would be considered less than significant.

KOPs 5, 6, and 7 extend along SR 299. No activity areas are visible from these locations. Views of R-6, R-7, R-8, R-10, U-3, construction staging areas, and construction access roads are obscured by topography and vegetation. There are no homes along this stretch of SR 299. Therefore, any impacts to visual resources at this location would be considered less than significant.

VAU # 5: (Douglas City Unit)

KOPs 1 through 6 (Views of R-9): Alternative 3 consists of rehabilitation activities associated with R-9. The R-9 activity area would include vegetation removal. This activity area is visible from both SR 299 (KOPs 1, 2, and 3) and SR 3 (KOP 6), although the SR 299/Trinity River bridge obscures portions of the area's east side when viewed from KOP 6. Views of the area from the town of Douglas City are obscured by topography. Although the impacts to visual resources from KOPs 1 through 3 and KOP 6 would be temporary, the impacts would be significant.

Mitigation Measures

In order to minimize impacts to visual resources resulting from the removal of vegetation within the project study area, mitigation measures 1a through 1d, as described Section 3.7 (Vegetation, Wildlife, and Wetlands) of the EA/DEIR, will be implemented where applicable for all alternatives.

Noise

Significance Criteria

Based on Appendix G of the CEQA Guidelines, the Proposed Action and alternatives 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.

Impact 3.16-1:

Construction activities associated with the project would result in temporary noise impacts to nearby sensitive receptors.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

During the construction phase of the project, noise from construction activities, including the processing and transport of alluvial materials would dominate the noise environment in the immediate area. As shown in Revised Table 3.16-4 from the SEA/RPDEIR, construction activities would generate maximum noise levels ranging from 70 to 90 dBA at a distance of 50 feet, although intervening terrain and vegetation could reduce these noise levels. Construction noise would be temporary and is expected to occur intermittently over the course of the construction period. There would be no permanent noise impacts as a result of project implementation.

Ten sensitive receptors are located in the immediate vicinity of the project boundary (SEA/RPDEIR, Revised Figures 3.16-1b, . Sensitive receptors identified within 1,000 feet of the project boundary are listed in Revised Table 3.16-2 from the SEA/RPDEIR. Each of these sensitive receptors would be subjected to varying degrees of construction noise under Alternative 3. Under Alternative 3, the access road proposed to extend from Union Hill Road to activity areas on the north side of the river would not be constructed, therefore reducing the noise impacts associated with sensitive receptors 8, 9, and 10.

It is anticipated that ground vibration associated with project rehabilitation activities will not be detectable at any of the sensitive receptor locations, nor will it result in structural damage. However, during the construction phase of the project, noise from construction activities would dominate the noise environment in the immediate area. This would be considered a significant impact.

Mitigation Measures:

- 1a. Construction activities near residential areas (i.e., sensitive receptors 1-3 and 5-6) 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).

Public Services and Utilities/Energy

Significance Criteria

A project would 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.

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.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation

to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Although construction activities associated with Alternative 3 would be confined to the project boundary described in Chapter 2 of the SEA/RPDEIR, access for processing and transportation of alluvial materials, as well as the mobilization and demobilization of heavy equipment may require traffic control for SR 299 and River Ranch Road. Traffic control requirements associated with transport of processed material will be intermittent in accordance with Caltrans requirements. During periods of construction, approximately 30 dump trucks per day would be used to move material to off-site locations. 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 EA/DEIR Sections 3.16 and 3.17 and in coordination with the appropriate school district to avoid disruption of student access to bus service.

Mitigation Measures:

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

Transportation/Traffic Circulation

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 SR 299, specifically the bridges extending over Indian Creek and 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.

Impact 3.18-3:

Implementation of the project would obstruct access to adjacent land uses.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

As described in Section 3.2 of the EA/DEIR, land uses in and adjacent to the rehabilitation site consist mainly of residential areas. No residences occupy the right bank of the Trinity River. Residences and two businesses are present on the left bank within the project boundary. Construction activities associated with the left side of Trinity River would use primary access points on SR 299. Access to the U-4 area will occur within the Caltrans right-of-way downstream of Indian Creek. 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 would be restricted within the project boundary on both sides of the river during the construction period; however, several public access points are available adjacent to the project boundary, both upstream and downstream. Impacts relating to recreational activities are discussed under Section 3.8 of the EA/DEIR.

Mitigation Measures:

- 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.

Impact 3.18-5:

Construction activities could pose a safety hazard to motorists, bicyclists, and pedestrians.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Traffic safety hazards could arise for motorists, pedestrians, and bicyclists in the vicinity of the construction access routes when heavy construction equipment is entering or leaving the project site. Access to the Trinity River may be limited to identified routes

during construction activities to minimize public exposure to construction traffic. Trucks entering and exiting the access road off SR 299 may pose a temporary hazard to cyclists and motorists using the roadway. Although this impact would be limited to brief and intermittent time periods, it is considered significant.

Mitigation Measures:

- 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.

Impact 3.18-5:

Construction of the proposed project could pose a safety hazard to motorists, bicyclists, and pedestrians.

Finding:

Mitigation measures have been incorporated into the project that avoid significant environmental effects as determined in the Final EIR. As stated in the MMRP, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented. Incorporation of these measures will ensure that mitigation of significant environmental effects will occur.

Explanation:

Traffic safety hazards could arise for motorists, pedestrians, and bicyclists in the vicinity of the construction access route for brief periods of time on an intermittent basis (EA/DEIR pp. 3.18-2). Access to the Trinity River through the proposed project ESL may be limited to identified routes during construction activities to minimize public exposure to construction traffic.

Hazards will be minimized by mitigation measure 5a which requires the preparation of a traffic control plan that would provide temporary access through construction areas, reduce speed limits, illumination, provide for the use of safety vests, and use fencing to separate pedestrians and bicyclists from construction hazards.

Mitigation Measures:

- 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.*

IX.
PROJECT ALTERNATIVES;
OVERRIDING CONSIDERATIONS

CEQA provides that, where a significant environmental effect can be substantially lessened (i.e., mitigated to an "acceptable level") solely by the adoption of mitigation measures, the lead agency, in drafting its findings, has no obligation to consider the feasibility of alternatives with respect to that impact, even if the alternative would mitigate the impact to a greater degree than the proposed project. (Pub. Resources Code, § 21002; *Laurel Hills Homeowners Association v. City Council* (1978) 83 Cal.App.3d 515, 521; see also *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 730-731; and *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 400-403.) The same principle applies where, as here, the "project" approved by the lead agency was one of the "alternatives" set forth in an EIR. The discussion of impacts and mitigation measures above reveals that all identified significant impacts will be reduced to a level of insignificance by the implementation of the mitigation measures identified in the Mitigation Monitoring and Reporting Plan contained in the EA/Final EIR. Trinity County need not, therefore, consider any additional alternatives, and may adopt the Project as proposed (i.e., Alternative 3 in the EA/FONSI/FEIR).

Nor, under CEQA, is Trinity County required to adopt a "statement of overriding considerations" under the circumstances at hand. The requirement to adopt a statement expressly concluding that the economic or social benefits of proposed projects outweigh their adverse environmental effects is triggered only where such effects will remain *significant* even with implementation of feasible mitigation measures. (CEQA Guidelines, §§ 15002, subd. (a)(4), 15021, subd. (d), 15093; see also Pub. Resources Code, § 21081, subd. (b).) Here, Trinity County, through the MOU with Reclamation, has determined that Reclamation agrees to carry out all of those mitigation measures, identified throughout these findings, that are within Reclamation's jurisdiction and control.

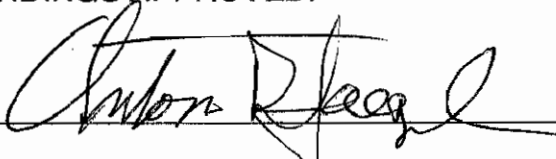
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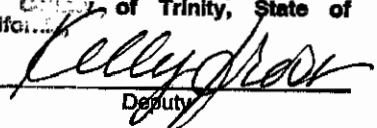
Trinity County has certified the Final EIR, pursuant to CEQA Guidelines Section 15090. CEQA Guidelines Section 15091(a) states that "No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation for the rationale for each finding." These findings constitute the independent conclusions, analysis, and rationale of Trinity County.

As documented in these Findings and in the EA/Final EIR, Trinity County finds that the mitigation measures incorporated into the project as approved (Alternative 3) avoid all significant impacts. Therefore, Trinity County hereby adopts all the mitigation measures described in Section VII of these Findings. As stated in the Mitigation Monitoring and Reporting Plan, Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting. As the lead agency, Trinity County will work with Reclamation to ensure that all measures in the MMRP are implemented.

Trinity County approves these Findings and hereby finds that the Proposed Project will have no significant effects on the environment, pursuant to its duties under Section 15092(a)-(b)1 of the CEQA Guidelines.

FINDINGS APPROVED:

 Date 5-7-07

The foregoing has been approved by the
Trinity County Board of Supervisors.
on 5/1/07
Attest: IDY G. TYLER
Clerk of the Board of Supervisors of
the County of Trinity, State of
California.
By: 
Deputy