Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites

Volume I: Executive Summary/Draft FONSI
Part 1: Draft Master Environmental Impact Report
Part 2: Environmental Assessment/Draft Environmental Impact Report

June 2009

California Lead Agency for CEQA
North Coast Regional Water Quality Control Board

Project Proponent and Federal Lead Agency for NEPA
Trinity River Restoration Program
U.S. Department of the Interior
Bureau of Reclamation

Federal Cooperating Agencies for NEPA
Shasta–Trinity National Forest
Bureau of Land Management

Cooperating Tribal Agencies
Hoopa Valley Tribe
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Yurok Tribe

Project Proponent's Consultant
North State Resources, Inc.

Trinity River Restoration Program
P.O. Box 1300, 1313 South Main Street
Weaverville, California 96093

California Regional Water Quality Control Board
North Coast Region
5550 Skylane Blvd., Suite A
Santa Rosa, California 95403

Subject: Master Environmental Impact Report for Trinity River Restoration Program Channel Rehabilitation and Sediment Management at Remaining Phase 1 and Phase 2 sites

Dear Interested Parties:

Under guidance of the Trinity River Restoration Program (TRRP), the Bureau of Reclamation has acted as the project proponent in preparation of a programmatic and site specific environmental document to evaluate impacts of proposed Trinity River restoration activities. The California Regional Water Quality Control Board, North Coast Region (Regional Water Board), has acted as the California Environmental Quality Act (CEQA) lead agency for preparation of both a Master (i.e., (programmatic)) Environmental Impact Report (EIR) and its site specific component. Part 1 of the environmental document is a Draft Master EIR that evaluates the environmental impacts of proposed rehabilitation and sediment management activities at future TRRP channel rehabilitation locations along the Trinity River. Part 2 is an Environmental Assessment/Draft Environmental Impact Report (EA/Draft EIR) and serves as an integrated National Environmental Policy Act (NEPA)/CEQA document that assesses project specific environmental impacts of proposed channel rehabilitation and sediment management activities at the Remaining Phase 1 sites. The two part environmental document, in combination with the 2000 Trinity River Mainstem Fisheries Restoration Program Final Environmental Impact Statement (FEIS), meets NEPA and CEQA requirements and will fulfill evaluation needs stipulated under Executive Orders 11988 (floodplain management), 11990 (protection of wetlands), 13112 (invasive species), and 12898 (environmental justice). The Master EIR, when certified by the Regional Water Board, will serve similar functions under CEQA, as the FEIS under NEPA, by providing programmatic level review from which site-specific project reviews may tier from.

The mechanical channel rehabilitation and sediment management activities evaluated by this joint CEQA/NEPA document were originally identified in the Interior Secretary's December 19, 2000 Record of Decision (ROD) as a necessary step towards restoration of the Trinity River's anadromous fishery. The focus of the TRRP's efforts are intended to increase habitat for all life stages of wild salmon and steelhead native to the Trinity River. Similar to previous construction efforts, the activities described in the Draft Master EIR would create additional fish and wildlife habitat at a number of discrete locations; over time, additional increases in habitat are anticipated as riverine processes are restored. Work to be performed includes re-contouring bank and floodplain features, as well as conducting in-river work such as gravel placement and grade control removal. In addition to various construction activities, the Draft Master EIR-EA/Draft

EIR provides the analysis necessary to authorize ongoing activities such as gravel addition during high spring flows and control of fine sediment on an annual basis. Construction activities within the channel and in the river itself are scheduled to begin in late-summer 2009.

A 45-day public review period has been established for the Draft Master EIR and site specific EA/Draft EIR for activities at the Remaining Phase 1 sites. The review period begins on June 5, 2009, and ends July 28, 2009. A public workshop will be scheduled in July if public comments dictate the need. Electronic copies of the draft document are available for public review on the TRRP's website at http://www.trrp.net/implementation/remainingP1.htm or on Reclamation's Mid-Pacific website at http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=3138 . Hard copies are available in Weaverville, California at the Trinity River Restoration Program Office at 1313 South Main Street (by Tops super market) and at the Trinity County Library at 211 N. Main St. All referenced materials will be available at the Trinity River Restoration Program office. Electronic CD copies and a limited number of paper copies may be obtained at the Trinity River Restoration Program Office free of charge (subject to availability).

The Master EIR, in combination with the site specific EA/FONSI and Final EIR (FEIR) for activities at the Remaining Phase 1 sites, will be used by federal and state agencies to support the decisions made by the CEQA and NEPA lead agencies. The CEQA/NEPA process is anticipated to be complete by August 2009. Written comments must be received by the Trinity River Restoration Program, P.O. Box 1300, Weaverville, CA 96093 no later than 5:00 p.m., July 28, 2009. If you have questions, please contact Mr. Brandt Gutermuth, TRRP Environmental Specialist, at 530-623-1806 or e-mail comments to bgutermuth@mp.usbr.gov.

Sincerely,

Catherine Kuhlman
Executive Officer
Water Quality Control Board
North Coast Region
CEQA - Lead Agency

Mike A. Hamman
Executive Director
Trinity River Restoration Program
NEPA – Lead Agency

Attachment – Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Part 1: Draft Master EIR and Part 2: Environmental Assessment/Draft EIR

If you would like a copy of the final EA/EIR, Please mail the following piece to the Trinity River Restoration Program, PO Box 1300, Weaverville, CA 96093

I would like a copy of the Draft Master EIR and EA/Draft EIR for Remaining Phase 1 sites in the following format:

Draft Master EIR and Executive Summary (50 pages) and CD which includes site specific EA/Draft EIR for the Remaining Phase 1 activities

Draft Master EIR and Environmental Assessment/Draft EIR for Remaining Phase 1 activities (CD of both parts)

Name _____

Address _____

City, State, Zip Code _____

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Executive Summary

1 Introduction

This environmental document was prepared by the U.S. Bureau of Reclamation (Reclamation) and the North Coast Regional Water Quality Control Board (Regional Water Board) for proposed channel rehabilitation and sediment management activities at the Remaining Phase 1 and Phase 2 sites along the Trinity River between Lewiston Dam and the North Fork of the river. The document is divided into two parts.

Part 1 is a Draft Master Environmental Impact Report (Draft Master EIR). This part of the document evaluates the environmental impacts of the proposed rehabilitation and sediment management activities at the Trinity River Restoration Program's (TRRP) Remaining Phase 1 and Phase 2 sites. From a programmatic perspective, it provides a discussion of the existing conditions, environmental impacts, and mitigation measures required to comply with the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.). In addition to addressing direct and indirect impacts associated with the Proposed Project and the alternatives, the Draft Master EIR addresses cumulative and growth-inducing impacts that could be associated with activities at the Remaining Phase 1 and Phase 2 sites. Part 1 is chapters 2 through 5 of this document.

Part 2 is an Environmental Assessment/Draft Environmental Impact Report (EA/Draft EIR), an integrated NEPA/CEQA document that evaluates the environmental impacts of the proposed channel rehabilitation and sediment management activities at a project-specific level for the Remaining Phase 1 sites. The EA/Draft EIR has been prepared to comply with the National Environmental Policy Act (NEPA) (42 United States Code [USC], Section 4321 et seq.) and CEQA (California Public Resources Code, Section 21000 et seq.). Part 2 is chapters 6 through 8 of this document.

The rehabilitation measures are required for the restoration of the Trinity River mainstem fishery. The Proposed Project is designed to benefit anadromous salmonids and their habitat by developing a properly functioning, diverse floodplain and riverine habitat. Collectively, the Proposed Project encompasses 29 rehabilitation site locations in Trinity County, California, along the 40-mile reach of the mainstem Trinity River from Lewiston Dam to the North Fork Trinity River. The Remaining Phase 1 sites (6 locations) are concentrated between Lewiston and Douglas City (about a 16-mile reach) and the Phase 2 sites (23 locations) are located between Rush Creek and the North Fork Trinity River near Helena California (see Figure ES-1).

Reclamation and the Regional Water Board prepared this Draft Master EIR – EA/Draft EIR in cooperation with the U.S. Bureau of Land Management (BLM) and the Shasta-Trinity National Forest (STNF). Reclamation will be responsible for project implementation and is functioning as the federal

lead agency for NEPA compliance and federal Endangered Species Act (ESA) requirements. The Regional Water Board is functioning as the state lead agency for CEQA compliance. As managers of public lands within the watershed and along the mainstem Trinity River, the STNF and the BLM are serving as NEPA cooperating agencies. As co-managers of the Wild and Scenic corridor established for the designated reach of the Trinity River, the STNF and BLM are responsible for complying with Section 7 of the federal Wild and Scenic Rivers Act to ensure that the Outstandingly Remarkable Values (ORVs) for which the Trinity River was designated under the act are protected or enhanced.

In addition to STNF and BLM, the primary cooperating (NEPA) agencies and responsible and trustee (CEQA) agencies are:

- Hoopa Valley Tribe (HVT)
- Yurok Tribe (YT)
- Trinity County Resource Conservation District (TCRCD)
- California Department of Transportation (Caltrans)
- California Department of Fish and Game (CDFG)
- California Department of Water Resources (DWR)
- Trinity County

The EA portion of the EA/Draft EIR in Part 2 of this document tiers from for the Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR). The Record of Decision (ROD), dated December 19, 2000, for the FEIS/EIR directed Department of the Interior (DOI) agencies to implement the Flow Evaluation Alternative, which was identified as the Preferred Alternative in the FEIS/EIR. In addition, elements of the Mechanical Restoration Alternative were included in the decision (U.S. Department of Interior 2000). The ROD set forth prescribed Trinity River flows for the following five water-year types: extremely wet (815,200 acre-feet annually [afa]; wet (701,000 afa); normal (646,900 afa); dry (452,600 afa); and critically dry (368,600 afa). After the ROD was issued, a series of legal challenges was made in federal court; ultimately, the ROD was upheld by the United States Court of Appeals for the Ninth Circuit.

Although Trinity County was the lead agency under CEQA for the FEIS/EIR, the Trinity County Board of Supervisors chose not to "certify" the EIR portion of the joint NEPA/CEQA document. The county's determination was based on its decision to defer pursuing a 1990 petition to the State Water Resources Control Board (State Water Board) related to Water Right Orders 90-05 and 91-01. Therefore, the EIR portion of this document cannot be "tiered" from the FEIS/EIR. The EIR portion functions as a stand-alone document and is in no way dependent for its legal adequacy—for CEQA purposes only—on the FEIS/EIR. Additional information on the legal challenges and ultimate outcome are incorporated by reference from the Hocker Flat Rehabilitation Site: Trinity River Mile 78 to 79.1 EA/EIR (U.S. Bureau of Reclamation 2004).

Based on the outcome of the litigation in federal court, the flows authorized by the 2000 ROD are deemed to constitute the "existing [hydrological] environment" for CEQA purposes, and are considered the basis for the environmental analysis of the Proposed Project under both NEPA and CEQA for this document.

Copies of all of the above-referenced documents and the documents that together constitute the FEIS/EIR are available for public review at:

Trinity River Restoration Program Office
United States Department of the Interior – Bureau of Reclamation
P.O. Box 1300
1313 South Main Street
Weaverville, California 96093

2 Project History and Background

Completion of the Trinity and Lewiston Dams in 1964 blocked migratory fish access to habitat upstream of Lewiston Dam, eliminated sediment transport from over 700 square miles of the upper Trinity River 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 to near 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 Trinity River Diversion (TRD) of the Central Valley Project. 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. Between 1990 and 1993, various restoration actions were implemented, including nine pilot bank rehabilitation projects. These projects were constructed on the mainstem Trinity River between Lewiston Dam and Helena.

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 and to develop recommendations "regarding permanent instream fishery flow requirements, TRD 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 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 Action. As noted previously, the Trinity County Board of Supervisors has never certified the EIR portion of the FEIS/EIR for the Trinity River Mainstem Fishery Restoration Program.

While the ROD for the FEIS identified a number of components that were included in the TRRP, this document focuses on the mechanical channel rehabilitation and fine and coarse sediment management components that would be implemented over time and at various locations along the river. The ROD acknowledged the benefit of implementing mechanical channel rehabilitation activities in two phases. To date, rehabilitation activities have been implemented, fully or partially, at a number of the Phase 1 sites. Phase 1 will be complete once the proposed activities at the Remaining Phase 1 sites evaluated in this document have been completed. Phase 2 as defined in this document includes mechanical channel rehabilitation at 23 site locations. Coarse sediment management may also occur at some of these sites in conjunction with other rehabilitation activities. Fine sediment management will continue to occur on a periodic basis at the Hamilton Ponds near the mouth of Grass Valley Creek. The Phase 2 site locations are interspersed with the Phase 1 sites along the 40-mile reach of the mainstem Trinity River downstream of Lewiston Dam.

Numerous other watershed restoration projects are being planned and implemented throughout the Trinity River basin. The TCRCD, BLM, and STNF, with funding provided by CDFG's Coastal Salmon Recovery Program, BLM's Jobs in the Woods Program, the State Water Board, the U.S. Department of Agriculture, and the National Fish and Wildlife Foundation, are implementing numerous upslope watershed restoration projects throughout the basin, including the South Fork Trinity River watershed.

3 Goals and Objectives of the Proposed Project

The goals of the TRRP outlined in the Trinity River Restoration Program Strategic Plan (2003-2008) provide the framework for the specific goals and objectives used to develop the action alternatives for this Draft Master EIR – EA/Draft EIR. The following goals and objectives support the Proposed Project and provided the structure for development of the alternatives:

- 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 Project 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 [Adaptive Environmental Assessment and Management] Program;
- provide safe and reasonable access to the sites 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 sites;
- integrate known fluvial and ecological theories and relationships with the sites' 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
- facilitate recovery of native fish and wildlife resources that are in decline or listed as threatened and endangered.

The following objectives apply to the responsible and trustee agencies for the Proposed Project:

- 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.

4 Purpose and Need for Action

The purpose of the Proposed Project is to implement a suite of channel rehabilitation, riparian restoration, and sediment management activities to provide juvenile fish habitat along the 40-mile reach of the

mainstem Trinity River from Lewiston Dam to the North Fork Trinity River. The Proposed Project will continue to advance the implementation efforts of the TRRP and provides the opportunity to

- increase the diversity and area of habitat for salmonids, particularly habitat suitable for rearing;
- increase rearing habitat for juvenile salmonids, including coho and Chinook salmon and steelhead;
- increase the structural and biological complexity of habitat for various species of wildlife associated with riparian habitats;
- increase hydraulic and fluvial geomorphic diversity and complexity;
- measure/demonstrate the ecological response to changes in flow regimes, morphological features, and aquatic, riparian, and upland habitats; and
- provide a self-maintaining project whereby adequate maintenance flows are likely to occur independent of future TRD flows.

The need for the Proposed Project results from:

- requirements in the ROD (U.S. Department of the Interior 2000) to restore the Trinity River fishery through a combination of higher releases from Lewiston Dam (up to 11,000 cubic feet per second [cfs]), floodplain infrastructure improvements, channel rehabilitation projects, fine and coarse sediment management, watershed restoration, and an Adaptive Environmental Assessment and Management (AEAM) Program; and
- the expectation that the AEAM Program will continue to incorporate the experience provided through the planning, design, and implementation of the Proposed Project into future restoration and rehabilitation efforts proposed by the TRRP.

The approach and methods incorporated into the Proposed Project used information gained from constructing the Hocker Flat, Canyon Creek, Indian Creek, and Lewiston–Dark Gulch rehabilitation projects. On-going monitoring at these project sites will continue to be incorporated into the AEAM Program for future restoration and rehabilitation efforts.

5 Required Permits and Approvals

The following section identifies the discretionary approvals, consistency determinations, and federal executive orders that were considered in the preparation of this Draft Master EIR – EA/Draft EIR.

5.1 Discretionary Approvals

Provided below is a list of the various discretionary approval processes that have been completed or are being coordinated concurrent with the NEPA/CEQA environmental review process:

- Section 404 Clean Water Act Permit – U.S. Army Corps of Engineers, San Francisco District, Eureka Field Office, Eureka, California
- Compliance with the Federal Endangered Species Act – U.S. Fish and Wildlife Service (USFWS), Eureka, and National Marine Fisheries Service (NMFS), Arcata, California
- Compliance with the Magnuson-Stevens Fishery Conservation and Management Act – NMFS, Arcata, California
- Compliance with Section 7 of the federal Wild and Scenic Rivers Act – BLM, Redding, California
- Section 1602 Streambed Alteration Agreement—CDFG, Region 1
- Compliance with the California Endangered Species Act – CDFG, Region 1
- Section 401 Clean Water Act Water Quality Certification – Regional Water Board
- Trinity County Ordinances (Floodplain Management) — Trinity County

5.2 Consistency Determinations

Provided below is a list of the governing laws for which a consistency determination will need to be made:

- Section 106 of the National Historic Preservation Act
- Federal Wild and Scenic Rivers Act
- National Forest Management Act
- State Wild and Scenic River Act

5.3 Federal Executive Orders

Provided below is a list of the federal executive orders and implementing polices with which the project will need to comply:

- Executive Order 11988 for Floodplain Management
- Executive Order 12898 for Environmental Justice
- Executive Order 11990 for Wetlands
- Executive Order 13007 for Indian Sacred Sites on Federal Land
- Executive Order 12373 for State, Area-Wide, and Local Plan and Program Consistency
- Executive Order 13112 for Invasive Species
- Executive Order 13443 for Facilitation of Hunting Heritage and Wildlife Conservation
- Indian Trust Assets

6 Scoping and Public Involvement

The Regional Water Board initiated the formal public scoping process by forwarding a Notice of Preparation (NOP) of an EIR to the State Clearinghouse on March 27, 2008. The NOP was circulated to the public; to local, state, and federal agencies; and to other interested parties to solicit comments on the Proposed Project. The NOP and agency comments on the NOP are summarized in Chapter 1 of the Draft Master EIR – EA/Draft EIR.

The public scoping period was March 27, 2008, through May 12, 2008, and scoping comments were received through September 15, 2008. Reclamation and the Regional Water Board held a joint NEPA/CEQA scoping meeting on April 16, 2008, at the Douglas City Firehall in Douglas City, California. During this meeting, the Proposed Project was introduced and members of the public were asked to assist Reclamation and the Regional Water Board in identifying issues that should be addressed in this document. No substantive comments were brought forward during this public meeting, although the lead agencies' representatives responded to a number of questions. During the public comment period, the lead agencies received three scoping comments. These areas of concern were considered during the preparation of this Draft Master EIR – EA/Draft EIR. Two open house sessions to discuss the Remaining Phase 1 sites were also held in (1) Lewiston, California at the Moose Lodge on September 10 and (2) Douglas City, California, at the Firehall on September 11, 2008. The scoping and public involvement process is also described in Chapter 1.

The scoping process determined that the Proposed Project could lead to potentially significant impacts on specific natural resources and on the human environment. Based on the comments received during the scoping process, the following resource elements are addressed in Part 1 of this Draft Master EIR – EA/Draft EIR. Part 2 of this document is consistent with Reclamation's requirements for an EA and includes sections on Tribal Trust and Environmental Justice.

- land use;
- geology, fluvial geomorphology, and soils;
- water resources;
- water quality;
- fishery resources;
- vegetation, wildlife, and wetlands;
- recreation;
- socioeconomics, population, and housing;
- cultural resources;
- air quality;
- aesthetics;
- hazardous materials;
- noise;
- public services and utilities/energy;
- transportation and traffic circulation; and
- cumulative impacts.

7 Existing Site Conditions

The Trinity River originates in the rugged Salmon-Trinity Mountains of northern California in the northeast corner of Trinity County, California. The river flows generally southward until Trinity and

Lewiston dams impound it. From Lewiston Dam, the river flows westward for 112 miles until it enters the Klamath River near the town of Weitchpec on the Yurok Reservation. The Trinity River passes through Trinity and Humboldt counties and the Hoopa Valley and Yurok Indian Reservations, draining approximately 2,965 square miles. The Klamath River flows northwesterly for approximately 40 miles from its confluence with the Trinity River before entering the Pacific Ocean.

The Remaining Phase 1 and Phase 2 sites are located along the 40-mile reach of the mainstem Trinity River from Lewiston Dam to the North Fork Trinity River. To facilitate the engineering and environmental compliance efforts, the site boundaries encompass lands on both sides of the Trinity River.

8 Description of the Proposed Project and Alternatives

The FEIS/EIR identified 44 potential channel rehabilitation sites and three potential side channel sites between Lewiston Dam and the North Fork Trinity River (U.S. Fish and Wildlife Service et al. 2000). Subsequently, in a detailed review of potential river rehabilitation areas, 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.

In general, the approach to channel rehabilitation is to selectively remove fossilized riparian berms (berms that are anchored by extensive woody vegetation and consolidated sand deposits) that developed after the TRD was completed as a result of the loss of scouring associated with peak flows. Along with berm removal, the approach involves physical alteration of other alluvial features (e.g., floodplains) and removal of riparian vegetation at strategic locations to promote the alluvial processes necessary for the restoration and maintenance of alternate bar riverine habitats.

As described in the FEIS, the rehabilitation sites exhibit a variety of conditions that require site-specific designs. The FEIS also recognized that, in many instances, entire sites 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 project includes specific activities proposed at 158 activity areas within the boundaries of the Remaining Phase 1 sites. Chapter 2 of the Draft Master EIR – EA/Draft EIR contains figures that illustrate the locations of these areas, as well as roads and access routes that would be used to implement the project. The type, extent, and level of activity within each area may be different, depending on the alternative. The activity areas were defined by the interdisciplinary design team to include riverine areas, in-channel areas, upland areas, and construction support areas. Riverine areas are labeled with an R preceding the site number (e.g., R-1, R-2); in-channel activity areas are labeled with a IC preceding the site number (e.g., IC-1, IC-2); upland areas are labeled with a U preceding the site number (e.g., U-1, U-2); staging areas and roads are included in areas labeled with a C; and low-flow crossings are labeled with an X.

The activities proposed for the Phase 2 sites are similar to those proposed for the Remaining Phase 1 sites; however, because only broad restoration concepts have been developed for the Phase 2 sites, the Draft Master EIR provides a programmatic description of the Phase 2 site activities, which respond to the conceptual objectives for these sites.

8.1 Proposed Project

The Proposed Project would include activities throughout the project boundaries on both sides of the Trinity River. These activities are expected to eventually result in the development of point bars and floodplain habitat that do not presently exist. The response time will be dynamic and subject to external forces once the activities have been completed. Creation of these features would be accomplished through the rescaling of the river channel and floodplain within the riverine rehabilitation areas, although there is an expectation that natural alluvial processes may immediately affect a larger area. In-channel treatments (grade control removal and sediment supplementation) will assist in reestablishing the alluvial processes and interactions at these sites. This rehabilitation of river function could result in the rapid development of a larger and more complex expanse of river and floodplain habitats. The result of habitat expansion would be increased habitat suitability and availability for salmonids and other native fish and wildlife species. Figures 2-1a through 2-1f in the Draft Master EIR – EA/Draft EIR illustrate the activities that would be implemented at the Remaining Phase 1 sites under the Proposed Action.

The Proposed Project includes a number of in-channel activities at each of the Remaining Phase 1 sites, as well as at least one temporary river crossing at most of these sites. Excavation activities associated with the Remaining Phase 1 sites are expected to yield more than 400,000 cubic yards of alluvial material. Collectively, the sites have the capacity to place (dispose of) nearly 500,000 cubic yards of excavated material. Riverine activities on both sides of the Trinity River would use adjacent upland and staging areas within the boundaries of the sites for disposing of and/or stockpiling excavated or processed materials.

In-channel and riverine activities incorporated into the Proposed Project are intended to increase the potential for the river to meander (migrate) out of the channel in which it has been confined by historic dredging activities and, more recently, by riparian berms. In addition to the immediate changes to the channel (e.g., grade control removal, berm removal, and floodplain excavation), the Proposed Project includes sediment management activities at various locations. These activities consist of placement of coarse sediment (spawning gravels) at a number of rehabilitation sites, including several long-term locations between Lewiston Dam and Weaver Creek. It also includes ongoing removal of fine sediment collected in the Hamilton Ponds near the mouth of Grass Valley Creek.

The activities proposed for the Phase 2 sites are similar to those proposed for the Remaining Phase 1 sites; however, because only broad restoration concepts have been developed for the Phase 2 sites, the Draft Master EIR provides a programmatic description of the Phase 2 site activities, which respond to the conceptual objectives for these sites.

8.2 Alternative 1

Alternative 1 is similar to the Proposed Project in many respects, particularly for the Remaining Phase 1 sites. The conceptual nature of the Phase 2 sites inhibits the lead agencies' ability to distinguish Alternative 1 from the Proposed Project at the site level. In general terms, Alternative 1 responds to impacts to the biological and, to a greater degree, the human environment. The overall reduction in the size, intensity, and magnitude of rehabilitation activities, particularly those in close proximity to residential or recreational developments, is expected to reduce the significant impacts to various resources, especially to the human environment (e.g., traffic, noise near residential areas, etc.). However, Alternative 1 is not expected to expand Trinity River aquatic habitat complexity and quantity or to enhance natural river processes to the same extent as the Proposed Project. Consequently, benefits to fish and wildlife populations would be reduced compared to the Proposed Project. Figures 2-2a through 2-2f in the Draft Master EIR – EA/Draft EIR illustrate the activities that would be implemented at the Remaining Phase 1 sites under Alternative 1.

Alternative 1 includes specific activities proposed at 122 activity areas within the boundaries of the Remaining Phase 1 sites. This is a reduction of 36 activity areas spread across five of the sites. In addition to a net reduction in activity areas at five of the Remaining Phase 1 sites, this alternative modifies the type and magnitude of activities in an effort to reduce significant impacts to the environment. Alternative 1 excludes seven in-channel and three riverine activity areas and reduces the number of temporary crossings by three compared to the Proposed Project. Under this alternative, excavation activities associated with the Remaining Phase 1 sites are expected to yield more than 350,000 cubic yards of alluvial material. These sites collectively provide the capacity to place almost 365,000 yards of material in the event this space is necessary during implementation. Alternative 1 would also reduce the length of the roads necessary to access activity areas by about 2 miles. Similar to the Proposed Project, riverine activities on both sides of the Trinity River would use adjacent upland and staging areas to dispose of and/or stockpile excavated or processed materials within the boundaries of the sites. These sites include public and private lands within a narrow corridor parallel to the river.

The activities proposed for the Phase 2 sites are similar to those proposed for the Remaining Phase 1 sites; however, because only broad restoration concepts have been developed for the Phase 2 sites, the Draft Master EIR provides a programmatic description of the Phase 2 site activities, which respond to the conceptual objectives for these sites.

9 Affected Environment and Environmental Consequences

Chapter 3, Regulatory Setting, describes federal, state, and local acts, regulations, and policies applicable to the Proposed Project. Chapter 4 describes the affected environment and the environmental consequences of implementing each project alternative. Consistent with the intended uses of a Master EIR, the descriptions of potentially affected resources in this chapter take a large-scale, region-wide view of existing environmental conditions. To the extent possible, the chapter also provides information useful in characterizing the resources associated with the Remaining Phase 1 and Phase 2 sites.

The analyses are presented by environmental resource area and include discussions of the existing environmental setting, significance criteria, potential environmental impacts, and mitigation measures. The descriptions of the existing regional and local conditions in the Environmental Setting sections of Chapter 4 are used as the environmental baseline for analyzing the significance of the potential effects of the Proposed Project and the alternatives with respect to each specific resource or issue area.

Chapter 7 expands the environmental setting as it pertains to the Remaining Phase 1 sites and analyzes the site-specific environmental consequences associated with implementing the proposed rehabilitation activities at these sites. The regulatory framework, environmental setting, methodology, and significance criteria discussed in the Master EIR (Chapters 3 and 4) are generally applicable to the Remaining Phase 1 sites, and this information is not repeated in Chapter 7.

The following subsections summarize the environmental consequences of implementing each project alternative. In instances where site-specific impacts are more specific than those described in the Master EIR, the site-specific impacts are summarized. A complete summary of all project impacts and associated mitigation measures for all of the action alternatives are presented at the end of this Executive Summary (Table ES-1, Draft Master EIR, and Table ES-2 EA/Draft EIR).

9.1 Land Use

Sections 4.2 and 7.2 evaluate the impacts of the Proposed Project and the alternatives on land uses. Impacts were considered significant if implementation of the project alternatives could disrupt existing land uses adjacent to the project sites; be inconsistent with the goals, policies, and objectives of the BLM's Redding Resource Management Plan, the STNF Land and Resource Management Plan, DWR's Hamilton Ranch Management Plan, the Trinity County General Plan, or other local community plans, policies, and ordinances; or affect the availability of a locally important mineral resource recovery site.

The No-Action Alternative would not adversely affect transportation or traffic circulation. However, the beneficial effects of the Proposed Project—an increase in habitat for anadromous fish and reestablishment of riparian vegetation—would not be realized under this alternative.

Either action alternative would result in significant impacts related to the availability of a locally important mineral resource recovery site. Implementation of the mitigation measures identified in sections 4.2 and 7.2 would reduce these impacts to a less-than-significant level.

9.2 Geology, Fluvial Geomorphology, and Soils

Sections 4.3 and 7.3 evaluate the geologic, geomorphic, and soil impacts of the Proposed Project and the alternatives. Impacts were considered significant if implementation of the project alternatives could subject structures and people to geologic hazards, including ground shaking and liquefaction; result in increased erosion and short-term sedimentation of the Trinity River; or interfere with the development of mineral resources.

The No-Action Alternative would not adversely affect geology, fluvial geomorphology, or soils. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Either action alternative would result in significant impacts related to erosion and short-term sedimentation of the Trinity River as well as the development of mineral resources. Implementation of the mitigation measures identified in sections 4.3 and 7.3 would reduce these impacts to a less-than-significant level.

9.3 Water Resources

Sections 4.4 and 7.4 evaluate the impacts of the Proposed Project and alternatives on water. Impacts were considered significant if implementation of the project alternatives could result in a temporary or permanent increase in the base flood elevation; result in a permanent decline in groundwater elevations or a permanent change in groundwater quality; or expose people or structures to a significant risk of injury, death, or loss involving flooding or erosional processes.

The No-Action Alternative would not adversely affect water resources. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Neither action alternative would result in significant impacts related to water resources, and no mitigation measures are required.

9.4 Water Quality

Sections 4.5 and 7.5 evaluate the impacts of the Proposed Project and alternatives on water quality. Impacts were considered significant if implementation of the project alternatives could result in short-term, temporary increases in turbidity and total suspended solids during construction; short-term, temporary increases in turbidity and total suspended solids following construction; contamination of the Trinity River from hazardous materials spills; increased stormwater runoff and a subsequent potential for erosion; or degradation of the beneficial uses of the Trinity River identified in the Basin Plan.

The No-Action Alternative would not adversely affect water quality. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Either action alternative would result in significant impacts related to short-term, temporary increases in turbidity and total suspended solids levels during and following construction; potential contamination of the Trinity River from hazardous materials spills; and potential degradation of the beneficial uses of the Trinity River. Implementation of the mitigation measures identified in sections 4.5 and 7.5 would reduce these impacts to a less-than-significant level.

9.5 Fishery Resources

Sections 4.6 and 7.6 evaluate the impacts of the Proposed Project and alternatives on fishery resources in the Trinity River basin. Impacts were considered significant if implementation of the project alternatives

could result in effects on potential spawning and rearing habitat for anadromous fishes, including the federally and state listed coho salmon; increased erosion and sedimentation levels that could adversely affect fishes, including the coho salmon; the accidental spill of hazardous materials that could adversely affect fishes, including the coho salmon; the mortality of rearing fishes, including the coho salmon; the permanent or temporary loss of SRA habitat for anadromous salmonids; or temporary impairment of fish passage during in-stream construction.

Under the No-Action Alternative, there would be no effects on fishery resources other than those associated with current ongoing actions. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Either action alternative could result in significant impacts related to potential spawning and rearing habitat for anadromous fishes, increased erosion and sedimentation levels, accidental spill of hazardous materials, mortality of rearing fishes; loss of shaded riverine aquatic habitat; and temporary impairment of fish passage. Implementation of the mitigation measures identified in sections 4.6 and 7.6 would reduce these impacts to a less-than-significant level.

9.6 Vegetation, Wildlife, and Wetlands

Sections 4.7 and 7.7 evaluate the impacts of the Proposed Project and alternatives on vegetation, wildlife, and wetlands resources. Impacts were considered significant if implementation of the project alternatives could result in the loss of jurisdictional waters, including wetlands; the loss of upland plant communities; the loss of individuals of a special-status plant species; impacts to the state-listed little willow flycatcher, foothill yellow-legged frog, and western pond turtle; impacts to nesting Vaux's swifts, yellow warblers, yellow-breasted chats, bald eagles, and northern goshawks; impacts to special-status bats and the ring-tailed cat; temporary loss of non-breeding habitat for several special-status birds; impacts to BLM and U.S. Forest Service (USFS) sensitive species; restriction of terrestrial wildlife movement through the project area; and the spread of non-native and invasive plant species.

The No-Action Alternative would not adversely affect vegetation, wildlife, and wetlands. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Either action alternative could result in the temporary loss of jurisdictional waters including wetlands; the loss of individuals of a special-status plant species; impacts to the state-listed little willow flycatcher, foothill yellow-legged frog, and western pond turtle; impacts to nesting Vaux's swifts, yellow warblers, yellow-breasted chats, bald eagles, and northern goshawks; impacts to special-status bats and the ring-tailed cat; temporary loss of non-breeding habitat for several special-status birds; impacts to BLM and USFS sensitive species; and the spread of non-native and invasive plant species. Implementation of the mitigation measures identified in sections 4.7 and 7.7 would reduce these impacts to a less-than-significant level.

9.7 Recreation

Sections 4.8 and 8.8 evaluate the impacts of the Proposed Project on recreation. Impacts were considered significant if implementation of the project alternatives could disrupt recreational activities, such as boating, fishing, and swimming, in the Trinity River; result in an increased safety risk to recreational users or resource damage to recreational lands within the project boundaries; lower the Trinity River's aesthetic value for recreationists by increasing its turbidity levels; or affect Wild and Scenic River values.

The No-Action Alternative would not adversely affect recreational resources. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Either action alternative would result in significant impacts related to disruption of recreational activities; increased safety risk to recreational users or resource damage to recreational lands; and lowering of the Trinity River's aesthetic value for recreationists. Implementation of the mitigation measures identified in sections 4.8 and 7.8 would reduce these impacts to a less-than-significant level.

9.8 Socioeconomics, Population, and Housing

Sections 4.9 and 7.9 evaluate the impacts of the Proposed Project and alternatives on socioeconomics, population, and housing. Impacts were considered significant if implementation of the project alternatives could result in the disruption or displacement of local businesses; an increased demand for housing during construction; or concentrated population growth.

The No-Action Alternative would not adversely affect socioeconomic resources . However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Neither action alternative would result in significant impacts related to socioeconomic resources, and no mitigation measures are required.

9.9 Cultural Resources

Sections 4.10 and 7.10 evaluate the impacts of the Proposed Project and alternatives on cultural resources. Impacts were considered significant if implementation of the project alternatives could cause a substantial adverse change in the significance of a known cultural resource or result in the disturbance of undiscovered prehistoric or historic resources.

The No-Action Alternative would not adversely affect cultural resources. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Either action alternative would result in potentially significant impacts related to the disturbance of undiscovered prehistoric or historic resources. Implementation of the mitigation measures identified in sections 4.10 and 7.10 would reduce these impacts to a less-than-significant level.

9.10 Air Quality

Sections 4.11 and 7.11 evaluate the impacts of the Proposed Project on air quality and greenhouse gas emissions. Impacts were considered significant if implementation of the project alternatives could result in an increase in the levels of fugitive dust and associated particulate matter (PM_{10} and $PM_{2.5}$); an increase in construction vehicle exhaust emissions; burning of vegetative materials; an increase in greenhouse gas emissions and effects on climate change; and short-term and localized fugitive dust, gas, and diesel emissions and smoke that could affect adjacent residences and schools.

The No-Action Alternative would not adversely affect air quality and greenhouse gas emissions. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Either action alternative would result in potentially significant impacts related to an increase in the levels of fugitive dust and associated particulate matter; an increase in construction vehicle exhaust emissions; burning of vegetative materials; and fugitive dust, gas, and diesel emissions and smoke that could affect adjacent residences and schools. Implementation of the mitigation measures identified in sections 4.11 and 7.11 would reduce these impacts to a less-than-significant level.

9.11 Aesthetics

Sections 4.12 and 7.12 evaluate the impacts of the Proposed Project and alternatives on aesthetic resources. Impacts were considered significant if implementation of the project alternatives could result in the degradation and/or obstruction of a scenic view from key observation areas; substantially change the character of, or be disharmonious with, existing land uses and aesthetic features; be inconsistent with federal and state Wild and Scenic River Act or Scenic Byway requirements; or generate increased daytime glare and/or nighttime lighting.

The No-Action Alternative would not adversely affect aesthetic values. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Either action alternative would result in potentially significant impacts related to the degradation and/or obstruction of a scenic view. Implementation of the mitigation measures identified in sections 4.12 and 7.12 would reduce these impacts to a less-than-significant level.

9.12 Hazards and Hazardous Materials

Sections 4.13 and 7.13 evaluate the impacts of the Proposed Project and alternatives related to hazards and hazardous materials. Impacts were considered significant if implementation of the project alternatives could increase the potential for release of, or exposure to, potentially hazardous materials that could pose a public health or safety hazard; could interfere with emergency response and evacuation plans by temporarily slowing traffic flow; could contribute to wildland fire potential and catastrophic fire behavior in the project area; or could contribute to an increased risk of landslides and flooding.

The No-Action Alternative would not adversely affect socioeconomic resources. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Neither action alternative would result in significant impacts related to hazards and hazardous materials, and no mitigation measures are required.

9.13 Noise

Sections 4.14 and 7.14 evaluate the impacts of the Proposed Project and alternatives related to noise. Impacts were considered significant if implementation of the project alternatives could result in noise impacts to nearby sensitive receptors.

The No-Action Alternative would not adversely affect noise levels in the vicinity of the project sites. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Either action alternative would result in potentially significant impacts related to an increase in noise levels that could affect sensitive receptors. Implementation of the mitigation measures identified in sections 4.14 and 7.14 would reduce these impacts to a less-than-significant level.

9.14 Public Services and Utilities/Energy

Sections 4.15 and 7.15 evaluates the impacts of the Proposed Project and alternatives on public services and utilities. Impacts were considered significant if implementation of the project alternatives could disrupt existing electrical and phone service during construction activities; result in the generation of increased solid waste; result in disruption of emergency services, school bus routes, or student travel routes during construction activities; or result in a substantial use of nonrenewable energy resources.

The No-Action Alternative would not adversely affect public services or utilities. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Either action alternative would result in potentially significant impacts related to disruption of emergency services, school bus routes, or student travel routes during construction activities. Implementation of the mitigation measures identified in sections 4.15 and 7.15 would reduce these impacts to a less-than-significant level.

9.15 Transportation/Traffic Circulation

Sections 4.16 and 7.16 evaluate the impacts of the Proposed Project and alternatives on transportation and traffic circulation. Impacts were considered significant if implementation of the project alternatives would reduce/close existing traffic lanes; would generate short-term increases in vehicle trips; would obstruct access to adjacent land uses; would increase wear and tear on local roadways; activities could pose a safety hazard to motorists, bicyclists, pedestrians, and equestrians; or could affect the form or function of bridges under the jurisdiction of Caltrans, Trinity County, or private parties.

The No-Action Alternative would not adversely affect transportation or traffic circulation. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Either action alternative would result in potentially significant impacts related to short-term increases in vehicle trips; obstruction of access to adjacent land uses; increased wear-and-tear on local roadways; and safety hazards to motorists, bicyclists, pedestrians, and equestrians. Implementation of the mitigation measures identified in sections 4.16 and 7.16 would reduce these impacts to a less-than-significant level.

9.16 Tribal Trust

Section 7.17 evaluates the impacts of the Proposed Project and alternatives on Tribal Trust. The need to restore and maintain the natural production of anadromous fish in the mainstem Trinity River originates partly from the federal government's trust responsibility to protect the fishery resources of the region's Indian Tribes. The Proposed Project could potentially affect anadromous fish, non-anadromous fish, water, wildlife, vegetation, and overall riverine health. It is not anticipated that these impacts will affect the sociocultures and economies of the Tribes. The No-Action Alternative would not impact Tribal Trust assets. Construction-related impacts to Tribal Trust assets are expected to be short-term and outweighed by the overall benefits to these Tribal Trust assets through implementation of the Trinity River Restoration Program.

The No-Action Alternative would not adversely affect Tribal Trust assets. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Neither action alternative would result in significant impacts related to Tribal Trust assets, and no mitigation measures are required.

9.17 Environmental Justice

Section 7.18 evaluates the impacts of the Proposed Project and alternatives related to environmental justice. Federal agencies are required to identify and address disproportionately high and adverse human health or environmental effects of their actions on minorities and low-income populations and communities, as well as the equity of the distribution of the benefits and risks of their decisions. No racial or ethnic group is disproportionately associated with the project area. There is no evidence to suggest that the Proposed Project would cause a disproportionately high, adverse human health or environmental effect on minority and low-income populations, compared to other residents in the general vicinity of the Proposed Project or elsewhere in Trinity County.

The No-Action Alternative would not adversely affect environmental justice. However, the beneficial effects of the Proposed Project would not be realized under this alternative.

Neither action alternative would result in significant impacts related to environmental justice, and no mitigation measures are required.

9.18 Other Impacts and Commitments

9.18.1 Cumulative Impacts

Cumulative impacts are the impacts on the environment that result from the incremental impacts of the Proposed Project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or entity undertakes such other actions. State CEQA Guidelines and Council on Environmental Quality NEPA regulations require that the cumulative impacts of a proposed project be addressed in an environmental document such as this Draft Master EIR – EA/Draft EIR when the cumulative impacts are expected to be significant (14 CCR 15130[a], 40CFR 1508.25[a][2]). When a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

The analysis of cumulative impacts in Chapters 5 and 8 address the cumulative impacts of the Proposed Project, as well as the No-Action Alternative and Alternative 1. It is recognized that the Proposed Project may be implemented in an interactive manner with other projects. In addition, these other projects may affect the impacts of the Proposed Project.

The cumulative impacts section identifies related projects through the list approach, based on input from the lead and cooperating agencies. The geographic scope of the area examined for cumulative effects is the Trinity River corridor between Lewiston Dam and the confluence of the North Fork Trinity River (Helena, California). The following projects were considered in this section:

- Fish Habitat Management
- Trinity River Mainstem Fishery Restoration Project
- California Coastal Salmonid Restoration Program/Five-Counties Salmonid Conservation Program
- Clean Water Action Section 303(d) Total Maximum Daily Load Requirements Program

No potentially adverse cumulative impacts are anticipated to result from the No-Action Alternative, Proposed Action, or Alternative 1. Instead, the action alternatives as mitigated will benefit, rather than adversely affect, geology, fluvial geomorphology, and soils; water quality; fishery resources; vegetation, wildlife, and wetlands; recreation; and Tribal Trust assets. Thus, far from creating adverse impacts that will compound or exacerbate the adverse impacts of other projects, the action alternatives will contribute to long-term environmental benefits.

9.18.2 Growth-Inducing Impacts

Chapter 5 evaluates the potential for growth that could be induced by implementation of the Proposed Project and alternatives and assesses the level of significance of any expected growth inducement. The potential for growth inducement is limited by the nature and location of the rehabilitation activities described in Chapter 2.

River rehabilitation projects are typically implemented in specific areas during a finite period. Although the TRRP was established to implement the ROD, thereby increasing the fishery resources of the Trinity River, growth-inducing impacts within Trinity County were not anticipated. Section 15126(g) of the CEQA Guidelines provides definitions and guidance in determining the growth-inducing impacts of a proposed project. Specifically, a project is defined to be growth-inducing if it would

- accelerate the rate of planned growth,
- remove obstacles to population growth,
- tax existing community service facilities, or
- foster, promote, or sustain economic or population growth.

Growth itself is not assumed to be beneficial, detrimental, or insignificant to the environment. If a project is determined to be growth-inducing, an evaluation is made to determine if significant impacts on the environment would result from that growth.

Growth was evaluated in terms of Trinity County growth policies; general information on population demographics; vacant land and projected build out; Trinity County's constraints to development; and proposed land uses.

There would be no significant growth-inducing impacts as a result of the action alternatives. In general, all parcels associated with the Proposed Project have been subdivided to the fullest extent possible under existing zoning designations.

9.19 Consultation and Coordination

Chapter 3 summarizes the scoping process, consultation, coordination, and applicable laws, policies, and regulations used to develop the Draft Master EIR – EA/Draft. The lead agency for the Draft Master EIR – EA/Draft EIR is Reclamation, as defined by NEPA, and the Regional Water Board, as defined by CEQA. The primary cooperating (NEPA) and responsible and trustee (CEQA) agencies are

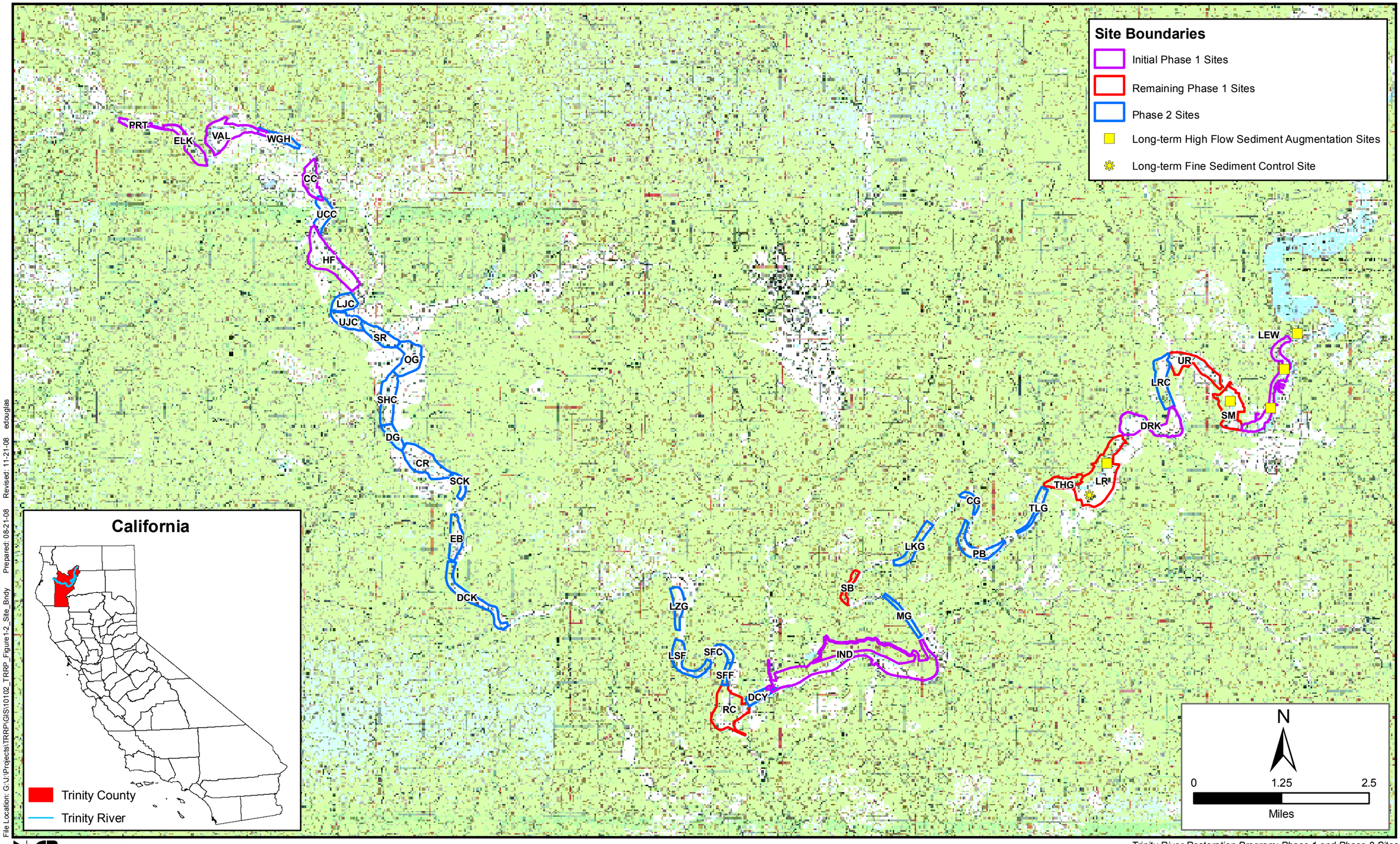
- U.S. Department of Interior, Bureau of Land Management
- Shasta-Trinity National Forest
- Hoopa Valley Tribe
- Yurok Tribe
- Trinity County Resource Conservation District
- California Department of Transportation
- California Department of Fish and Game
- California Department of Water Resources
- Trinity County

A summary of the public scoping process that has been completed to date and a list of agencies, groups, and individuals that provided comments and/or comment letters on the NOP that was circulated by the Regional Water Board are included in Chapter 1 of the Draft Master EIR – EA/Draft EIR. In addition, a

list of agencies and organizations consulted during the preparation of the environmental document; a list of the related laws, rules, regulations, and federal executive orders that were considered in the preparation of this Draft Master EIR – EA/Draft EIR; and a discussion of how this Draft Master EIR – EA/Draft EIR is consistent with federal (NEPA) and state (CEQA) statutes are included in Chapter 3. Finally, Chapter 3 includes a summary of the various discretionary approval processes that have been completed or are still being coordinated concurrent with the NEPA/CEQA environmental review process and a summary of governing laws for which a consistency determination will need to be made.

9.20 Environmental Commitments and Mitigation Measures

Tables ES-1 summarizes potential project impacts and mitigation measures prescribed for potentially significant impacts for each environmental resource and issue area.



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North State Resources, Inc.

Trinity River Restoration Program: Phase 1 and Phase 2 Sites

Figure ES-1
TRRP Project Sites

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Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
4.2 Land Use		
Impact 4.2-1: Implementation of the project could disrupt existing land uses adjacent to the proposed project site.		
Mitigation Measures	Since no significant impact was identified, no mitigation is required.	Since no significant impact was identified, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.2-2: Implementation of the project could be inconsistent with the goals, policies, and objectives of the BLM RMP, the USFS LRMP, the DWR Hamilton Ranch Management Plant, the Trinity County General Plan, or other local community plans, policies, and ordinances		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.2-3: Implementation of the project could affect the availability of a locally important mineral resource recovery site.		
Mitigation Measures	**3a** Reclamation will provide notice of the project to landowners within the Remaining Phase 1 and Phase 2 sites and to individuals with mining claims within the project sites. Notice will be given prior to project implementation and will include a schedule of river access closures.	**3a** Reclamation will provide notice of the project to landowners within the Remaining Phase 1 and Phase 2 sites and to individuals with mining claims within the project sites. Notice will be given prior to project implementation and will include a schedule of river access closures.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
4.3 Geology, Fluvial Geomorphology, and Soils		
Impact 4.3-1: Implementation of the project could result in the exposure of structures and people to geologic hazards, including ground shaking and liquefaction.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.3-2: Construction activities associated with the project could result in increased erosion and short-term sedimentation of the Trinity River.		
Mitigation Measures	**2a** Reclamation will implement the following measures during construction activities: ▪ Areas where ground disturbance would occur will be identified in advance of construction and limited to only those areas that have been approved by Reclamation. ▪ All vehicular construction traffic will be confined to the designated access routes and staging areas. ▪ Disturbance will be limited to the minimum necessary to complete all rehabilitation activities. ▪ All supervisory construction personnel will be informed of environmental concerns, permit conditions, and final project specifications. **2b** Reclamation will 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. Reclamation will provide the SWPPP for review by associated agencies upon request. Reclamation's project manager will ensure the preparation and implementation of an erosion and sediment control plan prior to the start of construction. The following measures shall be used as a guide to develop this plan:	**2a** Reclamation will implement the following measures during construction activities: ▪ Areas where ground disturbance would occur will be identified in advance of construction and limited to only those areas that have been approved by Reclamation. ▪ All vehicular construction traffic will be confined to the designated access routes and staging areas. ▪ Disturbance will be limited to the minimum necessary to complete all rehabilitation activities. ▪ All supervisory construction personnel will be informed of environmental concerns, permit conditions, and final project specifications. **2b** Reclamation will 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. Reclamation will provide the SWPPP for review by associated agencies upon request. Reclamation's project manager will ensure the preparation and implementation of an erosion and sediment control plan prior to the start of construction. The following measures shall be used as a guide to develop this plan:

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	▪ 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.	▪ 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.

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.3-3: Implementation of the project would interfere with existing, proposed, or potential development of mineral resources.		
Mitigation Measures	**3a** Reclamation will implement the following measures during construction: ▪ Areas where ground disturbance would occur will be identified in advance of construction and limited to only those areas that have been approved by Reclamation. ▪ All vehicular construction traffic will be confined to the designated access routes and staging areas. ▪ Disturbance wil be limited to the minimum necessary to complet all rehabilitation activities. ▪ All supervisory construction personnel will be informed of environmental concerns, permit conditions, and final project specifications. **3b** Reclamation will prepare an erosion and sedimentation control plan (SWPPP) as stipulated in Mitigation Measure 4.3-2b. **3c** Reclamation will coordinate with private land owners and owners of active mining claims to develop site-specific measures that can be implemented to avoid or lessen project-related impacts to mineral resources associated with the Trinity River and its tributaries.	**3a** Reclamation will implement the following measures during construction: ▪ Areas where ground disturbance would occur will be identified in advance of construction and limited to only those areas that have been approved by Reclamation. ▪ All vehicular construction traffic will be confined to the designated access routes and staging areas. ▪ Disturbance wil be limited to the minimum necessary to complet all rehabilitation activities. ▪ All supervisory construction personnel will be informed of environmental concerns, permit conditions, and final project specifications. **3b** Reclamation will prepare an erosion and sedimentation control plan (SWPPP) as stipulated in Mitigation Measure 4.3-2b. **3c** Reclamation will coordinate with private land owners and owners of active mining claims to develop site-specific measures that can be implemented to avoid or lessen project-related impacts to mineral resources associated with the Trinity River and its tributaries.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
4.4 Water Resources		
Impact 4.4-1: Implementation of the proposed project could result in a temporary or permanent increase in the BFE.		
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.4-2: Implementation of the project could result in a permanent decline in groundwater elevations or permanent changes in groundwater quality.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.4-3: Implementation of the project would expose people or structures to a significant risk of injury, death, or loss involving flooding or erosional processes.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
4.5 Water Quality		
Impact 4.5-1: Construction of the project could result in short-term, temporary increases in turbidity and total suspended solids levels during construction.		
Mitigation Measures	**1a** The water quality objective for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (North Coast Regional Water Quality Control Board 2007), is summarized below. ▪ Turbidity levels shall not be increased more than 20 percent above naturally occurring background levels.	**1a** The water quality objective for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (North Coast Regional Water Quality Control Board 2007), is summarized below. ▪ Turbidity levels shall not be increased more than 20 percent above naturally occurring background levels.

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	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. ▪ Due to the nature of the proposed restoration activities and the clarity of the Trinity River during low flow conditions, the Regional Water Board has determined that an allowable zone of turbidity dilution is appropriate and necessary in order for Trinity River restoration activities to be accomplished in a meaningful, timely, and cost-effective manner that fully protects beneficial uses without resulting in a violation of the water quality objective for turbidity ▪ Project activities that occur in areas outside of the active river channel will not increase turbidity levels by more than 20 percent above naturally occurring background levels. During in-river construction activities and until the first extended period of post-construction high flow (i.e., flows of at least 6,000 cfs inundate the project areas and floodplain for a minimum of 7 days) a zone of turbidity dilution within which higher percentages would be tolerated will be defined in discharge permits as the full width of the river channel within 500 linear feet downstream of any project activity that increases naturally occurring background levels, provided that all other required controls and appropriate BMPs for sediment and turbidity control are in place and downstream beneficial uses are also fully protected. When naturally occurring background levels are less than or equal to 20 NTUs, turbidity levels immediately downstream of the zone of turbidity dilution shall not exceed 20 NTUs. If naturally occurring background levels are greater than 20 NTUs, turbidity levels immediately downstream of the 500 linear foot zone of dilution shall not be increased by more than 20 percent above the naturally occurring background level	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. ▪ Due to the nature of the proposed restoration activities and the clarity of the Trinity River during low flow conditions, the Regional Water Board has determined that an allowable zone of turbidity dilution is appropriate and necessary in order for Trinity River restoration activities to be accomplished in a meaningful, timely, and cost-effective manner that fully protects beneficial uses without resulting in a violation of the water quality objective for turbidity ▪ Project activities that occur in areas outside of the active river channel will not increase turbidity levels by more than 20 percent above naturally occurring background levels. During in-river construction activities and until the first extended period of post-construction high flow (i.e., flows of at least 6,000 cfs inundate the project areas and floodplain for a minimum of 7 days) a zone of turbidity dilution within which higher percentages would be tolerated will be defined in discharge permits as the full width of the river channel within 500 linear feet downstream of any project activity that increases naturally occurring background levels, provided that all other required controls and appropriate BMPs for sediment and turbidity control are in place and downstream beneficial uses are also fully protected. When naturally occurring background levels are less than or equal to 20 NTUs, turbidity levels immediately downstream of the zone of turbidity dilution shall not exceed 20 NTUs. If naturally occurring background levels are greater than 20 NTUs, turbidity levels immediately downstream of the 500 linear foot zone of dilution shall not be increased by more than 20 percent above the naturally occurring background level

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	1b To ensure that turbidity levels do not exceed the thresholds described above (4.5-1a) during in-river project construction activities, Reclamation shall monitor turbidity levels upstream within 50 feet of project activities (i.e., natural background) and 500 feet downstream of the in-river construction activities that could increase turbidity. 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 two hours during in-river work periods and when activities commence that are likely to increase turbidity levels above any previously monitored levels. ▪ If grab sample results indicate that turbidity levels exceed 20 NTU at 500 feet downstream from construction activities, remedial actions will be implemented to reduce and maintain turbidity at or below 20 NTU immediately downstream of the 500 linear foot zone of dilution. Potential remedial actions include halting or slowing construction activities and implementation of additional BMPs until turbidity levels are at or below 20 NTU. **1c** Fill gravels used on the streambeds, stream banks, and river crossings will be composed of washed, spawning-sized gravels from a local Trinity River 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 will 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 will be adequate to minimize sediment inputs into the Trinity River until vegetation regrowth occurs. All required controls and BMPs, including sediment and	**1b** To ensure that turbidity levels do not exceed the thresholds described above (4.5-1a) during in-river project construction activities, Reclamation shall monitor turbidity levels upstream within 50 feet of project activities (i.e., natural background) and 500 feet downstream of the in-river construction activities that could increase turbidity. 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 two hours during in-river work periods and when activities commence that are likely to increase turbidity levels above any previously monitored levels. ▪ If grab sample results indicate that turbidity levels exceed 20 NTU at 500 feet downstream from construction activities, remedial actions will be implemented to reduce and maintain turbidity at or below 20 NTU immediately downstream of the 500 linear foot zone of dilution. Potential remedial actions include halting or slowing construction activities and implementation of additional BMPs until turbidity levels are at or below 20 NTU. **1c** Fill gravels used on the streambeds, stream banks, and river crossings will be composed of washed, spawning-sized gravels from a local Trinity River 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 will 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 will be adequate to minimize sediment inputs into the Trinity River until vegetation regrowth occurs. All required controls and BMPs, including sediment and

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	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 activity areas with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable upland activity areas. All applicable erosion control standards will be required during stockpiling of materials. **1e** To minimize the potential for increases in turbidity and suspended sediments entering the Trinity River as a result of access routes (e.g., roads), Reclamation will implement the following protocols). ▪ Keep bare soil to the minimum required by designs. Erosion control devices/measures will be applied to areas where vegetation has been removed to reduce short-term erosion prior to the start of the rainy season. ▪ Keep runoff from bare soil areas well dispersed. Dispersing runoff keeps sediment on-site and prevents sediment delivery to streams. Direct any concentrated runoff from bare soil areas into natural buffers of vegetation or areas with more gentle slopes where sediment can settle out. ▪ Disconnect and disperse flow paths, including roadside ditches, that might otherwise deliver fine sediment to stream channels. ▪ Decompact or rip floodplain areas so that surfaces are permeable and no surface water runoff occurs.	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 activity areas with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable upland activity areas. All applicable erosion control standards will be required during stockpiling of materials. **1e** To minimize the potential for increases in turbidity and suspended sediments entering the Trinity River as a result of access routes (e.g., roads), Reclamation will implement the following protocols). ▪ Keep bare soil to the minimum required by designs. Erosion control devices/measures will be applied to areas where vegetation has been removed to reduce short-term erosion prior to the start of the rainy season. ▪ Keep runoff from bare soil areas well dispersed. Dispersing runoff keeps sediment on-site and prevents sediment delivery to streams. Direct any concentrated runoff from bare soil areas into natural buffers of vegetation or areas with more gentle slopes where sediment can settle out. ▪ Disconnect and disperse flow paths, including roadside ditches, that might otherwise deliver fine sediment to stream channels. ▪ Decompact or rip floodplain areas so that surfaces are permeable and no surface water runoff occurs.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.5-2: Construction of the project could result in short-term temporary increases in turbidity and total suspended solids levels following construction.		
Mitigation Measures	**2a** Turbidity increases associated with project activities will not exceed the water quality objectives for turbidity in	**2a** Turbidity increases associated with project activities will not exceed the water quality objectives for turbidity in

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	the Trinity River basin (North Coast Regional Water Quality Control Board 2007). **2b** To ensure that turbidity levels do not exceed the threshold following construction, Reclamation will monitor turbidity and total suspended solids during and after representative rainfall events to determine the effect of the project on Trinity River water quality. At a minimum, field turbidity measurements will be collected whenever a visible increase in turbidity is observed. ▪ If increases in turbidity and total suspended solids are observed as a result of erosion from constructed features, field turbidity measurements will be collected 50 feet upstream of a point adjacent to the end of the feature and 500 feet downstream of the feature. ▪ If the grab sample indicates that turbidity levels exceed the established thresholds identified in the Basin Plan, the Regional Water Board will be notified. The need to implement erosion control measures for turbidity that is expected to result from overland river flows (versus surface run-off) will be evaluated with Regional Water Board staff to determine if remediation measures are needed. **2c** To reduce the potential for the access routes to continually contribute soil materials to the Trinity River following project construction, thereby increasing turbidity and total suspended solids in the river, these routes will be stabilized or decommissioned upon completion of work in those areas consistent with the requirements outlined in Chapter 2 (Design Elements and Construction Criteria). Decommissioning is defined as removing those elements of a road that reroute hillslope drainage and present slope stability hazards.	the Trinity River basin (North Coast Regional Water Quality Control Board 2007). **2b** To ensure that turbidity levels do not exceed the threshold following construction, Reclamation will monitor turbidity and total suspended solids during and after representative rainfall events to determine the effect of the project on Trinity River water quality. At a minimum, field turbidity measurements will be collected whenever a visible increase in turbidity is observed. ▪ If increases in turbidity and total suspended solids are observed as a result of erosion from constructed features, field turbidity measurements will be collected 50 feet upstream of a point adjacent to the end of the feature and 500 feet downstream of the feature. ▪ If the grab sample indicates that turbidity levels exceed the established thresholds identified in the Basin Plan, the Regional Water Board will be notified. The need to implement erosion control measures for turbidity that is expected to result from overland river flows (versus surface run-off) will be evaluated with Regional Water Board staff to determine if remediation measures are needed. **2c** To reduce the potential for the access routes to continually contribute soil materials to the Trinity River following project construction, thereby increasing turbidity and total suspended solids in the river, these routes will be stabilized or decommissioned upon completion of work in those areas consistent with the requirements outlined in Chapter 2 (Design Elements and Construction Criteria). Decommissioning is defined as removing those elements of a road that reroute hillslope drainage and present slope stability hazards.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Impact 4.5-3: Construction of the project could cause contamination of the Trinity River from hazardous materials spills.		
Mitigation Measures	**3a** Reclamation will prepare and implement a spill prevention and containment plan in accordance with applicable federal and state requirements. **3b** Reclamation will ensure that any construction equipment that would come in contact with the Trinity River 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 will ensure 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 or within an adequate secondary fueling containment area. In addition, the construction contractor will 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.	**3a** Reclamation will prepare and implement a spill prevention and containment plan in accordance with applicable federal and state requirements. **3b** Reclamation will ensure that any construction equipment that would come in contact with the Trinity River 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 will ensure 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 or within an adequate secondary fueling containment area. In addition, the construction contractor will 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.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.5-4: Construction of the project could result in increased stormwater runoff and subsequent potential for erosion		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Impact 4.5-5: Construction and maintenance of the project could result in the degradation of Trinity River beneficial uses identified in the Basin Plan.		
Mitigation Measures	The significance of impacts related to sediment, settleable materials, suspended materials, turbidity, and increased stormwater runoff and subsequent potential for erosion, as well as mitigation measures that would reduce the significance of these impacts, are addressed under Impacts 4.5-1, 4.5-2, and 4.5-4. The significance of, and mitigation for, chemical constituents and toxicity impacts are addressed under Impact 4.5-3.	The significance of impacts related to sediment, settleable materials, suspended materials, turbidity, and increased stormwater runoff and subsequent potential for erosion, as well as mitigation measures that would reduce the significance of these impacts, are addressed under Impacts 4.5-1, 4.5-2, and 4.5-4. The significance of, and mitigation for, chemical constituents and toxicity impacts are addressed under Impact 4.5-3.
Level of Significance after Mitigation	Less than significant	Less than significant
4.6 Fishery Resources		
Impact 4.6-1: Implementation of the project could result in effects on potential spawning and rearing habitat for anadromous fishes, including federally and state-listed coho salmon.		
Mitigation Measures	**1a** The proposed construction schedule avoids in-channel work during the period in which it could affect spawning spring- and fall-run Chinook salmon, coho salmon, and steelhead or their embryos once in the gravel. As directed by the 2000 Biological Opinion (National Marine Fisheries Service 2000), Reclamation will ensure that all in-channel construction activities are conducted during late-summer, low-flow conditions (e.g., July 15–September 15). **1b** Alluvial material used for coarse sediment additions will be composed of washed, spawning-sized gravels (3/8- to 5-inches diameter) from a local Trinity River 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	**1a** The proposed construction schedule avoids in-channel work during the period in which it could affect spawning spring- and fall-run Chinook salmon, coho salmon, and steelhead or their embryos once in the gravel. As directed by the 2000 Biological Opinion (National Marine Fisheries Service 2000), Reclamation will ensure that all in-channel construction activities are conducted during late-summer, low-flow conditions (e.g., July 15–September 15). **1b** Alluvial material used for coarse sediment additions will be composed of washed, spawning-sized gravels (3/8- to 5-inches diameter) from a local Trinity River 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

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	greater.	greater.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.6-2: Implementation of the project could result in increased erosion and sedimentation levels that could adversely affect fishes, including federally and state-listed coho salmon.		
Mitigation Measures	**2a** The water quality objective for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (North Coast Regional Water Quality Control Board 2007), is summarized below. ▪ Turbidity levels shall not be increased 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. ▪ Due to the nature of the proposed restoration activities and the clarity of the Trinity River during low flow conditions, the Regional Water Board has determined that an allowable zone of turbidity dilution is appropriate and necessary in order for Trinity River restoration activities to be accomplished in a meaningful, timely, and cost-effective manner that fully protects beneficial uses without resulting in a violation of the water quality objective for turbidity. ▪ Project activities that occur in areas outside of the active river channel will not increase turbidity levels by more than 20 percent above naturally occurring background levels. During in-river construction activities and until the first extended period of post-construction high flow (i.e., flows of at least 6,000 cfs inundate the project areas and floodplain for a minimum of 7 days) a zone of turbidity dilution within which higher percentages would be tolerated will be defined in discharge permits as the full width of the	**2a** The water quality objective for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (North Coast Regional Water Quality Control Board 2007), is summarized below. ▪ Turbidity levels shall not be increased 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. ▪ Due to the nature of the proposed restoration activities and the clarity of the Trinity River during low flow conditions, the Regional Water Board has determined that an allowable zone of turbidity dilution is appropriate and necessary in order for Trinity River restoration activities to be accomplished in a meaningful, timely, and cost-effective manner that fully protects beneficial uses without resulting in a violation of the water quality objective for turbidity. ▪ Project activities that occur in areas outside of the active river channel will not increase turbidity levels by more than 20 percent above naturally occurring background levels. During in-river construction activities and until the first extended period of post-construction high flow (i.e., flows of at least 6,000 cfs inundate the project areas and floodplain for a minimum of 7 days) a zone of turbidity dilution within which higher percentages would be tolerated will be defined in discharge permits as the full width of the

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	river channel within 500 linear feet downstream of any project activity that increases naturally occurring background levels, provided that all other required controls and appropriate BMPs for sediment and turbidity control are in place and downstream beneficial uses are also fully protected. When naturally occurring background levels are less than or equal to 20 NTUs, turbidity levels immediately downstream of the zone of turbidity dilution shall not exceed 20 NTUs. If naturally occurring background levels are greater than 20 NTUs, turbidity levels immediately downstream of the 500 linear foot zone of dilution shall not be increased by more than 20 percent above the naturally occurring background level **2b** To ensure that turbidity levels do not exceed the thresholds described above (4.6-2a) during in-river project construction activities, Reclamation shall monitor turbidity levels upstream within 50 feet of project activities (i.e., natural background) and 500 feet downstream of the in-river construction activities that could increase turbidity. 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 two hours during in-river work periods and when activities commence that are likely to increase turbidity levels above any previously monitored levels. If grab sample results indicate that turbidity levels exceed 20 NTU at 500 feet downstream from construction activities, remedial actions will be implemented to reduce and maintain turbidity at or below 20 NTU immediately downstream of the 500 linear foot zone of dilution. Potential remedial actions include halting or slowing construction activities and implementation of additional BMPs until turbidity levels are at or below 20 NTU. **2c** Fill gravels used on the streambeds, stream banks, and river crossings will be composed of washed, spawning-sized gravels from a local Trinity River basin	river channel within 500 linear feet downstream of any project activity that increases naturally occurring background levels, provided that all other required controls and appropriate BMPs for sediment and turbidity control are in place and downstream beneficial uses are also fully protected. When naturally occurring background levels are less than or equal to 20 NTUs, turbidity levels immediately downstream of the zone of turbidity dilution shall not exceed 20 NTUs. If naturally occurring background levels are greater than 20 NTUs, turbidity levels immediately downstream of the 500 linear foot zone of dilution shall not be increased by more than 20 percent above the naturally occurring background level **2b** To ensure that turbidity levels do not exceed the thresholds described above (4.6-2a) during in-river project construction activities, Reclamation shall monitor turbidity levels upstream within 50 feet of project activities (i.e., natural background) and 500 feet downstream of the in-river construction activities that could increase turbidity. 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 two hours during in-river work periods and when activities commence that are likely to increase turbidity levels above any previously monitored levels. If grab sample results indicate that turbidity levels exceed 20 NTU at 500 feet downstream from construction activities, remedial actions will be implemented to reduce and maintain turbidity at or below 20 NTU immediately downstream of the 500 linear foot zone of dilution. Potential remedial actions include halting or slowing construction activities and implementation of additional BMPs until turbidity levels are at or below 20 NTU. **2c** Fill gravels used on the streambeds, stream banks, and river crossings will be composed of washed, spawning-sized gravels from a local Trinity River basin

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	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. **2d** Reclamation will 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 will be adequate to minimize sediment inputs into the Trinity River until vegetation regrowth occurs. All required controls and BMPs, including 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 activity areas with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable upland activity areas. All applicable erosion control standards will be required during stockpiling of materials. **2e** To minimize the potential for increases in turbidity and suspended sediments entering the Trinity River as a result of access routes (e.g., roads), Reclamation will implement the following protocols: ▪ Keep bare soil to the minimum required by designs. Erosion control devices/measures will be applied to areas where vegetation has been removed to reduce short-term erosion prior to the start of the rainy season. ▪ Keep runoff from bare soil areas well dispersed. Dispersing runoff keeps sediment on-site and prevents sediment delivery to streams. Direct any concentrated runoff from bare soil areas into natural buffers of vegetation or areas with more gentle slopes where sediment can settle out. ▪ Disconnect and disperse flow paths, including	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. **2d** Reclamation will 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 will be adequate to minimize sediment inputs into the Trinity River until vegetation regrowth occurs. All required controls and BMPs, including 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 activity areas with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable upland activity areas. All applicable erosion control standards will be required during stockpiling of materials. **2e** To minimize the potential for increases in turbidity and suspended sediments entering the Trinity River as a result of access routes (e.g., roads), Reclamation will implement the following protocols: ▪ Keep bare soil to the minimum required by designs. Erosion control devices/measures will be applied to areas where vegetation has been removed to reduce short-term erosion prior to the start of the rainy season. ▪ Keep runoff from bare soil areas well dispersed. Dispersing runoff keeps sediment on-site and prevents sediment delivery to streams. Direct any concentrated runoff from bare soil areas into natural buffers of vegetation or areas with more gentle slopes where sediment can settle out. ▪ Disconnect and disperse flow paths, including roadside

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	roadside ditches, that might otherwise deliver fine sediment to stream channels. ▪ Decompact or rip floodplain areas so that surfaces are permeable and no surface water runoff occurs.	ditches, that might otherwise deliver fine sediment to stream channels. ▪ Decompact or rip floodplain areas so that surfaces are permeable and no surface water runoff occurs.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.6-3: Construction activities associated with the project could potentially result in the accidental spill of hazardous materials that could adversely affect fishes, including federally and state-listed coho salmon.		
Mitigation Measures	**3a** Construction specifications will include the following measures to reduce potential impacts associated with accidental spills of pollutants (fuel, oil, grease, etc.) on vegetation and aquatic habitat resources within the project boundary: ▪ Equipment and materials will be stored away from wetland and surface water features. ▪ Vehicles and equipment used during construction will receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling will be conducted in an area at least 150 feet away from waters of the Trinity River or within an appropriate secondary fueling containment area. ▪ The contractor will develop and implement site-specific 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.	**3a** Construction specifications will include the following measures to reduce potential impacts associated with accidental spills of pollutants (fuel, oil, grease, etc.) on vegetation and aquatic habitat resources within the project boundary: ▪ Equipment and materials will be stored away from wetland and surface water features. ▪ Vehicles and equipment used during construction will receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling will be conducted in an area at least 150 feet away from waters of the Trinity River or within an appropriate secondary fueling containment area. The contractor will develop and implement site-specific 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.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Impact 4.6-4: Construction activities associated with the project could result in the mortality of rearing fishes, including federally and state-listed coho salmon.		
Mitigation Measures	**4a** To avoid impacts to spawning and incubating salmonids, instream work will only occur between July 15 and September 15. **4b To** avoid or minimize potential injury and mortality of fish during riverine activities (e.g. removal of grade control structures, channel crossings, and addition and grading of coarse sediment), equipment will be operated slowly and deliberately to alert and scare adult and juvenile salmonids away from the work area. **4c** Reclamation will 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. **4d** To avoid or minimize potential injury and mortality of fish during excavation and placement of fill materials in the active low-flow channel, equipment will be operated slowly and deliberately to alert and scare adult and juvenile salmonids away from the work area. Reclamation will ensure 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 will be added slowly and deliberately to allow fish to move from the work area. **4e** To avoid impacts to juvenile salmonids during high flow gravel injections, gravel will only be injected in select	**4a** To avoid impacts to spawning and incubating salmonids, instream work will only occur between July 15 and September 15. **4b To** avoid or minimize potential injury and mortality of fish during riverine activities (e.g. removal of grade control structures, channel crossings, and addition and grading of coarse sediment), equipment will be operated slowly and deliberately to alert and scare adult and juvenile salmonids away from the work area. **4c** Reclamation will 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. **4d** To avoid or minimize potential injury and mortality of fish during excavation and placement of fill materials in the active low-flow channel, equipment will be operated slowly and deliberately to alert and scare adult and juvenile salmonids away from the work area. Reclamation will ensure 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 will be added slowly and deliberately to allow fish to move from the work area. **4e** To avoid impacts to juvenile salmonids during high flow gravel injections, gravel will only be injected in select

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	locations where water velocities are too high and juvenile salmonids would not be expected to be holding. **4f** Monitoring of the constructed inundation surfaces for salmon fry stranding will 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. These flows, and associated fry stranding surveys, would typically occur between January and May. If substantial stranding is observed, Reclamation will take appropriate measures to return stranded fishes to river habitats and to subsequently modify the constructed surfaces prior to the next managed flow release to reduce the likelihood of future occurrences of fry stranding.	locations where water velocities are too high and juvenile salmonids would not be expected to be holding. **4f** Monitoring of the constructed inundation surfaces for salmon fry stranding will 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. These flows, and associated fry stranding surveys, would typically occur between January and May. If substantial stranding is observed, Reclamation will take appropriate measures to return stranded fishes to river habitats and to subsequently modify the constructed surfaces prior to the next managed flow release to reduce the likelihood of future occurrences of fry stranding.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.6-5: Implementation of the project would result in the permanent and temporary loss of SRA habitat for anadromous salmonids.		
Mitigation Measures	To maintain overall SRA habitat values in the project reach, the Proposed Project 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 will be installed along all riparian areas outside of delineated rehabilitation activity areas. These markers will prevent construction access so that impacts to riparian vegetation are minimized. To compensate for the loss of riparian vegetation in the project boundaries, Reclamation will implement the following measures: **5a** Prior to the start of construction activities, Reclamation will 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 riparian habitats	To maintain overall SRA habitat values in the project reach, the Proposed Project 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 will be installed along all riparian areas outside of delineated rehabilitation activity areas. These markers will prevent construction access so that impacts to riparian vegetation are minimized. To compensate for the loss of riparian vegetation in the project boundaries, Reclamation will implement the following measures: **5a** Prior to the start of construction activities, Reclamation will 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 riparian habitats

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	and wetland waters. In addition, Reclamation will 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 with specific instructions to avoid any construction activity within these features. Reclamation will inspect and maintain flagged areas on a regular basis throughout the construction phase.	and wetland waters. In addition, Reclamation will 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 with specific instructions to avoid any construction activity within these features. Reclamation will inspect and maintain flagged areas on a regular basis throughout the construction phase.
	5b Reclamation will continue to implement the Riparian Revegetation and Monitoring Plan during Proposed Project implementation. The plan acknowledges that the ultimate goals of the TRRP include enhancement and maintenance of functional riparian habitat and no net-loss of riparian habitat and jurisdictional wetlands within channel rehabilitation site boundaries and generally throughout the 40-mile reach of the Trinity River below the TRD.	**5b** Reclamation will continue to implement the Riparian Revegetation and Monitoring Plan during Proposed Project implementation. The plan acknowledges that the ultimate goals of the TRRP include enhancement and maintenance of functional riparian habitat and no net-loss of riparian habitat and jurisdictional wetlands within channel rehabilitation site boundaries and generally throughout the 40-mile reach of the Trinity River below the TRD.
	5c Reclamation will initiate a 10-year mitigation monitoring program after the first growing season following project implementation. After a period of 3 years, the need for additional riparian habitat and wetland enhancement will be evaluated. At that time, Reclamation, in consultation with the USACE, Regional Water Board, and CDFG, will determine whether there is a need to further enhance or create additional areas of riparian habitat or jurisdictional wetlands within the project boundary so that there will be no net loss of riparian habitat after a 10-year monitoring period. In addition, wetlands will be redelineated 5 years post-project implementation to ensure no net loss of wetland habitat. Riparian habitat reporting 3 years after project implementation and wetland delineation 5 years after implementation will provide Reclamation with needed data in a timely fashion to take additional pro-active measures towards meeting the goals of no net loss of riparian and jurisdictional wetland habitat within Project site boundaries after 10 years.	**5c** Reclamation will initiate a 10-year mitigation monitoring program after the first growing season following project implementation. After a period of 3 years, the need for additional riparian habitat and wetland enhancement will be evaluated. At that time, Reclamation, in consultation with the USACE, Regional Water Board, and CDFG, will determine whether there is a need to further enhance or create additional areas of riparian habitat or jurisdictional wetlands within the project boundary so that there will be no net loss of riparian habitat after a 10-year monitoring period. In addition, wetlands will be redelineated 5 years post-project implementation to ensure no net loss of wetland habitat. Riparian habitat reporting 3 years after project implementation and wetland delineation 5 years after implementation will provide Reclamation with needed data in a timely fashion to take additional pro-active measures towards meeting the goals of no net loss of riparian and jurisdictional wetland habitat within Project site boundaries after 10 years.

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.6-6: Implementation of the project would result in fish passage being temporarily impaired during the in-stream construction phase.		
Mitigation Measures	**6a** Low water crossings will only be constructed and used between July 15 and September 15. Fill gravels used on the low-water crossings, streambeds, and stream banks 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. Abutment and embankment materials used for bridges will be native alluvium obtained from within the boundaries of the Remaining Phase 1 or Phase 2 sites. **6b** Reclamation will construct the low-flow channel crossings to allow adequate depths and velocities for adult and juvenile salmonids to pass safely. Flows associated with storm events are not considered critical because the width and hydrologic conditions associated with low-flow channel crossings in the Trinity River are not considered to limit fish passage at elevated flows and would be comparable to hydrologic conditions in local riffle-and-run features. For Trinity River low-flow channel crossings at base flows, velocities will not exceed 2 feet per second to allow for juvenile fish passage and water depths will not be less than 12 inches in two-thirds of the river channel to provide adequate depth for adult salmon and steelhead passage. **6c** The number of vehicle and equipment crossings of the Trinity River will be minimized. **6d** Reclamation will not impede the physical features or hydraulic process of the Trinity River in a fashion that would be inconsistent with the 2000 Biological Opinion (National Marine Fisheries Service 2000), or result in a	**6a** Low water crossings will only be constructed and used between July 15 and September 15. Fill gravels used on the low-water crossings, streambeds, and stream banks 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. Abutment and embankment materials used for bridges will be native alluvium obtained from within the boundaries of the Remaining Phase 1 or Phase 2 sites. **6b** Reclamation will construct the low-flow channel crossings to allow adequate depths and velocities for adult and juvenile salmonids to pass safely. Flows associated with storm events are not considered critical because the width and hydrologic conditions associated with low-flow channel crossings in the Trinity River are not considered to limit fish passage at elevated flows and would be comparable to hydrologic conditions in local riffle-and-run features. For Trinity River low-flow channel crossings at base flows, velocities will not exceed 2 feet per second to allow for juvenile fish passage and water depths will not be less than 12 inches in two-thirds of the river channel to provide adequate depth for adult salmon and steelhead passage. **6c** The number of vehicle and equipment crossings of the Trinity River will be minimized. **6d** Reclamation will not impede the physical features or hydraulic process of the Trinity River in a fashion that would be inconsistent with the 2000 Biological Opinion (National Marine Fisheries Service 2000), or result in a

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	temporary impairment to fish passage related to a bridge.	temporary impairment to fish passage related to a bridge.
Level of Significance after Mitigation	Less than significant	Less than significant
	4.7 Vegetation, Wildlife, and Wetlands	
Impact 4.7-1: Construction activities associated with the project could result in the loss of jurisdictional waters including wetlands.		
Mitigation Measures	**1a** Prior to the start of construction activities, Reclamation will retain a qualified biologist to identify potential construction access routes to ensure that these features avoid and/or minimize to the fullest extent impacts to jurisdictional waters. In addition, Reclamation will 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 with specific instructions to avoid any construction activity within these features. Reclamation will inspect and maintain marked areas on a regular basis throughout the construction phase. **1b** Reclamation will continue to implement the Riparian Revegetation and Monitoring Plan during Proposed Project implementation. The plan acknowledges that the ultimate goals of the TRRP include enhancement and maintenance of functional riparian habitat and no net loss of riparian habitat and jurisdictional wetlands both within channel rehabilitation site boundaries and generally throughout the 40-mile reach of the Trinity River below the TRD. **1c** Reclamation will initiate a 10-year mitigation monitoring program after the first growing season following project implementation. After a period of 3 years, the need for additional riparian habitat and wetland enhancement will be evaluated. At that time, Reclamation, in consultation with the USACE, Regional Water Board, and CDFG, will determine whether there is	**1a** Prior to the start of construction activities, Reclamation will retain a qualified biologist to identify potential construction access routes to ensure that these features avoid and/or minimize to the fullest extent impacts to jurisdictional waters. In addition, Reclamation will 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 with specific instructions to avoid any construction activity within these features. Reclamation will inspect and maintain marked areas on a regular basis throughout the construction phase. **1b** Reclamation will continue to implement the Riparian Revegetation and Monitoring Plan during Proposed Project implementation. The plan acknowledges that the ultimate goals of the TRRP include enhancement and maintenance of functional riparian habitat and no net loss of riparian habitat and jurisdictional wetlands both within channel rehabilitation site boundaries and generally throughout the 40-mile reach of the Trinity River below the TRD. **1c** Reclamation will initiate a 10-year mitigation monitoring program after the first growing season following project implementation. After a period of 3 years, the need for additional riparian habitat and wetland enhancement will be evaluated. At that time, Reclamation, in consultation with the USACE, Regional Water Board, and CDFG, will determine whether there is

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	a need to further enhance or create additional areas of riparian habitat or jurisdictional wetlands within the project boundary so that there will be no net loss of wetlands at the end of a 5 year period and no net loss of riparian habitat after a 10-year monitoring period. In addition, wetlands will be re-delineated 5 years after project implementation to ensure no net loss of wetland habitat. Riparian habitat reporting 3 years after project implementation and wetland delineation 5 years after implementation will provide Reclamation with needed data in a timely fashion to take additional pro-active measures towards meeting the goals of no net loss of riparian habitat and jurisdictional wetlands within boundaries established for TRRP rehabilitation sites after 10 years.	a need to further enhance or create additional areas of riparian habitat or jurisdictional wetlands within the project boundary so that there will be no net loss of wetlands at the end of a 5 year period and no net loss of riparian habitat after a 10-year monitoring period. In addition, wetlands will be re-delineated 5 years after project implementation to ensure no net loss of wetland habitat. Riparian habitat reporting 3 years after project implementation and wetland delineation 5 years after implementation will provide Reclamation with needed data in a timely fashion to take additional pro-active measures towards meeting the goals of no net loss of riparian habitat and jurisdictional wetlands within boundaries established for TRRP rehabilitation sites after 10 years.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.7-2: Implementation of the project would result in the loss of upland plant communities.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.7-3: Construction of the project could result in the loss of individuals of a special-status plant species.		
Mitigation Measures	**3a** A qualified botanist will conduct a minimum of two pre-construction surveys to determine if special-status plant species occur within the project site. Surveys shall be conducted during the blooming periods of the plants potentially occurring at the site to determine (1) if the species occur and (2) the quality, location, and extent of any populations. If a special-status plants species is found within 250 feet of any proposed disturbance, the following measures will be implemented.	**3a** A qualified botanist will conduct a minimum of two pre-construction surveys to determine if special-status plant species occur within the project site. Surveys shall be conducted during the blooming periods of the plants potentially occurring at the site to determine (1) if the species occur and (2) the quality, location, and extent of any populations. If a special-status plants species is found within 250 feet of any proposed disturbance, the following measures will be implemented.

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	Proposed Action	Alternative 1
	3b Prior to the start of disturbance, exclusionary fencing will be erected around the known occurrences. If necessary, a qualified botanist shall be present to assist with locating these special-status plant populations. The exclusionary fencing will be periodically inspected throughout each period of construction and be repaired as necessary. **3c** If a population cannot be fully avoided, Reclamation will retain a qualified botanist to (1) determine appropriate salvage and relocation measures and (2) implement appropriate measures in coordination with CDFG staff.	**3b** Prior to the start of disturbance, exclusionary fencing will be erected around the known occurrences. If necessary, a qualified botanist shall be present to assist with locating these special-status plant populations. The exclusionary fencing will be periodically inspected throughout each period of construction and be repaired as necessary. **3c** If a population cannot be fully avoided, Reclamation will retain a qualified botanist to (1) determine appropriate salvage and relocation measures and (2) implement appropriate measures in coordination with CDFG staff.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.7-4: Construction activities associated with the project could result in impacts to the state-listed little willow flycatcher.		
Mitigation Measures	**4a** Prior to the start of construction, a qualified biologist will conduct a survey of the project site(s) to determine whether suitable nesting habitat for the little willow flycatcher is present. If suitable habitat is present, Mitigation Measure 4.7-4b will be implemented. **4b** Grading and other construction activities will be scheduled to avoid the nesting season to the extent possible. The nesting season for this species in Trinity County extends from June 1 through July 31. If construction occurs outside of the breeding season, no further mitigation is necessary. If the breeding season cannot be completely avoided, Mitigation Measures 4.7-4c and 4.7-4d will be implemented. **4c** A qualified biologist will conduct a minimum of one pre-construction survey for the little willow flycatcher within the project sites and a 250-foot buffer around the sites. The survey will be conducted no more than 15 days prior to the initiation of construction in any given area. The pre-construction survey will be used to ensure that no nests of this species within or immediately	**4a** Prior to the start of construction, a qualified biologist will conduct a survey of the project site(s) to determine whether suitable nesting habitat for the little willow flycatcher is present. If suitable habitat is present, Mitigation Measure 4.7-4b will be implemented. **4b** Grading and other construction activities will be scheduled to avoid the nesting season to the extent possible. The nesting season for this species in Trinity County extends from June 1 through July 31. If construction occurs outside of the breeding season, no further mitigation is necessary. If the breeding season cannot be completely avoided, Mitigation Measures 4.7-4c and 4.7-4d will be implemented. **4c** A qualified biologist will conduct a minimum of one pre-construction survey for the little willow flycatcher within the project sites and a 250-foot buffer around the sites. The survey will be conducted no more than 15 days prior to the initiation of construction in any given area. The pre-construction survey will be used to ensure that no nests of this species within or immediately

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	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 will be removed before the onset of the nesting season, if feasible. This will help preclude nesting and substantially decrease the likelihood of direct impacts.	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 will be removed before the onset of the nesting season, if feasible. This will help preclude nesting and substantially decrease the likelihood of direct impacts.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.7-5: Construction activities associated with the project could result in impacts to foothill yellow-legged frogs.		
Mitigation Measures	**5a** If any construction in the Trinity River channel will occur prior to August 1 of any construction season, a pre-construction survey for yellow-legged frog larvae and/or eggs will be conducted by a qualified biologist. This survey will 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 will 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 will 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 4.5 (Water Quality) for addressing erosion and sedimentation and accidental spills will be fully implemented to mitigate for potential indirect impacts to dispersal habitat for the yellow-legged frog due to sedimentation and accidental spills.	**5a** If any construction in the Trinity River channel will occur prior to August 1 of any construction season, a pre-construction survey for yellow-legged frog larvae and/or eggs will be conducted by a qualified biologist. This survey will 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 will 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 will 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 4.5 (Water Quality) for addressing erosion and sedimentation and accidental spills will be fully implemented to mitigate for potential indirect impacts to dispersal habitat for the yellow-legged frog due to sedimentation and accidental spills.

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	5d The mitigation measure associated with the disturbance to riparian habitat (Mitigation Measures 4.7-1a-c) will be fully implemented.	**5d** The mitigation measure associated with the disturbance to riparian habitat (Mitigation Measures 4.7-1a-c) will be fully implemented.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.7-6: Construction activities associated with the project could result in impacts to western pond turtles.		
Mitigation Measures	**6a:** A minimum of one survey for pond turtle nests will be conducted during the nesting season (generally late June-July) prior to construction. A qualified biologist will be retained by Reclamation to conduct the survey. If a pond turtle nest is found, the biologist will flag the site and determine whether construction activities can avoid affecting the nest. If the nest cannot be avoided, the nest will be excavated by the biologist and reburied at a suitable location outside of the construction limits. **6b:** Prior to construction in open water habitat, a qualified biologist will trap and move turtles out of the construction area to nearby suitable habitats. **6c:** During construction, in the event that a pond turtle is observed within the construction limits, the contractor will temporarily halt construction activities until the turtle has been moved to a safe location within suitable habitat outside of the construction limits. **6d:** Mitigation measures presented in section 4.5 (Water Quality) for addressing erosion and sedimentation and accidental spills will be fully implemented to mitigate for the potential indirect impacts to potential dispersal habitat due to sedimentation and accidental spills. **6e:** The mitigation measure associated with the disturbance to riparian habitat (Mitigation Measures 4.7-1a-c) will be fully implemented.	**6a:** A minimum of one survey for pond turtle nests will be conducted during the nesting season (generally late June-July) prior to construction. A qualified biologist will be retained by Reclamation to conduct the survey. If a pond turtle nest is found, the biologist will flag the site and determine whether construction activities can avoid affecting the nest. If the nest cannot be avoided, the nest will be excavated by the biologist and reburied at a suitable location outside of the construction limits. **6b:** Prior to construction in open water habitat, a qualified biologist will trap and move turtles out of the construction area to nearby suitable habitats. **6c:** During construction, in the event that a pond turtle is observed within the construction limits, the contractor will temporarily halt construction activities until the turtle has been moved to a safe location within suitable habitat outside of the construction limits. **6d:** Mitigation measures presented in section 4.5 (Water Quality) for addressing erosion and sedimentation and accidental spills will be fully implemented to mitigate for the potential indirect impacts to potential dispersal habitat due to sedimentation and accidental spills. **6e:** The mitigation measure associated with the disturbance to riparian habitat (Mitigation Measures 4.7-1a-c) will be fully implemented.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Impact 4.7-7: Construction activities associated with the project could result in impacts to nesting Vaux's swifts, yellow warblers, and yellow-breasted chats.		
Mitigation Measures	In order to avoid and/or minimize impacts to nesting California yellow warblers, yellow-breasted chats, and Vaux's swifts, the following measures will be implemented: **7a:** Prior to the start of construction, a qualified biologist will conduct a survey of the project site(s) to determine whether suitable nesting habitat for the species is present. If suitable habitat is present, Mitigation Measure 4.7-7b will be implemented. **7b:** Grading and other construction activities will be scheduled to avoid the nesting season for these species to the extent possible. The nesting season for these species in Trinity County extends from March 15 through August. If construction occurs outside the breeding season, no further mitigation is necessary. If construction during the breeding season cannot be completely avoided, Mitigation Measures 4.7-7c and 4.7-7d will be implemented. **7c:** A qualified biologist will conduct a minimum of one preconstruction survey for these species within the project site(s) and a 250-foot buffer around the site. The survey will be conducted no more than 15 days prior to the initiation of construction in any given area. The preconstruction survey will be used to ensure that no nests of these species within or immediately adjacent to the project site(s) will be disturbed during project implementation. If an active nest is found, a qualified biologist will determine the extent of a construction-free buffer zone to be established around the nest. **7d:** If vegetation is to be removed by the project and all necessary approvals have been obtained, potential nesting habitat (e.g., shrubs and trees) that will be removed by the project will be removed before the onset of the nesting season, if feasible. This will help preclude	In order to avoid and/or minimize impacts to nesting California yellow warblers, yellow-breasted chats, and Vaux's swifts, the following measures will be implemented: **7a:** Prior to the start of construction, a qualified biologist will conduct a survey of the project site(s) to determine whether suitable nesting habitat for the species is present. If suitable habitat is present, Mitigation Measure 4.7-7b will be implemented. **7b:** Grading and other construction activities will be scheduled to avoid the nesting season for these species to the extent possible. The nesting season for these species in Trinity County extends from March 15 through August. If construction occurs outside the breeding season, no further mitigation is necessary. If construction during the breeding season cannot be completely avoided, Mitigation Measures 4.7-7c and 4.7-7d will be implemented. **7c:** A qualified biologist will conduct a minimum of one preconstruction survey for these species within the project site(s) and a 250-foot buffer around the site. The survey will be conducted no more than 15 days prior to the initiation of construction in any given area. The preconstruction survey will be used to ensure that no nests of these species within or immediately adjacent to the project site(s) will be disturbed during project implementation. If an active nest is found, a qualified biologist will determine the extent of a construction-free buffer zone to be established around the nest. **7d:** If vegetation is to be removed by the project and all necessary approvals have been obtained, potential nesting habitat (e.g., shrubs and trees) that will be removed by the project will be removed before the onset of the nesting season, if feasible. This will help preclude

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	nesting and substantially decrease the likelihood of direct impacts.	nesting and substantially decrease the likelihood of direct impacts.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.7-8: Construction activities associated with the project could result in impacts to nesting bald eagles and northern goshawks.		
Mitigation Measures	In order to avoid and/or minimize impacts to nesting bald eagles and northern goshawks, the following measures will be implemented: **8a:** Prior to the start of construction, a qualified biologist will conduct a survey of the project site(s) to determine whether suitable nesting habitat for the species is present. If suitable habitat is present, Mitigation Measure 4.7-8b will be implemented. **8b:** Construction will be scheduled to avoid the nesting season for bald eagles and northern goshawks 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 will be avoided and no impacts to nesting bald eagles and northern goshawks would be expected. If it is not possible to schedule construction during this time, the following mitigation measures will be implemented. **8c:** Pre-construction surveys for nesting northern goshawks will be conducted by a qualified biologist to ensure that no nests will be disturbed during project implementation. These surveys will be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the biologist will inspect all trees immediately adjacent to the impact areas for bald eagle and northern goshawk nests. If an active nest is found within 500 feet of the construction area to be disturbed by these activities, the biologist, in consultation	In order to avoid and/or minimize impacts to nesting bald eagles and northern goshawks, the following measures will be implemented: **8a:** Prior to the start of construction, a qualified biologist will conduct a survey of the project site(s) to determine whether suitable nesting habitat for the species is present. If suitable habitat is present, Mitigation Measure 4.7-8b will be implemented. **8b:** Construction will be scheduled to avoid the nesting season for bald eagles and northern goshawks 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 will be avoided and no impacts to nesting bald eagles and northern goshawks would be expected. If it is not possible to schedule construction during this time, the following mitigation measures will be implemented. **8c:** Pre-construction surveys for nesting northern goshawks will be conducted by a qualified biologist to ensure that no nests will be disturbed during project implementation. These surveys will be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the biologist will inspect all trees immediately adjacent to the impact areas for bald eagle and northern goshawk nests. If an active nest is found within 500 feet of the construction area to be disturbed by these activities, the biologist, in consultation

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	with the CDFG, will determine the extent of a construction-free buffer zone to be established around the nest. **8d:** If vegetation is to be removed as part of the project and all necessary approvals have been obtained, potential nesting habitat (i.e., trees) that will be removed by the project will be removed before the onset of the nesting season, if feasible. This will help preclude nesting and substantially decrease the likelihood of direct impacts.	with the CDFG, will determine the extent of a construction-free buffer zone to be established around the nest. **8d:** If vegetation is to be removed as part of the project and all necessary approvals have been obtained, potential nesting habitat (i.e., trees) that will be removed by the project will be removed before the onset of the nesting season, if feasible. This will help preclude nesting and substantially decrease the likelihood of direct impacts.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.7-9: Construction activities associated with the project could result in impacts to special-status bats and the ring-tailed cat.		
Mitigation Measures	In order to avoid and/or minimize impacts to roosting special-status bats and the ring-tailed cat, the following measures will be implemented: **9a:** A pre-construction survey for roosting bats and ring-tailed cats will be conducted prior to the start of construction activities. The survey will be conducted by a qualified biologist. No activities that would result in disturbance to active roosts of special-status bats or dens of ring-tailed cats will proceed prior to completion of the surveys. If no active roosts or dens are found, no further action is needed. Because bats are known to abandon young when disturbed, if a maternity roost is located, a qualified bat biologist will determine the extent of a construction-free zone to be implemented around the roost. If a bat maternity roost or hibernaculum is present, or a ring-tailed cat den is present, Mitigation Measures 4.7-9b and/or 4.7-9c will be implemented. CDFG will also be notified of any active bat nurseries within the disturbance zones. **9b:** If an active maternity roost or hibernaculum is found,	In order to avoid and/or minimize impacts to roosting special-status bats and the ring-tailed cat, the following measures will be implemented: **9a:** A pre-construction survey for roosting bats and ring-tailed cats will be conducted prior to the start of construction activities. The survey will be conducted by a qualified biologist. No activities that would result in disturbance to active roosts of special-status bats or dens of ring-tailed cats will proceed prior to completion of the surveys. If no active roosts or dens are found, no further action is needed. Because bats are known to abandon young when disturbed, if a maternity roost is located, a qualified bat biologist will determine the extent of a construction-free zone to be implemented around the roost. If a bat maternity roost or hibernaculum is present, or a ring-tailed cat den is present, Mitigation Measures 4.7-9b and/or 4.7-9c will be implemented. CDFG will also be notified of any active bat nurseries within the disturbance zones. **9b:** If an active maternity roost or hibernaculum is found,

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	the project will be redesigned to avoid the loss of the tree or structure occupied by the roost, if feasible. If the project cannot be redesigned to avoid removal of the structure, demolition of that structure will commence before bat maternity colonies form (i.e., prior to March 1) or after young are volant (flying) (i.e., after July 31). The disturbance-free buffer zones described above will be observed during the bat maternity roost season (March 1–July 31). If a non-breeding bat hibernaculum is found in a tree or structure to be razed, the individuals will be safely evicted under the direction of a qualified bat biologist, by opening the roosting area to allow air to flow through the cavity. Demolition will then follow no sooner than the following day (i.e., there will be no less than one night between initial disturbance for air flow and the demolition). This action will allow bats to leave during dark hours, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. Trees with roosts that need to be removed will first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours. **9c:** If an active ring-tailed cat nest is found, the project will be redesigned to avoid the loss of the tree occupied by the nest if feasible. If the project cannot be redesigned to avoid removal of the occupied tree, demolition of that tree will commence outside of the breeding season (February 1 to August 30). If a non-breeding den is found in a tree scheduled to be removed, the individuals will be safely evicted under the direction of a qualified biologist. Trees with dens that need to be removed will first be disturbed at dusk, just prior to removal that same evening, to allow ring-tailed cats to escape during the darker hours.	the project will be redesigned to avoid the loss of the tree or structure occupied by the roost, if feasible. If the project cannot be redesigned to avoid removal of the structure, demolition of that structure will commence before bat maternity colonies form (i.e., prior to March 1) or after young are volant (flying) (i.e., after July 31). The disturbance-free buffer zones described above will be observed during the bat maternity roost season (March 1–July 31). If a non-breeding bat hibernaculum is found in a tree or structure to be razed, the individuals will be safely evicted under the direction of a qualified bat biologist, by opening the roosting area to allow air to flow through the cavity. Demolition will then follow no sooner than the following day (i.e., there will be no less than one night between initial disturbance for air flow and the demolition). This action will allow bats to leave during dark hours, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. Trees with roosts that need to be removed will first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours. **9c:** If an active ring-tailed cat nest is found, the project will be redesigned to avoid the loss of the tree occupied by the nest if feasible. If the project cannot be redesigned to avoid removal of the occupied tree, demolition of that tree will commence outside of the breeding season (February 1 to August 30). If a non-breeding den is found in a tree scheduled to be removed, the individuals will be safely evicted under the direction of a qualified biologist. Trees with dens that need to be removed will first be disturbed at dusk, just prior to removal that same evening, to allow ring-tailed cats to escape during the darker hours.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Impact 4.7-10: Construction activities associated with the project could result in the temporary loss of non-breeding habitat for several special-status birds.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.7-11: Construction activities associated with the project could result in impacts to BLM and USFS sensitive species.		
Mitigation Measures	Since no significant impacts for the Pacific fisher were identified, no mitigation is required. Mitigation Measures 4.7-4a-c will reduce impacts to the little willow flycatcher to a less-than-significant level. Mitigation Measures 4.7-5a-d will reduce the impacts to the foothill yellow-legged frog to a less-than-significant level. Mitigation Measures 4.7-6a-d will reduce the impacts to the western pond turtle to a less-than-significant level. Mitigation measures 4.7-8a-c will reduce the impacts to the northern goshawk to a less-than-significant level, and Mitigation Measures 4.7-9a-b will reduce the impacts to special-status bat species to a less-than-significant level.	Since no significant impacts for the Pacific fisher were identified, no mitigation is required. Mitigation Measures 4.7-4a-c will reduce impacts to the little willow flycatcher to a less-than-significant level. Mitigation Measures 4.7-5a-d will reduce the impacts to the foothill yellow-legged frog to a less-than-significant level. Mitigation Measures 4.7-6a-d will reduce the impacts to the western pond turtle to a less-than-significant level. Mitigation measures 4.7-8a-c will reduce the impacts to the northern goshawk to a less-than-significant level, and Mitigation Measures 4.7-9a-b will reduce the impacts to special-status bat species to a less-than-significant level.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.7-12: Construction activities associated with the project could restrict terrestrial wildlife movement through the project area.		
Mitigation Measures	Since no significant impact was identified for these alternatives, no mitigation is required.	Since no significant impact was identified for these alternatives, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Impact 4.7-13: Implementation of the project could result in the spread of non-native and invasive plant species.		
Mitigation Measures	In order to avoid and/or minimize the potential introduction and/or spread of noxious weeds, the following measures will 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 materials to those that are known to be weed free. **13d:** Ensure all construction equipment is thoroughly washed prior to entering the worksite. 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:** Use a mix of native grasses, forbs, and non-persistent non-native species for seeding disturbed areas that are subject to infestation by non-native and invasive plant species. Where appropriate, a heavy application of mulch will be used to discourage introduction of these species. Use of planting plugs of native grass species may also be used to accelerate occupation of disturbed sites and increase the likelihood of reestablishing a self-sustaining population of native plant species. **13f:**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 will be considered. When implementing weed control techniques, the approach will consider using all available control methods known for a weed species.	In order to avoid and/or minimize the potential introduction and/or spread of noxious weeds, the following measures will 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 materials to those that are known to be weed free. **13d:** Ensure all construction equipment is thoroughly washed prior to entering the worksite. 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:** Use a mix of native grasses, forbs, and non-persistent non-native species for seeding disturbed areas that are subject to infestation by non-native and invasive plant species. Where appropriate, a heavy application of mulch will be used to discourage introduction of these species. Use of planting plugs of native grass species may also be used to accelerate occupation of disturbed sites and increase the likelihood of reestablishing a self-sustaining population of native plant species. **13f:**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 will be considered. When implementing weed control techniques, the approach will consider using all available control methods known for a weed species.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	4.8 Recreation	
Impact 4.8-1:	**Construction associated with the project could disrupt recreation activities, such as boating, fishing, and swimming, in the Trinity River.**	
Mitigation Measures	**1a** Reclamation 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 boundaries 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 public river access areas located within the project area and managed by BLM, STNF, and DFG (e.g., Bucktail River Access, Steel Bridge Campground, Douglas City Campground, Indian Creek River Access, and Junction City Campground). Additionally, public notification of proposed project construction activities and associated safety hazards shall be circulated in the local *Trinity Journal* newspaper prior to the onset of project construction. **1b** Reclamation will repair and/or replace any facilities associated with Remaining Phase 1 or Phase 2 sites that are impacted by project activities. This measure would include installation of interpretive signage consistent with the requirements of the STNF and BLM. Preconstruction meetings between Reclamation and landowners/land managers will identify the amount of vegetative screening to be retained at each recreation site within the project area.	**1a** Reclamation 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 boundaries 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 public river access areas located within the project area and managed by BLM, STNF, and DFG (e.g., Bucktail River Access, Steel Bridge Campground, Douglas City Campground, Indian Creek River Access, and Junction City Campground). Additionally, public notification of proposed project construction activities and associated safety hazards shall be circulated in the local *Trinity Journal* newspaper prior to the onset of project construction. **1b** Reclamation will repair and/or replace any facilities associated with Remaining Phase 1 or Phase 2 sites that are impacted by project activities. This measure would include installation of interpretive signage consistent with the requirements of the STNF and BLM. Preconstruction meetings between Reclamation and landowners/land managers will identify the amount of vegetative screening to be retained at each recreation site within the project area.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Impact 4.8-2: Construction of the project could result in an increased safety risk to recreational users or resource damage to lands within the project boundaries.		
Mitigation Measures	**2a** Please see mitigation measure 1a above.	**2a** Please see mitigation measure 1a above.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.8-3: Construction activities associated with the project could lower the river's aesthetic values for recreationists by increasing its turbidity.		
Mitigation Measures	**3a** The water quality objective for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (North Coast Regional Water Quality Control Board 2007), is summarized below. ▪ Turbidity levels shall not be increased 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. ▪ Due to the nature of the proposed restoration activities and the clarity of the Trinity River during low flow conditions, the Regional Water Board has determined that an allowable zone of turbidity dilution is appropriate and necessary in order for Trinity River restoration activities to be accomplished in a meaningful, timely, and cost-effective manner that fully protects beneficial uses without resulting in a violation of the water quality objective for turbidity ▪ Project activities that occur in areas outside of the active river channel will not increase turbidity levels by more than 20 percent above naturally occurring background levels. During in-river construction activities and until the first extended period of post-construction high flow (i.e., flows of at least 6,000 cfs inundate the project areas and floodplain for a	**3a** The water quality objective for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (North Coast Regional Water Quality Control Board 2007), is summarized below. ▪ Turbidity levels shall not be increased 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. ▪ Due to the nature of the proposed restoration activities and the clarity of the Trinity River during low flow conditions, the Regional Water Board has determined that an allowable zone of turbidity dilution is appropriate and necessary in order for Trinity River restoration activities to be accomplished in a meaningful, timely, and cost-effective manner that fully protects beneficial uses without resulting in a violation of the water quality objective for turbidity ▪ Project activities that occur in areas outside of the active river channel will not increase turbidity levels by more than 20 percent above naturally occurring background levels. During in-river construction activities and until the first extended period of post-construction high flow (i.e., flows of at least 6,000 cfs inundate the project areas and floodplain for a

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	minimum of 7 days) a zone of turbidity dilution within which higher percentages would be tolerated will be defined in discharge permits as the full width of the river channel within 500 linear feet downstream of any project activity that increases naturally occurring background levels, provided that all other required controls and appropriate BMPs for sediment and turbidity control are in place and downstream beneficial uses are also fully protected. When naturally occurring background levels are less than or equal to 20 NTUs, turbidity levels immediately downstream of the zone of turbidity dilution shall not exceed 20 NTUs. If naturally occurring background levels are greater than 20 NTUs, turbidity levels immediately downstream of the 500 linear foot zone of dilution shall not be increased by more than 20 percent above the naturally occurring background level. **3b** To ensure that turbidity levels do not exceed the thresholds described above (4.8-3a) during in-river project construction activities, Reclamation shall monitor turbidity levels upstream within 50 feet of project activities (i.e., natural background) and 500 feet downstream of the in-river construction activities that could increase turbidity. 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 two hours during in-river work periods and when activities commence that are likely to increase turbidity levels above any previously monitored levels. ▪ If grab sample results indicate that turbidity levels exceed 20 NTU at 500 feet downstream from construction activities, remedial actions will be implemented to reduce and maintain turbidity at or below 20 NTU immediately downstream of the 500 linear foot zone of dilution. Potential remedial actions include halting or slowing construction activities and implementation of additional BMPs until turbidity levels	minimum of 7 days) a zone of turbidity dilution within which higher percentages would be tolerated will be defined in discharge permits as the full width of the river channel within 500 linear feet downstream of any project activity that increases naturally occurring background levels, provided that all other required controls and appropriate BMPs for sediment and turbidity control are in place and downstream beneficial uses are also fully protected. When naturally occurring background levels are less than or equal to 20 NTUs, turbidity levels immediately downstream of the zone of turbidity dilution shall not exceed 20 NTUs. If naturally occurring background levels are greater than 20 NTUs, turbidity levels immediately downstream of the 500 linear foot zone of dilution shall not be increased by more than 20 percent above the naturally occurring background level. **3b** To ensure that turbidity levels do not exceed the thresholds described above (4.8-3a) during in-river project construction activities, Reclamation shall monitor turbidity levels upstream within 50 feet of project activities (i.e., natural background) and 500 feet downstream of the in-river construction activities that could increase turbidity. 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 two hours during in-river work periods and when activities commence that are likely to increase turbidity levels above any previously monitored levels. ▪ If grab sample results indicate that turbidity levels exceed 20 NTU at 500 feet downstream from construction activities, remedial actions will be implemented to reduce and maintain turbidity at or below 20 NTU immediately downstream of the 500 linear foot zone of dilution. Potential remedial actions include halting or slowing construction activities and implementation of additional BMPs until turbidity levels

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	are at or below 20 NTU. **3c** Fill gravels used on the streambeds, stream banks, and river crossings will be composed of washed, spawning-sized gravels from a local Trinity River 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. **3d** Reclamation will 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 will be adequate to minimize sediment inputs into the Trinity River until vegetation regrowth occurs. All required controls and BMPs, including 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 activity areas with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable upland activity areas. All applicable erosion control standards will be required during stockpiling of materials. **3e** To minimize the potential for increases in turbidity and suspended sediments entering the Trinity River as a result of access routes (e.g., roads), Reclamation will implement the following protocols: ▪ Keep bare soil to the minimum required by designs. Erosion control devices/measures will be applied to areas where vegetation has been removed to reduce short-term erosion prior to the start of the rainy season. ▪ Keep runoff from bare soil areas well dispersed. Dispersing runoff keeps sediment on-site and prevents sediment delivery to streams. Direct any concentrated	are at or below 20 NTU. **3c** Fill gravels used on the streambeds, stream banks, and river crossings will be composed of washed, spawning-sized gravels from a local Trinity River 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. **3d** Reclamation will 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 will be adequate to minimize sediment inputs into the Trinity River until vegetation regrowth occurs. All required controls and BMPs, including 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 activity areas with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable upland activity areas. All applicable erosion control standards will be required during stockpiling of materials. **3e** To minimize the potential for increases in turbidity and suspended sediments entering the Trinity River as a result of access routes (e.g., roads), Reclamation will implement the following protocols: ▪ Keep bare soil to the minimum required by designs. Erosion control devices/measures will be applied to areas where vegetation has been removed to reduce short-term erosion prior to the start of the rainy season. ▪ Keep runoff from bare soil areas well dispersed. Dispersing runoff keeps sediment on-site and prevents sediment delivery to streams. Direct any concentrated

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	runoff from bare soil areas into natural buffers of vegetation or areas with more gentle slopes where sediment can settle out. ▪ Disconnect and disperse flow paths, including roadside ditches, that might otherwise deliver fine sediment to stream channels. ▪ Decompact or rip floodplain areas so that surfaces are permeable and no surface water runoff occurs.	runoff from bare soil areas into natural buffers of vegetation or areas with more gentle slopes where sediment can settle out. ▪ Disconnect and disperse flow paths, including roadside ditches, that might otherwise deliver fine sediment to stream channels. ▪ Decompact or rip floodplain areas so that surfaces are permeable and no surface water runoff occurs.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.8-4: Implementation of the project could affect Wild and Scenic River values.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
4.9 Socioeconomic, Population, and Housing		
Impact 4.9-1: Construction of the project would provide temporary employment opportunities for construction workers in Trinity County.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	Beneficial	Beneficial
Impact 4.9-2: Implementation of the project could result in the disruption or displacement of local businesses.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Level of Significance after Mitigation	N/A	N/A
Impact 4.9-3: Implementation of the project would result in an increased demand for housing during construction.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.9-4: Implementation of the project would result in concentrated population growth.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
4.10 Cultural Resources		
Impact 4.10-1: Implementation of the proposed project could cause a substantial adverse change in the significance of a known cultural resource.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.10-2: Implementation of the proposed project could potentially result in disturbance of undiscovered prehistoric or historic resources.		
Mitigation Measures	**2a** Prior to initiation of construction or ground-disturbing activities, all construction workers shall be alerted to the possibility of discovering cultural resources. This includes prehistoric and/or historic resources. Personnel	**2a** Prior to initiation of construction or ground-disturbing activities, all construction workers shall be alerted to the possibility of discovering cultural resources. This includes prehistoric and/or historic resources. Personnel

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	shall be instructed that upon discovery of buried cultural resources, work within 50 feet of the find shall be halted and Reclamation's designated archaeologist shall be consulted. Once the find has been identified, Reclamation shall be responsible for developing a treatment plan for the cultural resource including an assessment of its historic properties and methods for avoiding any adverse effects, pursuant to the PA and in compliance with the NHPA. **2b** If human remains are encountered during construction on non-federal lands, work in that area will 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) shall be notified within 24 hours of determination, as required by Public Resources Code, Section 5097. The NAHC shall 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. If Native American human remains and associated items are discovered on federal lands, they will be treated according to provisions set forth in the Native American Protection and Repatriation Act (25 U.S.C. 3001) as well as Reclamation's Directives and Standards LND 02-01. 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 project while mitigation for historical or unique archaeological resources takes place.	shall be instructed that upon discovery of buried cultural resources, work within 50 feet of the find shall be halted and Reclamation's designated archaeologist shall be consulted. Once the find has been identified, Reclamation shall be responsible for developing a treatment plan for the cultural resource including an assessment of its historic properties and methods for avoiding any adverse effects, pursuant to the PA and in compliance with the NHPA. **2b** If human remains are encountered during construction on non-federal lands, work in that area will 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) shall be notified within 24 hours of determination, as required by Public Resources Code, Section 5097. The NAHC shall 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. If Native American human remains and associated items are discovered on federal lands, they will be treated according to provisions set forth in the Native American Protection and Repatriation Act (25 U.S.C. 3001) as well as Reclamation's Directives and Standards LND 02-01. 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 project while mitigation for historical or unique archaeological resources takes place.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	4.11 Air Quality	
Impact 4.11-1: Construction activities associated with the project could result in an increase in fugitive dust and associated particulate matter (PM_{10} and $PM_{2.5}$) levels.		
Mitigation Measures	**1a:** Reclamation will implement a dust control program to limit fugitive dust and particulate matter emissions. The dust control program will include 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 will be covered or will 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 will be conducted in phases to reduce the amount of bare soil exposed at any one time. Mulching with weed-free materials will be used to minimize soil erosion, as described in section 4.3, Geology, Fluvial Geomorphology, and Soils, and section 4.5, Water Quality. ▪ Watering (using equipment and/or manually) will 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 will be swept (with water sweepers), as required by Reclamation. ▪ Paved roads will be swept (with water sweepers) if visible soil material is carried onto adjacent private and public roads, as required by Reclamation. ▪ All ground-disturbing activities with the potential to	**1a:** Reclamation will implement a dust control program to limit fugitive dust and particulate matter emissions. The dust control program will include 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 will be covered or will 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 will be conducted in phases to reduce the amount of bare soil exposed at any one time. Mulching with weed-free materials will be used to minimize soil erosion, as described in section 4.3, Geology, Fluvial Geomorphology, and Soils, and section 4.5, Water Quality. ▪ Watering (using equipment and/or manually) will 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 will be swept (with water sweepers), as required by Reclamation. ▪ Paved roads will be swept (with water sweepers) if visible soil material is carried onto adjacent private and public roads, as required by Reclamation. ▪ All ground-disturbing activities with the potential to

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	generate dust will be suspended when winds exceed 20 mph, as directed by the NCUAQMD. ▪ Reclamation or its contractor will 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.	generate dust will be suspended when winds exceed 20 mph, as directed by the NCUAQMD. ▪ Reclamation or its contractor will 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.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.11-2: Construction activities associated with the project could result in an increase in construction vehicle exhaust emissions.		
Mitigation Measures	**2a:** Reclamation will comply with NCUAQMD Rule 104 (3.0) Particulate Matter. This compliance could occur by using portable internal combustion engines registered and certified under the state portable equipment regulation (Health & Safety Code 41750 through 41755).	**2a:** Reclamation will comply with NCUAQMD Rule 104 (3.0) Particulate Matter. This compliance could occur by using portable internal combustion engines registered and certified under the state portable equipment regulation (Health & Safety Code 41750 through 41755).
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.11-3: Construction activities associated with the project and removal of vegetation could result in vegetative materials that managers will decide to burn.		
Mitigation Measures	**3a:** Vegetative piles to be burned 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 will include but not be limited to the following: ▪ Ensure that burning occurs only on approved burn days as defined by the NCUAQMD (determined by calling 1-866-BURN-DAY).	**3a:** Vegetative piles to be burned 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 will include but not be limited to the following: ▪ Ensure that burning occurs only on approved burn days as defined by the NCUAQMD (determined by calling 1-866-BURN-DAY).

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	▪ Burning will only occur during suitable conditions to ensure control of ignited fires. For instance, water to wet the litter and duff layer and penetrate the mineral soil layer to 1/4 inch or more will be present, wind speeds will be low (<10 mph), and temperature will be low (<80 ºF). ▪ Piles will 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 will be covered and the plastic anchored to preserve a dry ignition point. Dry fuel conditions will minimize smoke emissions. ▪ Slash piles will not be constructed on logs, stumps, or 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:** Reclamation will notify the public each day that burning is to occur. Signs or personnel will notify residents and traffic on nearby access routes.	▪ Burning will only occur during suitable conditions to ensure control of ignited fires. For instance, water to wet the litter and duff layer and penetrate the mineral soil layer to 1/4 inch or more will be present, wind speeds will be low (<10 mph), and temperature will be low (<80 ºF). ▪ Piles will 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 will be covered and the plastic anchored to preserve a dry ignition point. Dry fuel conditions will minimize smoke emissions. ▪ Slash piles will not be constructed on logs, stumps, or 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:** Reclamation will notify the public each day that burning is to occur. Signs or personnel will notify residents and traffic on nearby access routes.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.11-4: Construction and transportation activities associated with the project could result in an increase of greenhouse gas emissions and effects on climate change.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Impact 4.11-5: Construction activities would generate short-term and localized fugitive dust, gas, and diesel emissions and smoke that could affect adjacent residences and schools.		
Mitigation Measures	**5a:** Construction activity occurring within 300 feet of the Lewiston or Douglas City elementary schools will be limited to the period when school is not in session. **5b:** Construction activity occurring within 300 feet of residences will be limited to Monday through Saturday, from the hours of 9 a.m. to 5 p.m. **5c:** Reclamation will notify residences within 300 feet of Remaining Phase 1 and Phase 2 and project activity and the Lewiston, Douglas City, and Junction City elementary schools will be notified of construction activity located near the schools prior to site construction activities. **5d:** Reclamation will ensure that a notice is posted at/adjacent to the rehabilitation sites, which contains a phone number for the public to contact for concerns related to air quality.	**5a:** Construction activity occurring within 300 feet of the Lewiston or Douglas City elementary schools will be limited to the period when school is not in session. **5b:** Construction activity occurring within 300 feet of residences will be limited to Monday through Saturday, from the hours of 9 a.m. to 5 p.m. **5c:** Reclamation will notify residences within 300 feet of Remaining Phase 1 and Phase 2 and project activity and the Lewiston, Douglas City, and Junction City elementary schools will be notified of construction activity located near the schools prior to site construction activities. **5d:** Reclamation will ensure that a notice is posted at/adjacent to the rehabilitation sites, which contains a phone number for the public to contact for concerns related to air quality.
Level of Significance after Mitigation	Less than significant	Less than significant
4.12 Aesthetics		
Impact 4.12-1: Implementation of the project could result in the degradation and/or obstruction of a scenic view from key observation areas.		
Mitigation Measures	In order to minimize impacts to visual resources resulting from the removal of vegetation in the project area, mitigation measures 4.7-1a through 1c, as described in section 4.7 (Vegetation, Wildlife, and Wetlands), will be implemented where applicable for either alternative. Visual impacts related to water quality (e.g., the potential for increased turbidity to adversely impact the aesthetic quality of the river) will be mitigated through the implementation of mitigation measures 4.8-3a through 3f,	In order to minimize impacts to visual resources resulting from the removal of vegetation in the project area, mitigation measures 4.7-1a through 1c, as described in section 4.7 (Vegetation, Wildlife, and Wetlands), will be implemented where applicable for either alternative. Visual impacts related to water quality (e.g., the potential for increased turbidity to adversely impact the aesthetic quality of the river) will be mitigated through the implementation of mitigation measures 4.8-3a through 3f,

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
	as described in section 4.8 (Recreation). These measures will be implemented where applicable for either alternative.	as described in section 4.8 (Recreation). These measures will be implemented where applicable for either alternative.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.12-2: Implementation of the project could substantially change the character of, or be disharmonious with, existing land uses and aesthetic features.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.14-3: The project may be inconsistent with the federal or state Wild and Scenic River Acts or Scenic Byway requirements.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.12-4: The project could generate increased daytime glare and/or nighttime lighting.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
4.13 Hazardous Materials		
Impact 4.13-1: Implementation of the project may increase the potential for release of, or exposure to, potentially hazardous materials that could pose a public health or safety hazard.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.13-2: Construction activities associated with the project may interfere with emergency response/evacuation plans by temporarily slowing traffic flow.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.13-3: Implementation of the project may contribute to area wildland fire potential and catastrophic fire behavior in the project area.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.13-4: Implementation of the project may contribute to an increased risk of landslide and flooding.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
4.14 Noise		
Impact 4.14-1: Construction activities associated with the project would result in noise impacts to nearby sensitive receptors.		
Mitigation Measures	**1a:** Construction activities near residential areas would be scheduled between 7:00 a.m. and 7:00 p.m., Monday through Saturday. No construction activities will be scheduled for Sundays or other hours and days established by the local jurisdiction (i.e., Trinity County). The contractor may submit a request for variances in construction activity hours, as needed. **1b:** Reclamation will require that all construction equipment be equipped with manufacturer's specified noise muffling devices. **1c:** Reclamation will require placement of all stationary noise-generating equipment as far away as feasibly possible from sensitive noise receptors or in an orientation minimizing noise impacts (e.g., behind existing barriers, storage piles, unused equipment).	**1a:** Construction activities near residential areas would be scheduled between 7:00 a.m. and 7:00 p.m., Monday through Saturday. No construction activities will be scheduled for Sundays or other hours and days established by the local jurisdiction (i.e., Trinity County). The contractor may submit a request for variances in construction activity hours, as needed. **1b:** Reclamation will require that all construction equipment be equipped with manufacturer's specified noise muffling devices. **1c:** Reclamation will require placement of all stationary noise-generating equipment as far away as feasibly possible from sensitive noise receptors or in an orientation minimizing noise impacts (e.g., behind existing barriers, storage piles, unused equipment).
Level of Significance after Mitigation	Less than significant	Less than significant
4.15 Public Services and Utilities/Energy		
Impact 4.15-1: Implementation of the project could disrupt existing electrical and phone service during construction activities.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Impact 4.15-2: Construction of the project could result in the generation of increased solid waste.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.15-3: Implementation of the project could result in disruption to emergency services, school bus routes, or student travel routes during construction activities.		
Mitigation Measures	**3a:** Reclamation will require that staging and construction work, including temporary road or bridge closures occurs in a manner that allows for access by emergency service providers. **3b:** Reclamation will provide 72-hour notice to the local emergency providers and affected users prior to the start of temporary closures. **3c:** Reclamation will coordinate road closures occurring during the school year (mid-August through mid-June) with the appropriate school districts to avoid disruption of school attendance and student access to bus service.	**3a:** Reclamation will require that staging and construction work, including temporary road or bridge closures occurs in a manner that allows for access by emergency service providers. **3b:** Reclamation will provide 72-hour notice to the local emergency providers and affected users prior to the start of temporary closures. **3c:** Reclamation will coordinate road closures occurring during the school year (mid-August through mid-June) with the appropriate school districts to avoid disruption of school attendance and student access to bus service.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.15-4: Construction of the proposed project could result in a substantial use of nonrenewable energy resources.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
4.16 Transportation/Traffic Circulation		
Impact 4.16-1: Construction activities would reduce/close existing traffic lanes.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 4.16-2: Construction activities would generate short-term increases in vehicle trips.		
Mitigation Measures	**2a** Reclamation will post signs during gravel haul activities notifying travelers of trucks entering the roadway. Reclamation will ensure that the gravel trucks maintain a speed limit of 15 mph on residential roads and private roads and operate only between the hours of 7 a.m. and 7 p.m., Monday through Saturday.	**2a** Reclamation will post signs during gravel haul activities notifying travelers of trucks entering the roadway. Reclamation will ensure that the gravel trucks maintain a speed limit of 15 mph on residential roads and private roads and operate only between the hours of 7 a.m. and 7 p.m., Monday through Saturday.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.16-3: Implementation of the project would obstruct access to adjacent land uses.		
Mitigation Measures	**3a** Reclamation will maintain access throughout the construction period for all private residences adjacent to the project boundary and access roads adjacent to the Trinity River. **3b** During the construction phase of the project, Reclamation will limit the amount of daily construction equipment traffic by staging construction equipment and vehicles within the project boundary throughout the work period.	**3a** Reclamation will maintain access throughout the construction period for all private residences adjacent to the project boundary and access roads adjacent to the Trinity River. **3b** During the construction phase of the project, Reclamation will limit the amount of daily construction equipment traffic by staging construction equipment and vehicles within the project boundary throughout the work period.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Impact 4.16-4: Construction activities would increase wear and tear on local roadways.		
Mitigation Measures	**4a** Reclamation will perform a pre-construction survey of local federal, state, and private roads to determine the existing roadway conditions of the construction access routes, and will consult with the relevant agencies/private parties about road conditions prior to construction activity and post construction activity. An agreement would be entered into prior to construction that would detail the pre-construction conditions and post-construction requirements for potential roadway rehabilitation.	**4a** Reclamation will perform a pre-construction survey of local federal, state, and private roads to determine the existing roadway conditions of the construction access routes, and will consult with the relevant agencies/private parties about road conditions prior to construction activity and post construction activity. An agreement would be entered into prior to construction that would detail the pre-construction conditions and post-construction requirements for potential roadway rehabilitation.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.16-5: Construction activities could pose a safety hazard to motorists, bicyclists, pedestrians, and equestrians.		
Mitigation Measures	**5a:** Reclamation will prepare and implement a traffic control plan that would include provision and maintenance of temporary access through the construction zone, reduction in speed limits though 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 bicyclists, pedestrians, and equestrians from construction activities.	**5a:** Reclamation will prepare and implement a traffic control plan that would include provision and maintenance of temporary access through the construction zone, reduction in speed limits though 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 bicyclists, pedestrians, and equestrians from construction activities.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 4.16-6: Construction activities could affect the form or function of bridges under the jurisdiction of Caltrans, Trinity County, or private parties.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.

Table ES-1. Summary of Impacts and Mitigation Measures for the Remaining Phase 1 and Phase 2 Sites

	Proposed Action	Alternative 1
Level of Significance after Mitigation	N/A	N/A

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
7.2 Land Use		
Impact 7.2-1: Implementation of the project could disrupt existing land uses adjacent to the project site.		
Mitigation Measures	Since no significant impact was identified, no mitigation is required.	Since no significant impact was identified, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.2-2: Implementation of the project could be inconsistent with the goals, policies, and objectives of the BLM RMP, the USFS LRMP, the DWR Hamilton Ranch Management Plant, the Trinity County General Plan, or other local community plans, policies, and ordinances		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.2-3: Implementation of the project could affect the availability of a locally important mineral resource recovery site.		
Mitigation Measures	**3a** Reclamation will provide notice of the project to landowners within the Remaining Phase 1 and Phase 2 sites and to individuals with mining claims within the project sites. Notice will be given prior to project implementation and will include a schedule of river access closures.	**3a** Reclamation will provide notice of the project to landowners within the Remaining Phase 1 and Phase 2 sites and to individuals with mining claims within the project sites. Notice will be given prior to project implementation and will include a schedule of river access closures.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
7.3 Geology, Fluvial Geomorphology, and Soils		
Impact 7.3-1: Implementation of the project could result in the exposure of structures and people to geologic hazards, including ground shaking and liquefaction.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.3-2: Construction activities associated with the project could result in increased erosion and short-term sedimentation of the Trinity River.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.3-2 apply (section 4.3.2). No additional mitigation measures are required.	Mitigation measures detailed under the Master EIR Impact 4.3-2 apply (section 4.3.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.3-3: Implementation of the project would interfere with existing, proposed, or potential development of mineral resources.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.3-3 apply (section 4.3.2). No additional mitigation measures are required.	Mitigation measures detailed under the Master EIR Impact 4.3-3 apply (section 4.3.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
7.4 Water Resources		
Impact 7.4-1: Implementation of the proposed project could result in a temporary or permanent increase in the BFE.		
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Impact 7.4-2: Implementation of the project could result in a permanent decline in groundwater elevations or permanent changes in groundwater quality.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.4-3: Implementation of the project would expose people or structures to a significant risk of injury, death, or loss involving flooding or erosional processes.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
7.5 Water Quality		
Impact 7.5-1: Construction of the project could result in short-term, temporary increases in turbidity and total suspended solids levels during construction.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.5-1 apply (section 4.5.2). No additional mitigation measures are required.	Mitigation measures detailed under the Master EIR Impact 4.5-1 apply (section 4.5.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.5-2: Construction of the project could result in short-term temporary increases in turbidity and total suspended solids levels following construction.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.5-2 apply (section 4.5.2). No additional mitigation measures are required.	Mitigation measures detailed under the Master EIR Impact 4.5-2 apply (section 4.5.2). No additional mitigation measures are required.

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.5-3: Construction of the project could cause contamination of the Trinity River from hazardous materials spills.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.5-3 apply (section 4.5.2). No additional mitigation measures are required.	Mitigation measures detailed under the Master EIR Impact 4.5-3 apply (section 4.5.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.5-4: Construction of the project could result in increased stormwater runoff and subsequent potential for erosion		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.5-5: Construction and maintenance of the project could result in the degradation of Trinity River beneficial uses identified in the Basin Plan.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.5-5 apply (section 4.5.2). No additional mitigation measures are required.	Mitigation measures detailed under the Master EIR Impact 4.5-5 apply (section 4.5.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
7.6 Fishery Resources		
Impact 7.6-1: Implementation of the project could result in effects on potential spawning and rearing habitat for anadromous fishes, including federally and state-listed coho salmon.		
Mitigation Measures	Mitigation measures detailed under Impact 4.6-1 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.6-1 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.6-2: Implementation of the project could result in increased erosion and sedimentation levels that could adversely affect fishes, including federally and state-listed coho salmon.		
Mitigation Measures	Mitigation measures detailed under Impact 4.6-2 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.6-2 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.6-3: Construction activities associated with the project could potentially result in the accidental spill of hazardous materials that could adversely affect fishes, including federally and state-listed coho salmon.		
Mitigation Measures	Mitigation measures detailed under Impact 4.6-3 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.6-3 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.6-4: Construction activities associated with the project could result in the mortality of rearing fishes, including federally and state-listed coho salmon.		
Mitigation Measures	Mitigation measures detailed under Impact 4.6-4 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.6-4 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.6-5: Implementation of the project would result in the permanent and temporary loss of SRA habitat for anadromous salmonids.		
Mitigation Measures	Mitigation measures detailed under Impact 4.6-5 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.6-5 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.6-6: Implementation of the project would result in fish passage being temporarily impaired during the in-stream construction phase.		
Mitigation Measures	Mitigation measures detailed under Impact 4.6-6 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.6-6 in the Master EIR apply (section 4.6.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
7.7 Vegetation, Wildlife, and Wetlands		
Impact 7.7-1: Construction activities associated with the project could result in the loss of jurisdictional waters including wetlands.		
Mitigation Measures	Mitigation measures detailed under Impact 4.7-1 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.7-1 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.7-2: Implementation of the project would result in the loss of upland plant communities.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.7-3: Construction of the project could result in the loss of individuals of a special-status plant species.		
Mitigation Measures	Mitigation measures detailed under Impact 4.7-3 in the Master EIR apply (section 4.7.2). Mitigation measure 4.7-3a shall apply only to those portions of the sites not	Mitigation measures detailed under Impact 4.7-3 in the Master EIR apply (section 4.7.2). Mitigation measure 4.7-3a shall apply only to those portions of the sites not

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
	previously surveyed. No additional mitigation measures are required.	previously surveyed. No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.7-4: Construction activities associated with the project could result in impacts to the state-listed little willow flycatcher.		
Mitigation Measures	Mitigation measures detailed under Impact 4.7-4 in the Master EIR apply are (section 4.7.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.7-4 in the Master EIR apply are (section 4.7.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.7-5: Construction activities associated with the project could result in impacts to foothill yellow-legged frogs.		
Mitigation Measures	Mitigation measures detailed under Impact 4.7-5 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.7-5 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.7-6: Construction activities associated with the project could result in impacts to western pond turtles.		
Mitigation Measures	Mitigation measures detailed under Impact 4.7-6 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.7-6 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.7-7: Construction activities associated with the project could result in impacts to nesting Vaux's swifts, yellow warblers, and yellow-breasted chats.		
Mitigation Measures	Mitigation measures detailed under Impact 4.7-7 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.7-7 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.7-8: Construction activities associated with the project could result in impacts to nesting bald eagles and northern goshawks.		
Mitigation Measures	Mitigation measures detailed under Impact 4.7-8 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.7-8 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.7-9: Construction activities associated with the project could result in impacts to special-status bats and the ring-tailed cat.		
Mitigation Measures	Mitigation measures detailed under Impact 4.7-9 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.7-9 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.7-10: Construction activities associated with the project could result in the temporary loss of non-breeding habitat for several special-status birds.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.7-11: Construction activities associated with the project could result in impacts to BLM and USFS sensitive species.		
Mitigation Measures	Mitigation measures detailed under Impact 4.7-11 in the Master EIR for special-status species apply (section 4.7.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.7-11 in the Master EIR for special-status species apply (section 4.7.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Impact 7.7-12: Construction activities associated with the project could restrict terrestrial wildlife movement through the project area.		
Mitigation Measures	Since no significant impact was identified for these alternatives, no mitigation is required.	Since no significant impact was identified for these alternatives, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.7-13: Implementation of the project could result in the spread of non-native and invasive plant species.		
Mitigation Measures	Mitigation measures detailed under Impact 4.7-13 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.7-13 in the Master EIR apply (section 4.7.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
4.8 Recreation		
Impact 7.8-1: Construction associated with the project could disrupt recreation activities, such as boating, fishing, and swimming, in the Trinity River.		
Mitigation Measures	Mitigation measures detailed under Impact 4.8-1 in the Master EIR apply (section 4.8.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.8-1 in the Master EIR apply (section 4.8.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.8-2: Construction of the project could result in an increased safety risk to recreational users or resource damage to lands within the project boundaries.		
Mitigation Measures	Mitigation measures detailed under Impact 4.8-2 in the Master EIR apply (section 4.8.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.8-2 in the Master EIR apply (section 4.8.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Impact 7.8-3: Construction activities associated with the project could lower the river's aesthetic values for recreationists by increasing its turbidity.		
Mitigation Measures	Mitigation measures detailed under Impact 4.8-3 in the Master EIR apply (section 4.8.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.8-3 in the Master EIR apply (section 4.8.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.8-4: Implementation of the project could affect Wild and Scenic River values.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
7.9 Socioeconomic, Population, and Housing		
Impact 7.9-1: Construction of the project would provide temporary employment opportunities for construction workers in Trinity County.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	Beneficial	Beneficial
Impact 7.9-2: Implementation of the project could result in the disruption or displacement of local businesses.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Impact 7.9-3: Implementation of the project would result in an increased demand for housing during construction.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.9-4: Implementation of the project would result in concentrated population growth.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
7.10 Cultural Resources		
Impact 7.10-1: Implementation of the proposed project could cause a substantial adverse change in the significance of a known cultural resource.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.10-2: Implementation of the proposed project could potentially result in disturbance of undiscovered prehistoric or historic resources.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.10-2 apply (section 4.10.2). No additional mitigation measures are required.	Mitigation measures detailed under the Master EIR Impact 4.10-2 apply (section 4.10.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
	7.11 Air Quality	
Impact 7.11-1: Construction activities associated with the project could result in an increase in fugitive dust and associated particulate matter (PM_{10} and $PM_{2.5}$) levels.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.11-1 apply (section 4.11.2). No additional mitigation measures are required.	▪ Mitigation measures detailed under the Master EIR Impact 4.11-1 apply (section 4.11.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.11-2: Construction activities associated with the project could result in an increase in construction vehicle exhaust emissions.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.11-2 apply (section 4.11.2). No additional mitigation measures are required.	Mitigation measures detailed under the Master EIR Impact 4.11-2 apply (section 4.11.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.11-3: Construction activities associated with the project and removal of vegetation could result in vegetative materials that managers will decide to burn.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.11-3 apply (section 4.11.2). No additional mitigation measures are required.	Mitigation measures detailed under the Master EIR Impact 4.11-3 apply (section 4.11.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.11-4: Construction and transportation activities associated with the project could result in an increase of greenhouse gas emissions and effects on climate change.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.11-5: Construction activities would generate short-term and localized fugitive dust, gas, and diesel emissions and smoke that could affect adjacent residences and schools.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.11-5 apply (section 4.11.2). No additional mitigation measures are required.	Mitigation measures detailed under the Master EIR Impact 4.11-5 apply (section 4.11.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
7.12 Aesthetics		
Impact 7.12-1: Implementation of the project could result in the degradation and/or obstruction of a scenic view from key observation areas.		
Mitigation Measures	Mitigation measures detailed under the Master EIR Impact 4.12-1 apply (section 4.12.2). No additional mitigation measures are required.	Mitigation measures detailed under the Master EIR Impact 4.12-1 apply (section 4.12.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.12-2: Implementation of the project could substantially change the character of, or be disharmonious with, existing land uses and aesthetic features.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.14-3: The project may be inconsistent with the federal or state Wild and Scenic River Acts or Scenic Byway requirements.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Level of Significance after Mitigation	N/A	N/A
Impact 7.12-4: The project could generate increased daytime glare and/or nighttime lighting.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
7.13 Hazardous Materials		
Impact 7.13-1: Implementation of the project may increase the potential for release of, or exposure to, potentially hazardous materials that could pose a public health or safety hazard.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.13-2: Construction activities associated with the project may interfere with emergency response/evacuation plans by temporarily slowing traffic flow.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.13-3: Implementation of the project may contribute to area wildland fire potential and catastrophic fire behavior in the project area.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Impact 7.13-4: Implementation of the project may contribute to an increased risk of landslide and flooding.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	Less than significant	Less than significant
7.14 Noise		
Impact 7.14-1: Construction activities associated with the project would result in noise impacts to nearby sensitive receptors.		
Mitigation Measures	Mitigation measures detailed under Impact 4.14-1 in the Master EIR apply (section 4.14.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.14-1 in the Master EIR apply (section 4.14.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
7.15 Public Services and Utilities/Energy		
Impact 7.15-1: Implementation of the project could disrupt existing electrical and phone service during construction activities.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.15-2: Construction of the project could result in the generation of increased solid waste.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Impact 7.15-3: Implementation of the project could result in disruption to emergency services, school bus routes, or student travel routes during construction activities.		
Mitigation Measures	Mitigation measures detailed under Impact 4.15-3 in the Master EIR apply (section 4.15.2). No additional mitigation measures are required.	Mitigation measures detailed under Impact 4.15-3 in the Master EIR apply (section 4.15.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.15-4: Construction of the proposed project could result in a substantial use of nonrenewable energy resources.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
7.16 Transportation/Traffic Circulation		
Impact 7.16-1: Construction activities would reduce/close existing traffic lanes.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.16-2: Construction activities would generate short-term increases in vehicle trips.		
Mitigation Measures	The mitigation measure detailed under Impact 4.16-2 in the Master EIR applies (section 4.16.2). No additional mitigation measures are required.	The mitigation measure detailed under Impact 4.16-2 in the Master EIR applies (section 4.16.2). No additional mitigation measures are required.
Level of Significance after Mitigation	Less than significant	Less than significant

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
Impact 7.16-3: Implementation of the project would obstruct access to adjacent land uses.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
Impact 7.16-4: Construction activities would increase wear and tear on local roadways.		
Mitigation Measures	The mitigation measure detailed under Impact 4.16-4 in the Master EIR applies (section 4.14.2). No additional mitigation is required.	The mitigation measure detailed under Impact 4.16-4 in the Master EIR applies (section 4.14.2). No additional mitigation is required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.16-5: Construction activities could pose a safety hazard to motorists, bicyclists, pedestrians, and equestrians.		
Mitigation Measures	The mitigation measure detailed under Impact 4.16-5 in the Master EIR applies (section 4.14.2). No additional mitigation is required.	The mitigation measure detailed under Impact 4.16-5 in the Master EIR applies (section 4.14.2). No additional mitigation is required.
Level of Significance after Mitigation	Less than significant	Less than significant
Impact 7.16-6: Construction activities could affect the form or function of bridges under the jurisdiction of Caltrans, Trinity County, or private parties.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A

Table ES-2. Summary of Impacts and Mitigation Measures Remaining Phase 1 Sites

	Proposed Action	Alternative 1
7.17 Tribal Trust		
Impact 7.17-1: Implementation of the project may reduce the quantity or quality of Tribal trust assets.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A
7.18 Environmental Justice		
Impact 7.18-1: Implementation of the project could adversely affect a minority or low-income population and/or community.		
Mitigation Measures	Since no significant impact was identified for this alternative, no mitigation is required.	Since no significant impact was identified for this alternative, no mitigation is required.
Level of Significance after Mitigation	N/A	N/A

Draft Finding of No Significant Impact

U.S. BUREAU OF RECLAMATION
MID-PACIFIC REGION
NORTHERN CALIFORNIA AREA OFFICE
TRINITY RIVER RESTORATION PROGRAM
WEAVERVILLE, CALIFORNIA

DRAFT
FINDING OF NO SIGNIFICANT IMPACT

In accordance with the National Environmental Policy Act of 1969 (NEPA), as amended, and with the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508), the Trinity River Restoration Program (TRRP) office of the U.S. Bureau of Reclamation (Reclamation) has found that the Proposed Action, supported by the *Channel Rehabilitation and Sediment Management Activities for Remaining Phase 1 and Phase 2 Sites, Part 1: Final Master Environmental Impact Repor*t and *Part 2: Environmental Assessment/Final Environmental Impact Report* (Final Master EIR – EA/Final EIR), will result in no significant impacts on the human environment considering the context and intensity of impacts.

Part 1 of the supporting documentation, referred to as a Master Environmental Impact Report (Master EIR), is a programmatic document prepared in part to meet the requirements of the California Environmental Quality Act (CEQA). The state Master EIR is analogous to the federal Trinity River Mainstem Fisheries Restoration Final Environmental Impact Statement (FEIS) programmatic document prepared in 2000. Much of the design and analysis for the Proposed Action is discussed in the Draft Master EIR, which, as noted above, is Part 1 of the combined Draft Master EIR – EA/Draft EIR document. Part 2 of this document is an Environmental Assessment (EA) that has been prepared to support the authorization of the Proposed Action at the Remaining Phase 1 sites. Preparation of an Environmental Impact Statement to further analyze possible impacts is not required pursuant to Section 102(2) of the National Environmental Policy Act of 1969 and 40 CFR 1508.27.

Reference: Environmental Assessment for Remaining Phase 1 Channel Rehabilitation and Sediment Management Activities: Trinity River Mile 92.2 to 109.7

Environmental review by:

_____ _____

F. Brandt Gutermuth — Date
Environmental Specialist, Trinity River Restoration Program

Approved by:

_____ _____

Mike A. Hamman — Date
Executive Director, Trinity River Restoration Program — FONSI No.TR-EA 0109

FINDING OF NO SIGNIFICANT IMPACT

Remaining Phase 1 Channel Rehabilitation and Sediment Management Activities: Trinity River Mile 92.2 to 109.7

LEAD AGENCY

U.S. Bureau of Reclamation
Trinity River Restoration Program
P.O. Box 1300
1313 South Main Street
Weaverville, CA 96093
Phone: 530-623-1800
Fax: 530-623-5944
Email: mhamman@mp.usbr.gov

BACKGROUND AND NEED

Completion of the Trinity and Lewiston Dams in 1964 blocked migratory fish access to habitat upstream of Lewiston Dam, eliminated coarse 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 Lake to the Sacramento River basin altered the hydrologic regime of the Trinity River, diminishing annual flows by up to 90 percent. Consequences of diminished flows included encroachment of riparian vegetation, establishment of riparian berms[1], and fossilization of point bars at various locations along the river, as far downstream as the North Fork Trinity River. These geomorphic changes resulted in a decrease in the diversity of species and age classes of riparian vegetation along the river, impaired floodplain access, and adversely affected fish habitat.

In 1994, the U.S. Fish and Wildlife Service (USFWS) as the NEPA lead agency began the NEPA process for developing the Trinity River Mainstem Fishery Restoration Environmental Impact Statement (EIS). The 2000 Record of Decision (ROD) for the Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) directed Department of the Interior agencies to implement the Flow Evaluation Alternative as the Preferred Alternative identified in the FEIS/EIR to restore the Trinity River's anadromous fishery. The ROD directed the U.S. Bureau of Reclamation (Reclamation), through the Trinity River Restoration Program (TRRP), to restore the Trinity River fishery by implementing a combination of higher releases from Lewiston Dam (up to 11,000 cubic feet per second [cfs]), floodplain infrastructure improvements, channel rehabilitation projects, fine and coarse sediment management, watershed restoration, and an Adaptive Environmental Assessment and Management Program. The FEIS functions as project-level guidance for policy decisions associated with

[1] The condition is not as extensive as early studies indicated (e.g., the Trinity River Flow Evaluation Final Report 1999).

managing Trinity River flows and as a programmatic NEPA document providing first-tier support of related mechanical restoration and sediment management actions.

The TRRP, acting under the guidance of the Trinity Management Council (TMC), provides overall program direction to restore, enhance, and conserve the natural production of anadromous fisheries, native plant communities, and associated wildlife resources of the Trinity River basin. The TRRP provides technical and administrative support to the TMC related to both scientific evaluation of restoration progress and management implementation. The TRRP is responsible for the overall implementation of the ROD. The Remaining Phase 1 Channel Rehabilitation and Sediment Management Activities: Trinity River Mile 92.2 to 109.7 (project) is part of the mechanical channel rehabilitation and sediment management components of the ROD. The project is located between Lewiston Dam and the North Fork of the Trinity River and is designed to create, restore, and enhance the full range of anadromous fish habitats in the Trinity River by restoring fluvial processes. Activities to restore fluvial processes include rescaling the river channel and floodplain and managing coarse sediment at the Remaining Phase 1 sites, augmenting gravel at high-flow placement areas, and controlling fine sediment at the Hamilton Ponds. Specifically, this project would selectively remove fossilized berms and encroaching riparian vegetation; revegetate and/or reestablish complex and diverse assemblages of native riparian vegetation; and recreate alternate point bars and complex fish habitat similar in form to those that existed prior to the construction of Lewiston and Trinity dams. These rehabilitation activities are expected to increase habitat suitability and availability for salmonids and other native fish and wildlife species during a wide range of river flow conditions.

Implementing channel rehabilitation work at the remaining six Phase 1 sites would continue implementation of the ROD throughout the reach. Implementation of the Proposed Action (Proposed Project) at the Sawmill site, expected in 2009, would be the fifth in a sequence of channel rehabilitation projects (Hocker Flat constructed in 2005, the Canyon Creek Suite in 2006, Indian Creek in 2007, and Lewiston-Dark Gulch in 2008) to implement the ROD's mechanical channel rehabilitation components, and to rework the Trinity River floodplain based on pre-dam channel morphology characteristics. In addition to ongoing annual sediment management at the Hamilton Ponds and coarse sediment augmentation during high flows, activities at the Sawmill site constitute the third TRRP channel rehabilitation project to implement portions of the ROD's coarse sediment management activities. Gravel processing and augmentation activities initially occurred at the Indian Creek and Lewiston–Dark Gulch sites under both high and low flow conditions (e.g., in-channel gravel bar construction). The Proposed Action identified for the Remaining Phase 1 sites is intended to meet the overarching goals of the TRRP: to enhance river processes in order to increase channel complexity and fisheries habitat throughout the mainstem Trinity River downstream of Lewiston Dam. Implementation of the Proposed Action would contribute to the restoration of aquatic habitat in the mainstem Trinity River through the development of properly functioning channel conditions. Rehabilitation activities as described in the Draft Master EIR – EA/Draft EIR, combined with ROD flow releases, are expected to contribute to the restoration of the Trinity River mainstem fishery.

The EA/Final EIR for the project considered three alternatives: the No-Action Alternative, the Proposed Action, and Alternative 1. After inclusion of all mitigation measures (discussed in detail in Part 1 of the Draft Master EIR – EA/Draft EIR), no significant impacts were determined for the Proposed Action pursuant to NEPA or the California Environmental Quality Act (CEQA). Details concerning these alternatives and other alternatives considered but not carried forward for evaluation are included in Part 2 of *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites* (Draft Master EIR – EA/Draft EIR). The Proposed Action maximizes environmental benefits with less-than-significant environmental impacts and is preferred for implementation. The Proposed Action is described below.

The FEIS acknowledged that the various rehabilitation sites exhibit a variety of conditions that require site-specific designs. The FEIS 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 initiate development of a dynamic alluvial channel that will promote the formation and maintenance of an alternate bar channel in both treated and untreated areas.

An interdisciplinary team of the TRRP identified discrete activity areas within the boundaries of the six Remaining Phase 1 sites. Activity areas were identified based on the type of activity that would occur in a specific place and include in-channel, riverine, upland, construction staging, road, and temporary crossing areas. Remaining Phase 1 channel rehabilitation site locations and their associated number of discrete activity areas are as follows: Sawmill, 43; Upper Rush Creek, 31; Lowden Ranch, 24; Trinity House Gulch, 17; Steel Bridge Day Use, 11; and Reading Creek, 30. Access to these areas requires existing and new roads and low-flow crossings of the Trinity River in portions of the Remaining Phase 1 sites that would otherwise be inaccessible. The type, extent, and level of activity in each area may be different, depending on the alternative.

For each site, riverine activities are labeled with an R followed by the construction site number (e.g., R-1, R-2); upland activities are labeled with a U and followed by the construction site number (e.g., U-1, U-2); in-channel work areas (e.g., coarse sediment placement or grade control removal) are identified with an IC; and staging/use areas are characterized with a C. Temporary low-flow channel crossings are labeled with an X, and roads are identified as existing or new. In the Lewiston area, four site locations were defined as Sawmill (SM), Upper Rush Creek (URC), Lowden Ranch (LR) and Trinity House Gulch (THG). In the Douglas City area, two site locations were defined as Steel Bridge Road Day Use (SB) and Reading Creek (RC). The setting and additional details on these activity areas are provided in Chapters 2, 4, and 7 of the Draft Master EIR – EA/Draft EIR.

The TRRP has developed programmatic objectives for channel rehabilitation projects, which are described in Chapter 2 of the Draft Master EIR – EA/Draft EIR. The programmatic objectives were used to identify a number of specific activities that could be applied at each site location. Each activity area was established to meet a suite of specific objectives in conformance with the overall goals and objectives outlined for the TRRP. The activities included in the Proposed Action for the Remaining Phase 1 sites focus on modifying existing grade control features, reconnecting the river's floodplain with the river, establishing or expanding side-channel habitat, and enhancing the bed and banks of the Trinity River for

increased river function and aquatic habitat development. Removal of alluvial material at select locations will provide opportunities to enhance the development of alternate point bars and supplement coarse sediment. Ultimately, the goal of these channel rehabilitation efforts is to provide functional aquatic habitat for all life stages of anadromous salmonids under a range of flow conditions; to provide suitable salmonid rearing habitat, which is presently believed to be a limiting factor in the system; and to reestablish healthy alluvial river geomorphic processes, which will ultimately maintain high-quality salmonid habitat at a dynamic equilibrium.

The Proposed Action includes 15 rehabilitation activities. Each rehabilitation activity is identified with an alpha code for reference throughout the Draft Master EIR – EA/Draft EIR. The rehabilitation activities are shown in Table 1.

Table 1. Remaining Phase 1 Rehabilitation Activities

Label	Activity Type
A	Recontouring and vegetation removal
B	Constructed inundation surface (450 cfs*)
C	Constructed inundation surface (1,000 – 4,500 cfs)
D	Constructed inundation surface (6,000 cfs)
E	Low-flow side channel (300 cfs)
F	Medium-flow side channel (1000 cfs)
G	Alcove (450 cfs; 6,000 cfs)
H	Grade control removal
I	Sediment management (coarse and fine)
J	Placement of excavated materials
K	Staging/use areas (includes gravel processing and stockpiling)
L	Roads, existing
M	Roads, new
N	Temporary channel crossings (Trinity River and Tributaries)
O	Revegetation

Note: cfs = cubic feet per second.

Activities A–I would all occur within riverine areas included for rehabilitation activities as part of the Proposed Action. However, the type and degree of activity would differ slightly for each area along the Remaining Phase 1 reaches. Activities J and K would be associated with the transfer, placement, and stabilization of material excavated from the riverine areas. The location and extent of material stockpiled, transported, and placed would differ for each area. Other activities, including road creation, water crossings, and processing/transportation of alluvial materials, are designed to minimize impacts to the resources described in Chapters 4 and Chapter 7 of the Draft Master EIR – EA/Draft EIR, as revised in the Final Master EIR – EA/Final EIR. The inclusion of in-channel activities is intended to enhance the ability of the river to readjust to changes in the flow and sediment regime provided by the ROD. The Riparian Revegetation Management Plan, prepared in cooperation with the California Department of Fish and Game, U.S. Army Corps of Engineers (USACE), and the Regional Water Quality Control Board – North Coast Region (Regional Water Board), will be implemented to ensure that riparian habitat (e.g., riparian vegetation) is restored in a manner (species and size classes) that supports the TRRP object of

restoring the form and function of an alluvial river over time. Implementation of the Riparian Revegetation Management Plan will also ensure that the State of California's requirement of "no net-loss of riparian habitat" is met through a 1:1 replacement of affected riparian habitat over time. Project monitoring requirements will allow critical evaluation in order to adjust future rehabilitation plans to incorporate those practices that perform best in the field. A comprehensive discussion of these rehabilitation site activities is provided in Chapter 2 of the Draft Master EIR – EA/Draft EIR.

The Proposed Action meets the requirements of the Trinity River ROD, the Endangered Species Act (ESA), the Clean Water Act, NEPA, the Clean Air Act, the Wild and Scenic Rivers Act , the National Historic Preservation Act, and the Resource Management Plan for the Redding Field Office of the Bureau of Land Management as amended by the Northwest Forest Plan.

FINDINGS

The No-Action Alternative, Proposed Action, and Alternative 1 were evaluated in the EA with respect to their impacts in the following issue areas: land use; geomorphic environment; water resources; water quality; fishery resources; vegetation, wildlife, and wetlands; recreation; socioeconomics; tribal trust; cultural resources; air quality; environmental justice; aesthetics; hazards and hazardous materials; noise; public services and utilities/energy; and transportation/traffic circulation. Based on the following summary of the implementation effects of the Proposed Action (as discussed fully in the Master EIR – EA/EIR), implementation of the Proposed Action would result in no significant impacts to the quality of the human environment.

Land Use

The Proposed Action is located in Trinity County, California and would be consistent with Trinity County's General Plan and Zoning Ordinance, which provides development standards for land in Trinity County, including areas located within the Trinity River floodplain. Short-term land use impacts resulting from the Proposed Action would be minimal because of project design criteria that require that public and private access to the Trinity River, adjacent residents, and businesses be maintained. Additionally, project implementation would not prevent existing land uses from continuing or impede future land uses. Therefore, the Proposed Action would not have a significant impact on land use.

Geology, Fluvial Geomorphology, and Soils

Implementation of the Proposed Action is consistent with the 10 healthy river attributes described in the Trinity River Flow Evaluation Study that provide a basis for the TRRP efforts to restore and enhance native fish and wildlife populations. Project construction activities and disturbance would increase the potential for short-term wind and water erosion and could interfere with mineral resources. However, project implementation would include sediment and erosion control measures, and mitigation measures to reduce and avoid potential impacts on mineral resources. Therefore, the Proposed Action would not have significant impacts on geologic resources or processes.

Water Resources

Based on the USACE hydraulic model HEC-RAS, implementation of the Proposed Action, including excavation or placement of alluvial materials in the 100-year floodplain and low-flow channel, would not increase the base flood elevation of the Trinity River. Additionally, project implementation would not result in significant risk of injury, death or loss involving flooding or erosional processes. The proposed activities are expected to have minimal, if any, effects on groundwater elevations or groundwater quality. Therefore, the Proposed Action would not have a significant impact on water resources.

Water Quality

Implementation of the Proposed Action , including construction activities in and adjacent to the low-flow channel, could temporarily increase turbidity and total suspended solids in the water column. It could also result in a spill of hazardous materials (e.g., grease, solvents) into the Trinity River. Construction activities would be staged and timed to minimize potential water quality effects, and appropriate mitigation measures would be implemented to avoid and reduce water quality impacts. Therefore, the Proposed Action would not have a significant impact on water quality.

Fisheries Resources

To comply with Section 7 of the ESA, Reclamation initiated informal consultation with the National Marine Fisheries Service (NMFS) concerning project effects on the federally and state-listed (threatened) Southern Oregon/Northern California Coast (SONCC) evolutionarily significant unit (ESU) of coho salmon. NMFS affirmed that certain non-flow measures, including the mechanical rehabilitation and sediment management projects identified in the ROD, were considered in its 2000 Biological Opinion issued in response to the FEIS/EIR. In that Biological Opinion, NMFS identified implementation of mechanical rehabilitation projects as reasonable and prudent measures to minimize Trinity River Division effects on SONCC ESU coho salmon. Subsequent to the ROD, NMFS provided the TRRP with documentation necessary to ensure that the 2000 Biological Opinion did in fact consider the types of activities associated with the Proposed Action. Reclamation will continue to coordinate with NMFS as it implements the Terms and Conditions of the 2000 Biological Opinion.

Any temporary construction impacts on fish-rearing habitat are expected to be offset by permanent beneficial changes to physical rearing habitat associated with project implementation. Improved river access to the floodplain during flows in excess of summer base flows (450 cubic feet per second), is expected to increase the availability of the slow, shallow edge habitat preferred by juvenile salmonids. Collective improvements in fluvial channel dynamics contributed by the Proposed Action in conjunction with future channel rehabilitation projects throughout the Trinity River between Lewiston Dam and the North Fork Trinity River are ultimately expected to improve rearing habitat diversity for all anadromous salmonids. Because of the Proposed Action's limited construction near the water, inclusion of mitigation measures to protect fishes, and generally localized effects, no significant effects would occur to fisheries resources.

Vegetation, Wildlife, and Wetlands

Construction activities associated with the Proposed Action would result in a temporary loss of riparian vegetation, but the value provided by this vegetation would be offset by restoring floodplain function and riverine processes. Revegetation of alluvial features (i.e., floodplains) would increase structural and species diversity and would speed reestablishment of native riparian vegetation. Long-term changes in river inundation periods are expected to increase both seasonal and perennial riparian habitats.

Reclamation conducted informal consultation with the USFWS concerning effects to the ESA-listed northern spotted owl. Based on the consultation, the known lack of suitable habitat and spotted owl nests in the area (nest data provided by the STNF), and Trinity River bird distribution data provided by the Forest Service's Redwood Sciences Laboratory, Reclamation determined that a biological assessment was not required because the project would have no effect on the northern spotted owl or its critical habitat.

Specific design and contract criteria are included in the project description to ensure that project activities occur in a manner that addresses potential impacts to special-status species, including avian and amphibian species. These activities and prescriptive measures, combined with rapid riparian revegetation rates, ensure that the Proposed Action will not result in significant project impacts to vegetation, wildlife, and wetlands.

Recreation

The Trinity River was federally designated as a National Wild and Scenic River in 1981. Implementation of the Proposed Action would result in a long-term benefit to the form and function of the Trinity River, thereby enhancing the Outstandingly Remarkable Values for which it was designated as a Wild and Scenic River, including its anadromous fishery. Implementation of the project would alter the riverine environment; however, construction under the Proposed Action would not permanently affect the scenic or recreational values of the Trinity River for which it was designated. Although the Proposed Action could result in limited temporary interruptions of public access and use, river access would continue to be available at a number of temporary locations within the project boundaries and adjacent to the project sites. Because of the continued availability of river use and access, the generally localized effects, and inclusion of mitigation measures to protect recreationists, impacts on recreation resulting from project implementation would not be significant.

Socioeconomics, Population, and Housing

The Proposed Action could directly generate short-term income growth through the payment of wages and salaries, but would result in little increased long-term economic activity. A short-term increase in demand for housing in the general vicinity (i.e., Weaverville) could also occur as construction workers seek lodging during the construction period. However, because of the limited project size and duration, there would be no significant impact on socioeconomic conditions, population, or housing.

Tribal Trust

TRRP's overarching goals of restoring, enhancing, and conserving the natural production of anadromous fisheries, native plant communities, associated wildlife resources, and overall health of the Trinity River basin are consistent with federal Tribal Trust responsibilities. The primary TRRP goals originate partly from the federal government's trust responsibility to protect fishing rights for ceremonial, subsistence, and commercial purposes of the region's Indian tribes. Several short-term impacts that would affect Tribal Trust assets are considered acceptable provided that long-term fishery and healthy river goals are supported. These impacts are generally associated with construction activities, which would temporarily affect fish and wildlife resources, vegetation, and water quality in localized areas of the Remaining Phase 1 sites. Potential impacts on Tribal Trust assets would be avoided and minimized by project design criteria and mitigation measures provided to protect Tribal Trust assets. While some level of impact to fisheries and water quality cannot be avoided during construction activities, the impacts that would occur to these Tribal Trust assets would be kept at a less-than-significant level. Therefore, the Proposed Action would not have a significant impact on Tribal Trust assets.

Cultural Resources

Cultural resources identified within the Area of Potential Effect are primarily associated with dredger tailing piles at the Sawmill, Lowden Ranch, Trinity House Gulch, and Reading Creek sites. The types of dredger tailings identified include dragline dredge, ground sluice placer, bucket-line dredge, and placer. A hydraulic mining cut was identified at the Sawmill site, and a river crossing, known as "Lowden crossing," was identified near Lowden Ranch in Grass Valley. Reclamation archaeologists determined that one of the identified cultural resource sites (Reading Creek Ground Sluice Placer Tailings and Historic Artifacts) is eligible for listing on the National Register of Historic Places (NRHP). Therefore, the project was revised during the planning stages to avoid potentially significant features. If cultural materials or human remains are encountered during work for the project, the impacts would be negligible because construction would be halted and the proper agency contacted. Because of these pre-project cultural resource surveys, subsequent design changes to avoid potentially significant resources, and mitigation measures to cover potential finds during construction, project impacts to cultural resources during implementation of the Proposed Action would not be significant.

Air Quality

Construction associated with the Proposed Action requires the use of equipment that would temporarily contribute to air pollution in the Trinity River basin in the form of ozone precursors, particulate matter (PM_{10}), and greenhouse gas emissions. Because Reclamation would include provisions in construction contract documents that minimize construction-related impacts on air quality resulting from project activities, the Proposed Action would not result in a significant impact on air quality.

Environmental Justice

There is no evidence to suggest that the Proposed Action would cause a disproportionately high adverse human health or environmental effect on minority or low-income populations. The Proposed Action would not have a significant impact on environmental justice.

Aesthetics

Over the long-term, implementation of the Proposed Action is expected to complement the visual resources and aesthetic values of the project area by restoring the function and form typical of an alluvial river. Design of the Proposed Action incorporates the diversity of the landscape and vegetation types in the project vicinity into the character of the rehabilitated riverine and upland areas. Excavated material and disturbed dredger tailings piles would be placed in a manner that blends into the contours of the existing dredger tailings piles. Retention of existing topographic features would lessen the degree of visual impacts and improve the aesthetic quality of the affected reach of the Trinity River. Changes to the landscape will not be noticeable in the long term. Based on these findings, the Proposed Action would not have a significant impact on aesthetics.

Hazardous Materials

Implementation of the Proposed Action would potentially release hazardous materials through accidental spills that could pose a public hazard. However, Reclamation will ensure that the contractor follows Best Management Practices to prevent the release of hazardous materials into the environment (e.g., oils, gasoline) and to provide adequate response measures in case a spill does occur. These practices would ensure that implementation of the Proposed Action would not have a significant impact with respect to hazardous materials.

Noise

Construction and traffic associated with the Proposed Action would generate noise. To minimize potential noise impacts, construction activities would be scheduled between 7:00 a.m. and 7:00 p.m. Monday through Saturday. Additional time constraints may be imposed for activities occurring immediately adjacent to residences and schools. Gravel placement would use local topography to dampen/deflect/decrease the noise leaving the site. During working hours, Reclamation will ensure that the contractor will operate all equipment to minimize noise impacts to nearby sensitive receptors (residences, etc.) so that no significant project impacts from noise would occur.

Public Services and Utilities/Energy

Construction work and temporary road closures would be staged in a manner to allow for access by emergency service providers. Therefore, no significant effects to public services would result from implementation of the Proposed Action.

Transportation/Traffic Circulation

Implementation of the Proposed Action would minimize the use of heavy construction equipment to transport material to and from the project work site. Equipment would be staged on site during construction. Since local roads are built to service occasional heavy equipment traffic, no measurable road wear would result from ingress or egress of construction equipment or during hauling of restoration materials (e.g., gravel) to the sites. For safety reasons, Reclamation will ensure that the contractor will implement a traffic control plan to protect the public during construction. Implementation of these

planning measures will ensure that no significant effects to traffic circulation would result from project implementation.

SUMMARY

Implementation of the Proposed Action, including mitigation measures, would contribute to the long-term environmental quality and sustainability of the Trinity River ecosystem with no significant impacts to the environment.

FINDING OF NO SIGNIFICANT IMPACT IN ACCORDANCE WITH 40 CFR 1508.27

After considering the environmental effects described for the Proposed Action in the Draft Master EIR and EA specific to the Remaining Phase 1 sites, it has been determined that it will not have a significant effect on the quality of the human environment considering the context and intensity of impacts. Furthermore, it is determined that the Proposed Action is not a major federal action, individually or cumulatively, and will not significantly affect the quality of the environment. Therefore, an environmental impact statement is not needed. This determination is based on the Draft Master EIR – EA/Draft EIR and the context and intensity of the following factors (40 CFR 1508.27):

1) **There will be no significant effects, beneficial or adverse, resulting from implementation of this project.** The finding is not biased by the beneficial effects of the action. The construction of the Remaining Phase 1 rehabilitation sites along a 17.5-mile reach of the Trinity River is expected to provide localized improvements in aquatic and riparian habitats that currently exist at the sites. The sites will incrementally assist in meeting long-term needs to enhance fish habitat and provide properly functioning river conditions. Viewed within the context of a *healthy* Trinity River, and against implementing the larger river restoration program required under the ROD, this channel rehabilitation project will not result in any significant impacts.

2) **Public health and safety are not significantly affected by the project.** Due to the limited duration of the project and implementation of public safeguards, public safety will not be at risk. Standard Reclamation practices for notifying the public of heavy equipment activities during project implementation will be implemented.

3) **There will be no significant adverse effects on prime farmlands, park lands, floodplains, wetlands, historic or cultural resources, scenic rivers, ecologically critical areas, civil rights, women, or minority groups.** Although there will be no significant adverse effects in these areas, the project will result in a minor amount of disturbance to river attributes while enhancing the outstandingly remarkable value—the anadromous fishery—for which the river was designated in the Wild and Scenic system. Furthermore, this project is programmatically tiered to the Trinity River Mainstem Fishery Restoration Program EIS, which recommended implementation of the six components of the ROD. The Proposed Action, which involves implementation of a subset of channel rehabilitation and sediment management actions from the ROD, has no significant impacts within the context of the entire array of ROD restoration components.

4) **Based on public participation and the involvement of resource specialists, effects of the Proposed Action on the quality of the human environment are not expected to be highly controversial.** Previously, the types of activities associated with the Proposed Action have received general support by Trinity County and its citizenry. Controversy that existed has been resolved through the planning process; therefore, these effects are not determined to be highly controversial. With input from technical staff from the lead, cooperating, and responsible agencies, environmental, social, and economic issues have been addressed in the Draft Master EIR – EA/EIR so that this project should avoid major scientific controversy over environmental effects.

5) **There are no known effects on the human environment that are highly uncertain or involve unique or unknown risks.** The effects of the Proposed Action have been clearly evaluated in the Draft Master EIR – EA/Draft EIR. Furthermore, similar actions have been completed by the TRRP in the past with no unpredicted developments.

6) **These actions do not set a precedent for other projects that may be implemented to meet the goals and objectives of the Trinity River Restoration Program.** The Trinity River Mainstem Fishery Restoration EIS, the ROD, and the Trinity River Flow Evaluation Report all evaluated and recommended channel rehabilitation projects on the Trinity River below Lewiston Dam. The EIS constitutes the basis for tiering in this instance. The environmental effects of future projects will be analyzed based on need dictated by the ROD, but the need will be balanced by any new information collected during implementation of this project and other recently implemented projects.

7) **There are no known significant cumulative effects from this project and other projects implemented or planned on areas separated from the affected area of this project beyond those assessed.** While some short-term adverse direct and indirect effects may result from the project, these effects have been analyzed in the Draft Master EIR – EA/Draft EIR, and will not lead to significant cumulative effects. Potentially significant long-term project effects from implementation of the ROD were evaluated in the Trinity River Mainstem Fishery Restoration EIS. When considered in the context of cumulative watershed effects, the project is intended to improve the alluvial processes and function of the mainstem Trinity River and at the same time improve the ability of the Trinity River to mobilize and transport sediment. Cumulative short-term impacts such as soil disturbance and turbidity would occur in response to the project, but not to an extent that would cause significant impacts to downstream water quality.

8) **Based on surveys accomplished prior to this decision, this action will not adversely affect sites or structures eligible for the National Register of Historic Places, or cause loss or destruction of significant scientific, cultural, or historic resources**. Interdisciplinary teams and individual resource experts have visited the sites and provided recommendations to modify the location of one of the upland disposal areas to avoid a potentially significant cultural resource feature associated with the dredger tailings within the boundaries of the Remaining Phase 1 sites. These modifications would avoid the site that Reclamation determined is eligible for listing on the NRHP. Based on project design and measures described in the Draft Master EIR – EA/Draft EIR, the decision maker has

determined that the project would not result in the destruction of scientific, cultural, or historic resources.

9) **The project would not adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973**. A biological opinion addressing foreseeable TRRP activities (National Marine Fisheries Service 2000) was written in response to a biological assessment that reflected the findings in the Trinity River Mainstem Fishery Restoration EIS. The opinion was written because Trinity River coho salmon are federally listed as threatened. The opinion describes adverse effects that could result from the channel rehabilitation measures that are included in the preferred alternative described in the EIS. Such adverse effects were determined to be minor and short-lived, dwarfed by the long-term beneficial outcome from implementing the Proposed Action. The displacement of juvenile coho salmon "…is not expected to result in lethal take of these fish." (National Marine Fisheries Service 2000).

   The bald eagle has been removed from the Endangered Species list, and consultation is no longer required for this species. The project may affect but would not likely adversely affect the bald eagle because eagles are not known nor expected to nest within or near the project area. There is a potential to temporarily displace foraging eagles for short periods of time (at discrete activity areas) during a time of relatively low eagle foraging activity in the area. Other reaches of the Trinity River would remain undisturbed and available for foraging eagles. Fish, and thus foraging eagles, are expected to start reusing the area immediately following project implementation.

   Informal consultation with the USFWS concerning effects to the ESA-listed northern spotted owl was conducted by Reclamation. Based on this informal consultation, known lack of suitable habitat and spotted owl nests in the area (nest data provided by the U.S. Forest Service), and Trinity River bird distribution data provided by the Redwood Sciences Laboratory, Reclamation determined that a biological assessment was not required since the project would have no effect on the northern spotted owl or its critical habitat.

   No federally or state-listed threatened or endangered plant species occur within or adjacent to the site boundaries defined for the project.

10) **Implementation of the project does not threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment.** Implementation of the Proposed Action does not threaten violation of any laws. Its implementation meets requirements under the ROD, the ESA, the Clean Water Act, the Federal Land Protection and Management Act (FLPMA), NEPA, the Clean Air Act, the Wild and Scenic Rivers Act, the National Historic Preservation Act, and BLM's Resource Management Plan for the Redding Field Office.

    The project described in this finding is fully consistent with BLM's RMP, FLPMA, and CEQA. The following permits are required to authorize the project:

- Section 404, Clean Water Act, Nationwide Permit 27 (San Francisco District, U.S. Army Corps of Engineers),
- Section 401, Clean Water Act Water Quality Certification (Regional Water Quality Control Board – North Coast Region),
- Section 402, Clean Water Act National Pollutant Discharge Elimination System (NPDES) Stormwater Pollution Prevention Plan (Regional Water Quality Control Board – North Coast Region),
- Section 10, Endangered Species Act, Incidental Take Permit (National Marine Fisheries Service)
- Encroachment Permits (Trinity County),
- Floodplain Development Permit (Trinity County).

Findings Required by Other Laws and Regulations

This decision to implement the rehabilitation activities, including those specifically under the jurisdiction of BLM, is consistent with the intent of the RMP with respect to resource management conditions. The project is also consistent with the direction provided in the BLM's Trinity River Recreation Area Management Plan.

Implementation Date

The Proposed action will be implemented in phases beginning in summer 2009. It is expected that all Phase 1 projects will be completed by 2014.

Contact

For additional information concerning the overall decision to implement the Proposed Action, contact Brandt Gutermuth, Project Manager, Trinity River Restoration Program, P.O. Box 1300, and 1313 Main Street, Weaverville California, 96093.