

CANYON CREEK SUITE OF REHABILITATION SITES: TRINITY RIVER MILE 73 TO 78

FONSI - Environmental Assessment/ Final Environmental Impact Report

September 2006

*Project Applicant and Federal
Lead Agency for NEPA*

Trinity River Restoration Program
U.S. Department of the Interior
Bureau of Reclamation



Federal Cooperating Agencies for NEPA

U.S. Department of Agriculture
Forest Service

U.S. Department of Interior
Bureau of Land Management



California Lead Agency for CEQA

North Coast Regional Water
Quality Control Board



Applicant's Consultant

North State Resources



CANYON CREEK SUITE OF REHABILITATION SITES: TRINITY RIVER MILE 73 TO 78

FONSI - Environmental Assessment/ Final Environmental Impact Report

September 2006

***State Clearinghouse
SCH#2005102025***

Project Applicant and Federal Lead Agency for NEPA

Trinity River Restoration Program
U. S. Department of the Interior – Bureau of Reclamation
P. O. Box 1300
1313 Main Street
Weaverville, CA 96093

Federal Cooperating Agencies for NEPA

U. S. Department of Interior – Bureau of Land Management
Redding Field Office
355 Hemsted Drive
Redding, CA 96002

U. S. Department of Agriculture – United States Forest Service
Shasta-Trinity National Forest
3644 Avtech Parkway
Redding, CA 96002

California Lead Agency for CEQA

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

Applicant's Consultant:

North State Resources, Inc.
5000 Bechelli Lane, Suite 203
Redding, CA 96002



Trinity River Restoration Program

P.O. Box 1300, 1313 South Main Street, Weaverville, California 96093
Telephone: 530-623-1800, Fax: 530-623-5944

AUG 30 2006

Subject: Environmental Assessment/Final Environmental Impact Report for the Canyon Creek Suite of Rehabilitation Sites: Trinity River Mile 73 to 78

Dear Interested Parties:

Under guidance of the Trinity River Restoration Program (TRRP), the Bureau of Reclamation has acted as the federal lead agency in preparation of the following Finding of No Significant Impact (FONSI) and Environmental Assessment (EA). The North Coast Regional Water Quality Control Board (Regional Water Board), in their role as the state lead agency, has prepared the Final Environmental Impact Report (Final EIR). This joint environmental document for the proposed Canyon Creek Suite of Rehabilitation Sites Project: Trinity River Mile 73 to 78 (FONSI-EA/Final EIR), meets National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements and fulfills evaluation needs stipulated under Executive Orders 11988 (floodplain management), 11990 (protection of wetlands), and 12898 (environmental justice).

The purpose of the proposed Project is to conduct river rehabilitation activities at four locations downstream of the TRRP's recently constructed Hocker Flat channel rehabilitation project at Junction City, California. These mechanical channel rehabilitation projects are 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. Together, Hocker Flat and the proposed Project include restoration work at five sites which will not only enhance river processes locally, but which are also expected to increase and maintain fisheries habitat throughout the reach below Canyon Creek. The Project will accomplish this by re-contouring bank and floodplain features during the fall of 2006.

The attached FONSI-EA/Final EIR includes the EA/Draft EIR (incorporated by reference), a list of persons and agencies commenting on the EA/Draft EIR, written comments, Lead Agency responses to comments, revised EA/Draft EIR text, and a Mitigation Monitoring and Reporting Program (MMRP) for the proposed Project. Prior to approving the Project, the Regional Water Board will certify that the Final EIR is in compliance with CEQA. Then the document will be used to support necessary permit applications as well as to identify and adopt appropriate monitoring and mitigation plans.

The associated EA/Draft EIR may be reviewed at the TRRP Office at 1313 South Main St. in Weaverville. Electronic copies of the EA/Draft EIR and the FONSI-EA/Final EIR are available on the TRRP's website at: <http://trrp.net/RestorationProgram/CanyonCreek.htm> or on Reclamation's website at: http://www.usbr.gov/mp/nepa/nepa_projects.cfm?Project_ID=1854

Executive Director
Douglas P. Schlusener

If you have any questions concerning this document or the Project, please contact Brandt Gutermuth, TRRP Environmental Specialist, at 530-623-1806 or email him at bgutermuth@mp.usbr.gov

Sincerely,



Douglas Schleusner
Executive Director
NEPA - Lead Agency

Attachment – FONSI-EA/Final EIR

CANYON CREEK SUITE OF REHABILITATION SITES: TRINITY RIVER MILE 73 TO 78
FONSI-EA/FINAL EIR

FONSI

U.S. BUREAU OF RECLAMATION

MID-PACIFIC REGION

NORTHERN CALIFORNIA AREA OFFICE

TRINITY RIVER RESTORATION PROGRAM

WEAVERVILLE, CALIFORNIA

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 Canyon Creek Suite of Rehabilitation Sites Environmental Assessment/Environmental Impact Report (EA/EIR), will result in no significant impacts on the human environment. 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.

**Reference: Canyon Creek Suite of Rehabilitation Sites:
Trinity River Mile 73 to 78 EA**

Environmental review by:

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

Approved by:

Douglas P. Schleusner
Executive Director, Trinity River Restoration Program

FONSI No. TR-EA0206

FINDING OF NO SIGNIFICANT IMPACT

Canyon Creek Suite of Rehabilitation Sites: Trinity River Mile 73 to 78

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: DSCHLEUSNER@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 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 the 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 1994, the U.S. Fish and Wildlife Service (USFWS) as the NEPA lead agency began the NEPA process for the Trinity River Mainstem Fishery Restoration Program. The Final Environmental Impact Statement for the Trinity River Mainstem Fishery Restoration Program (FEIS), published in 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.

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 (DOI) agencies to implement the Preferred Alternative identified in the ROD for 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, mechanical channel rehabilitation projects, fine and coarse sediment management, watershed restoration, and an Adaptive Environmental Assessment and Management (AEAM) Program. The Canyon Creek Suite of Rehabilitation Sites: Trinity River Mile 73 to 78 (Project) is part of the mechanical channel rehabilitation component of the ROD and is designed to increase the amount of shallow, low-velocity edge habitat for rearing salmonid fry over a wide range of flows. This Project would selectively remove fossilized river edge berms (berms that have been anchored by extensive woody vegetation root systems and consolidated sand deposits); provide revegetation and conditions for reestablishment and survival 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 Dam, although smaller in scale.

The Project would be the second, after the 2005 construction of the Hocker Flat Demonstration Project, to implement the ROD's mechanical channel rehabilitation component and rework the Trinity River floodplain based on pre-dam channel morphology characteristics. The Project would expand the TRRP rehabilitation activities implemented at the site authorized in the Hocker Flat EA/EIR to include activities at four downstream locations. Collectively, the Hocker Flat and Canyon Creek Suite projects are intended to enhance river processes at their discrete locations and to synergistically enhance river processes in order to increase channel complexity and fisheries habitat throughout the mainstem Trinity River reach below Canyon Creek. The project would contribute to the restoration of aquatic habitat in the mainstem Trinity River through the development of properly functioning channel conditions. Rehabilitation treatments of the type described in the EA, combined with ROD flow releases, are expected to contribute to the restoration of the Trinity River mainstem fishery. The EA documents the analysis of three alternatives to meet this need.

The EA/Final EIR for the Canyon Creek Project considered three alternatives: the No-Action Alternative, Proposed Action, and Alternative 1. Under NEPA, no significant impacts were determined under any of these alternatives. Under the California Environmental Quality Act (CEQA), the EA/Draft EIR identified a significant unavoidable impact to aesthetic resources at one of the rehabilitation sites (Conner Creek) under the Proposed Action. This impact was based on initial objections from landowners to activities at the Conner Creek site expressed during the scoping process. Through the public review process, these landowners submitted written comments on the EA/Draft EIR stating that contrary to their position during the scoping process, they were in full support of the Proposed Action and retracted their objections, thereby reducing the impact to aesthetic resources (under CEQA) to a less-than-significant level.

Details concerning these alternatives and other alternatives considered but not carried forward for evaluation are included in the EA/Draft EIR (Volume II, Chapter 2). The Proposed Action maximizes environmental benefits with less-than-significant environmental impacts and is preferred for implementation.

The Proposed Action is described below.

THE PROPOSED ACTION AND ITS BENEFITS

The Proposed Action described in the EA/Draft EIR was designed to provide suitable rearing habitat for anadromous salmonids and to reestablish geomorphic processes typical of an alluvial river. By removing on-site riparian berms and lowering the floodplain elevation in certain locations, the Proposed Action would allow some degree of channel migration and increase the likelihood of an inundated floodplain in association with 1.5-year recurrence interval flood flows (approximately 6,600 cubic feet per second [cfs] for this project). In addition, several features have been designed to provide fisheries habitat and channel complexity at flows which are lower than the 1.5-year recurrence interval (e.g., low-water side channels, benches, and alcoves).

The Proposed Action includes up to 11 activity types that may occur within the boundaries of one or more of the sites. Defined rehabilitation activities are:

- A – Recontouring;
- B – Feathered edge construction and riparian berm removal;
- C, D, and E – Floodplain construction for 450 cfs, 2,000 cfs, or 6,600 cfs inundation;
- F and G – Side channel creation for 450 cfs or 6,600 cfs inundation;
- H – Alcove construction for 450 cfs inundation;
- I – Excavation and placement of materials;

- J – Staging/use areas/road building; and
- K – Revegetation.

Activities A–H would all occur within riverine areas included for rehabilitation activities under the Proposed Action. Because these riverine areas extend for approximately 5 miles along the Trinity River, the type and degree of activity would differ for each area. Under the Proposed Action, more than 20 acres of riverine area would be affected and more than 90,000 cubic yards would be excavated. Activities I-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. The Riparian Revegetation Management Plan prepared in conjunction with the California Department of Fish and Game (CDFG) will be implemented to ensure that riparian habitat (e.g., riparian vegetation) meets the TRRP objective of restoring the form and function of an alluvial river over time, while also meeting CDFG and CEQA requirements for a 1:1 replacement of affected riparian habitat. Monitoring of the Project over time will allow critical evaluation in order to adjust future rehabilitation plans to incorporate those practices that perform best in the field.

More detailed discussions of activities A-K are provided in Chapter 2 of the EA/Draft EIR prepared for the Project.

When compared to Alternative 1, the Proposed Action will increase the areal extent of rehabilitation activities at the Conner Creek and Elkhorn sites in order to achieve the desired condition, which is to create and maintain channel conditions which allow for more dynamic interactions between sediment routing, riparian vegetation, and high-flow hydraulics. Achieving the desired condition would promote healthy riparian, aquatic, and wetland ecosystems. In contrast, under the No-Action Alternative, existing channel and habitat conditions are expected to respond to ROD flow releases, but at a reduced scale, resulting in limited increases in aquatic habitat quantity and quality. The need for the project results from prior dam operations that caused long-term effects of reducing the frequency and magnitude of high flows that naturally thwart encroachment of riparian vegetation and hydraulically manipulate the stream bed.

This alternative meets requirements under the Trinity River ROD, Endangered Species Act, Clean Water Act, National Forest Management Act, the Northwest Forest Plan and Aquatic Conservation Strategy, NEPA, Clean Air Act, Wild and Scenic Rivers Act, National Historic Preservation Act, the Resource Management Plan for the Redding Field Office of the Bureau of Land Management, and the Land and Resource Management Plan for the Shasta-Trinity National Forest.

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; hazardous waste and 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 EA), implementation of the Proposed Action would result in no significant impacts to the quality of the physical, biological, or human environment.

Land Use

The Project is located within the Junction City Community Planning Area. Land use impacts resulting from the Proposed Action would be consistent with Trinity County's development standards for lands within the Junction City community and lying within the Flood Hazard Overlay zoning district. Project construction

impacts from access, excavation/earthwork along the river's edge, and placement of materials at higher elevations will have insignificant short-term impacts.

Geology, Fluvial Geomorphology, and Soils

Implementation of the Proposed Action is consistent with the 10 Trinity River healthy river attributes that provide a basis for the TRRP mechanical channel rehabilitation program in support of fish and wildlife populations. Construction activities and disturbance would increase potential for short-term wind and water erosion; however, sediment control measures would be implemented to ensure that construction impacts to the river are less than significant.

Water Resources

Implementation of the Proposed Action would generally decrease the elevation of the Trinity River 100-year flood through the project reach as a result of project activities, including excavation on the floodplain. However, local increases in flood elevation of less than 1 foot are possible. The project is expected to have minimal, if any, effects on groundwater elevations or groundwater quality. These relatively small scale impacts to water resources within the project area would be less than significant.

Water Quality

Implementation of the Proposed Action, including construction activities near the river 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 will be staged to minimize potential water quality effects, and appropriate measures will be implemented to reduce water quality impacts to insignificant levels.

Fisheries Resources

To comply with Section 7 of the Endangered Species Act (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 channel rehabilitation 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 the mechanical rehabilitation projects as reasonable and prudent measures to minimize project effects on SONCC ESU coho salmon. Consequently, implementation of the Proposed Action is covered by the NMFS 2000 Biological Opinion and no additional consultation was required. 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 implementation. Improved river access to the floodplain during elevated springtime flows is expected to increase the availability of slow, shallow edge habitat preferred by salmonid fry. Collective improvements in fluvial channel dynamics contributed by the Proposed Action in conjunction with future channel rehabilitation projects throughout the upper Trinity River below Lewiston Dam are ultimately expected to improve rearing habitat diversity for all anadromous salmonids. Because of the short duration, inclusion of mitigation measures to protect fishes, and localized effects, no significant project effects would occur to fisheries resources with project implementation.

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 values. The revegetation of alluvial features (i.e., floodplains) would speed reestablishment of

riparian vegetation, and long-term changes in river inundation periods are also expected to increase both seasonal and perennial riparian habitats.

Informal consultation with the USFWS concerning effects to the ESA-listed northern spotted owl was conducted by Reclamation. Habitat surveys for this species were conducted in the general project vicinity. While the majority of the habitat surveyed was not suitable for nesting, roosting, or foraging, some suitable habitat was determined to be present. Consequently, protocol northern spotted owl surveys were conducted within 0.5 mile of each Canyon Creek project site during spring 2004. No owls were detected. Consequently, Reclamation determined that a biological assessment was not required since implementation of the Proposed Action would have no effect on northern spotted owls.

Compared to the length of the Trinity River downstream of Lewiston Dam, the Proposed Action would occur on only a small area. The EA/Final EIR incorporates mitigation measures to ensure that construction would be completed during non-nesting periods when sensitive species and amphibians, with limited ambulatory abilities, are not present. In addition, rapid revegetation of riparian areas is anticipated. These factors ensure that there will be no significant impacts to vegetation, wildlife, and wetlands.

Recreation

The Trinity River was federally designated as a National Wild and Scenic River in 1981. Construction and implementation of the Proposed Action would not permanently affect the scenic or recreational values of the Trinity River for which it was protected. Implementation of the Proposed Action would result in a long-term benefit to the form and function of the Trinity River, thereby enhancing the Outstanding Recreational Values of its Wild and Scenic River status, including its anadromous fishery. Because fishing impacts would be limited and project benefits localized, the project would result in no significant impacts to recreation.

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, no significant socioeconomic effects would result from implementation.

Tribal Trust

The need to restore and maintain the natural production of anadromous fish in the Trinity River mainstem originates partly from the federal government's trust responsibility to protect fishing rights for ceremonial, subsistence, and commercial purposes of the region's Indian tribes. Construction-related impacts to Tribal Trust resources resulting from the Proposed Action are expected to be short-term and to be outweighed by long-term increases in numbers of anadromous fishes and rejuvenation of other trust assets, which are an expected beneficial by-product of the improved riverine health that would result from project implementation. However, project improvements to riverine health and trust assets would not be significant because of the localized nature of the project.

Cultural Resources

Dredger tailings are the only cultural resource identified within the Area of Potential Effect (APE) defined for the project; any unrecorded cultural resources are assumed to have been previously inundated, destroyed, or substantially damaged. 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 and mitigation measures to cover potential finds during construction, project impacts to cultural resource during implementation of the Proposed Action would be 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 and particulate matter (PM₁₀). Reclamation will include provisions in construction contract documents to ensure that there are no significant construction-related impacts to air quality from the project.

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 and low-income populations, compared to other project area or Trinity County residents. No significant project effects on environmental justice would occur as a result of project implementation.

Aesthetics

Implementation of the Proposed Action would complement the visual resources of the Canyon Creek area and would meet landowner approval. 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 would be placed in a manner that blends into the contours of existing tailings piles while not changing the nominal heights of the piles. Retention of existing topographic features would lessen the degree of visual impact and improve the aesthetic quality of this reach of the Trinity River. Because changes to the landscape will not be noticeable in the long-term, the project will not result in significant effects to aesthetics.

Hazardous Materials

Implementation of the Proposed Action would potentially release hazardous materials that could pose a public hazard. However, construction specifications will ensure that the contractor follows Best Management Practices to contain hazardous materials (e.g., oils, gasoline) from release into the environment. These practices ensure that no significant effects from hazardous material would occur during project implementation.

Noise

Construction activities would be scheduled between 7:00 a.m. and 7:00 p.m. Monday through Saturday. During working hours, the contractor would 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. Because construction work and temporary road closures would be staged in a manner to allow for access by emergency service providers, no significant effects to public services would result from project implementation.

Transportation/Traffic Circulation

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. For safety reasons, the contractor would 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 noted 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

It has been 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 EA/Draft EIR (including page 1-8, as revised in Chapter 3.2 of the EA/Final 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 construction of the four rehabilitation sites (20 acres of riverine rehabilitation activities) along a 5-mile reach of the Trinity River is expected to provide localized improvements in aquatic and riparian habitats that currently exist at these sites. These 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 Proposed Action.** Due to the limited duration of the project and implementation of public safeguards, public safety will not be at risk.
- 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.** The entire mainstem Trinity River, from the Lewiston dam to Wetchipee, was designated as a National Wild and Scenic River by the Secretary of the Interior in 1981, primarily because of the river's anadromous fishery. Under the WSRA, a federal agency may not assist in construction of a water resources project that would have a direct and adverse impact on the free-flowing, scenic, and natural values of a wild or scenic river. The Proposed Action will result in a minor amount of disturbance to river attributes while enhancing the outstandingly remarkable value (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, one project within the mechanical channel rehabilitation component of 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, project effects on the quality of the human environment are not expected to be highly controversial.** Five comments were submitted to the lead agencies on the EA. Two of these comments supported the Proposed Action, one from an affected landowner and one from the Yurok Tribe. The comment from a Reclamation Water Contractor illustrates the continued controversy surrounding competing uses of water provided by the Central Valley Project. However, the Proposed Action is similar to management activities that have been previously implemented by Reclamation in this reach of the Trinity River. These rehabilitation projects have been recently supported by the public in Trinity County. Furthermore, the anticipated effects are reasonably predictable; therefore, these effects are not highly controversial. Because biological, social, and economic issues are addressed in the EA, 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 this project have been clearly evaluated within the EA. Furthermore, similar actions have been completed 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 mechanical channel rehabilitation projects on the Trinity River below Lewiston Dam. These documents constitute the tiering documents that this project and its EA work from. The environmental effects of future projects will be analyzed based on needs dictated by the ROD but these needs will be balanced by any new information collected during implementation of this Proposed Action 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 impacts may result from the project, these have been analyzed in the EA 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.
- 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 site and have determined that there will be no destruction of scientific, cultural, or historic resources.
- 9) **The Proposed Action 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 (ESA).** A biological opinion addressing foreseeable Trinity River Restoration Program 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 resulting from the channel rehabilitation measures referenced in the EIS's preferred alternative: Such adverse effects were concluded to be minor, of short duration, and dwarfed by the long-term beneficial outcome via implementing the Proposed Action. The displacement of juvenile coho salmon "...is not expected to result in lethal take of these fish." (NMFS 2000).

The Proposed Action may affect but would not likely adversely affect the bald eagle based on the following rationale: Eagles are not known nor expected to nest within or near the project area. There is a potential to temporarily displace foraging eagles for up to 3 weeks at a time of relatively low eagle foraging activity in the area. Other nearby areas 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. Habitat surveys for this species were conducted in the general project vicinity. While the majority of the habitat surveyed was not suitable for nesting, roosting, or foraging, some suitable habitat was determined to be present. Consequently, protocol northern spotted owl surveys were conducted within 0.5 mile of each Canyon Creek project site during spring 2004. No owls were detected. Consequently, it was determined that implementation of the Proposed Action would have no effect on northern spotted owls.

- 10) **Implementation of the Proposed Action does not threaten a violation of Federal, State, or local laws 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, Endangered Species Act, Clean Water Act, National Forest Management Act, the Northwest Forest Plan and Aquatic Conservation Strategy, NEPA, Clean Air Act, Wild and Scenic Rivers Act, the Land and Resource Management Plan for the Shasta-Trinity National Forest, the National Historic Preservation Act, and the Resource Management Plan for the Redding Field Office of the Bureau of Land Management.

CANYON CREEK SUITE OF REHABILITATION SITES: TRINITY RIVER MILE 73 TO 78
FONSI-EA/FINAL EIR

Table of Contents

Table of Contents

Chapter 1: Introduction

1.1	Organization of the Document.....	1
1.2	Project Overview	1
1.2.1	Project History	2
1.2.2	Purpose and Need for the Project.....	3
1.2.3	Goals and Objectives of the Proposed Action	3
1.2.4	Description of the Proposed Action and Project Alternatives	4
1.3	Summary of Project Impacts and Mitigation Measures.....	5
1.4	Environmental Review Process	5
1.5	Other Necessary Decisions	6

Chapter 2: Comments and Responses to Comments on the EA/Draft EIR

2.1	Introduction.....	1
2.2	List of Commenters.....	1
2.3	Comments and Responses to Comments	1

Chapter 3: Changes to the EA/Draft EIR

3.1	Introduction.....	1
3.2	Changes to the EA/Draft EIR in Response to Comment Letters	1
3.3	Changes to the EA/Draft EIR to Correct Minor Errors and Omissions.....	10
3.3.1	Changes to Tables and Text.....	10
3.3.2	Changes to Figures.....	27

Chapter 4: Discussion of Final Mitigation Monitoring and Reporting Program

4.1	Introduction.....	1
4.2	Legal Requirements	2
4.3	Intent of the Mitigation Monitoring and Reporting Program	2
4.4	Development and Approval Process	2
4.5	Authorities and Responsibilities	3
4.6	Summary of Monitoring Requirements	3
4.7	Resolution of Noncompliance Complaints	3
4.8	Mitigation Measures	3

Appendix

Appendix 1 Final Mitigation Monitoring and Reporting Program

Introduction

Introduction

This document includes comments and responses to comments on the Environmental Assessment/Draft Environmental Impact Report (EA/Draft EIR) for the Canyon Creek Suite of Rehabilitation Sites: Trinity River Mile 73 to 78 and comprises the EA/Final EIR for the Proposed Action. The Final EIR portion of the EA/Final EIR is an informational document that must be considered by the North Coast Regional Water Quality Control Board (Regional Water Board) as lead agency under the California Environmental Quality Act (CEQA) before it approves or rejects the proposed project. Similarly, the U.S. Bureau of Reclamation (Reclamation) as the lead agency under NEPA must consider the Finding of No Significant Impact (FONSI)/EA portion of the joint document before signing the FONSI and making implementation decisions.

According to the CEQA Guidelines (Section 15132), a Final EIR shall consist of the following elements:

- a) the Draft EIR or a revision of that draft;
- b) comments and recommendations received on the draft EIR either verbatim or in summary;
- c) a list of persons, organizations, and public agencies commenting on the Draft EIR;
- d) the responses of the Lead Agency to significant environmental points raised in the review and consultation process; and
- e) any other information added by the Lead Agency.

1.1 Organization of the Document

This EA/Final EIR includes the EA/Draft EIR (incorporated by reference), a list of persons and agencies commenting on the EA/Draft EIR, written comments, lead agency responses to comments, revised EA/Draft EIR text, and a Mitigation Monitoring and Reporting Program (MMRP) for the Proposed Action.

The EA/Final EIR is organized into the following chapters:

- **Chapter 1 – Introduction:** This chapter provides a summary of the project and a discussion of the associated environmental review process.
- **Chapter 2 – Comments and Responses to Comments on the EA/Draft EIR:** This chapter provides a list of commenters, copies of written comments (alpha-numerically coded for reference), and lead agency responses to those comments.
- **Chapter 3 – Changes to the EA/Draft EIR:** This chapter includes all corrections and additions to the EA/Draft EIR text made as a result of public review of the EA/Draft EIR. It also includes minor editorial changes made by the lead agencies. Except for changes to mitigation measures, all changes to the text are indicated by revision marks. The EA/Draft EIR mitigation measures should be used as the basis for comparison. Tables and figures that have been changed are identified as “Revised.”

- **Chapter 4** – Final Mitigation Monitoring and Reporting Program: This chapter describes the final Mitigation Monitoring and Reporting Program (MMRP), as required by the CEQA Guidelines (Section 15097). To ensure consistency with the CEQA Findings of Fact prepared by the Regional Water Board, the mitigation measures presented in the EA/Draft EIR have been reorganized and, in some cases, rewritten. In addition, repetitive mitigation measures from the EA/Draft EIR, that applied to more than one resource area (e.g., turbidity mitigation which reoccurred in Geology, Water Quality, and Fishery sections), have been combined into a single mitigation measure. Chapter 4 includes the revised mitigation measures. In addition, the Mitigation Monitoring and Reporting Program Table included in Appendix 1 provides a cross reference to mitigation measures numbered in the EA/Draft EIR.

1.2 Project Overview

1.2.1 PROJECT HISTORY

The Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) identified mechanical rehabilitation activities along the Trinity River, including the proposed rehabilitation activities at the sites described in the EA/Draft EIR. The overall intent of these activities is to selectively remove fossilized berms (berms that have been anchored by extensive woody vegetation root systems and consolidated sand deposits); revegetate and provide conditions for regrowth/sustenance 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 the Trinity River Diversion. The project is required for the restoration of Trinity River mainstem fisheries and is specifically designed for the benefit of anadromous fish and their habitat through development of properly functioning and diverse floodplain and main river channel habitat.

The EA/Draft EIR for the Proposed Action addresses the environmental issues, alternatives, and impacts associated with modification of the bed and bank of the Trinity River downstream of the recently constructed Hocker Flat Rehabilitation Project (U.S. Bureau of Reclamation 2004). Reclamation, in cooperation with the USDA Forest Service (USFS), U.S. Bureau of Land Management (BLM), and the Regional Water Board prepared the EA/Draft EIR. After the public review period for the EA/Draft EIR, the lead agencies prepared this FONSI-EA/Final EIR to satisfy their legal and regulatory requirements. Reclamation will be responsible for the construction of the Proposed Action and is functioning as the federal lead agency under NEPA. The Regional Water Board is serving as the lead agency under CEQA. The primary cooperating (NEPA) and responsible and trustee (CEQA) agencies are:

- National Marine Fisheries Service (NMFS);
- U.S. Army Corps of Engineers (Corps);
- U.S. Fish and Wildlife Service (USFWS);
- California Department of Fish and Game (CDFG);
- California Department of Transportation (Caltrans);
- California State Lands Commission (SLC); and
- Trinity County.

1.2.2 PURPOSE AND NEED FOR THE PROJECT

The purpose of the Proposed Action is to implement a specific suite of channel and riparian rehabilitation measures to provide needed juvenile fish habitat on the mainstem Trinity River approximately 1 mile below Junction City and continuing downstream for about 5 miles. The Proposed Action encompasses four discrete sites: Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch.

The need for the Proposed Action results from:

- requirements in the Record of Decision (ROD) for the FEIS/EIR (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 incorporate the experience provided through the planning, design, and implementation of the Proposed Action at all four sites into future restoration and rehabilitation efforts proposed by the TRRP.

1.2.3 GOALS AND OBJECTIVES OF THE PROPOSED ACTION

The goals of the Trinity River Restoration Program (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 analyzed in the EA/Draft EIR. The following goals and objectives support the Proposed Action and provided the structure for developing the alternatives:

- evaluate changes in channel geometry in response to constructing channel and floodplain features designed for the river's current hydrologic regime;
- evaluate the evolution of channel planform features in response to designing and implementing the project at a river segment scale;
- evaluate the biological response (aquatic, riparian, upland) to changes in the physical environment and incorporate this information into the AEAM Program;
- locate the project downstream of Canyon Creek to ensure that natural tributary accretion to mainstem flows maximizes the likelihood of maintaining the site prior to full implementation of the ROD-recommended flow regime for wet and extremely wet water years;
- provide safe and reasonable access to the site for project planning, implementation, and monitoring;
- develop partnerships with willing participants and encourage positive landowner interest and involvement;
- design the project to function with the river's current hydrology estimated at the site;
- integrate known fluvial and ecological theories and relationships with the site's measured physical and biological attributes and evaluate the response over a definitive time frame;
- minimize in-stream work to reduce construction-related impacts, maximize the river's ability to rehabilitate itself during high flows, and reduce implementation cost and complexity; and
- attempt to preserve unique and valuable geomorphic and biological features wherever practicable (e.g., hydraulic controls, high quality spawning or adult holding habitat).

The following objectives apply to California responsible and trustee agencies for the Proposed Action, including the Regional Water Board, the SLC, and CDFG, as well as the Hoopa Valley Tribe (HVT):

- compliance with the California Water Code to ensure the highest reasonable quality of waters of the state and allocate 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, and native plant 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.

1.2.4 DESCRIPTION OF THE PROPOSED ACTION AND PROJECT ALTERNATIVES

The Proposed Action and the alternative that were developed to implement activities along the Trinity River at the four rehabilitation sites are discussed in Chapter 2 of the EA/Draft EIR, along with the No-Action Alternative, which represents the baseline for NEPA purposes. The No-Action conditions and “existing conditions” (a CEQA concept) are essentially the same. The two action alternatives discussed below are considered feasible, and both contain measures that would avoid or substantially lessen potentially significant environmental effects of the project.

No-Action Alternative

Under the No-Action (No-Project) Alternative, Reclamation and the Regional Water Board would not proceed with activities at the four rehabilitation sites. The No-Action Alternative represents the existing conditions at the four rehabilitation sites.

Proposed Action

The Proposed Action would include activities at all four sites. These activities are eventually expected to 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. 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. The tires of machinery will not enter the river below the river’s edge under the Proposed Action. Some vegetation removal or excavation below the water line (i.e., within 8 feet of the water’s edge) will likely be required to ensure efficient removal of established riparian vegetation.

Under the Proposed Action, activities within riverine areas would result in the excavation of approximately 91,500 cubic yards of material. The upland rehabilitation activity areas are large enough to accommodate this amount of material; however, the contractor will have the option of removing materials from the river right sites at Conner Creek, Valdor Gulch, and Elkhorn. Removal of materials to an off-site location would be accomplished in compliance with federal, state, and local requirements.

Alternative 1

Alternative 1 is identical to the Proposed Action at two of the sites, Valdor Gulch and Pear Tree Gulch. This alternative reflects stakeholder involvement and was developed to reduce significant impacts to private landowners at the Conner Creek site and to reduce required excavation at the Elkhorn site.

Activities included in Alternative 1 would provide substantial modification to the alluvial features at all four sites. However, the type and degree of modification would be reduced at the Conner Creek and Elkhorn sites. Alternative 1 would result in a reduction of the area that would be affected and the material that would be excavated from riverine areas. Exclusion of activity areas R-1 and R-2 at Conner Creek represents a reduction in the area and volume that would be excavated, equaling 0.95 acre and 2,600 cubic yards, respectively. At Elkhorn, reduced floodplain creation (at R4 and R5) and side channel excavation (at R2) would reduce the affected area by 1.2 acres and the amount of excavated material by 8,770 cubic yards. The exclusion of these areas would preserve the existing morphological features and riparian vegetation that enhance aesthetic values for adjacent landowners.

1.3 Summary of Project Impacts and Mitigation Measures

The affected environment and the environmental consequences (impacts) of implementing each of the project alternatives are described in Chapter 3 of the EA/Draft EIR, which is incorporated by reference. A complete summary of the project impacts and associated mitigation measures for each action alternative is available in the EA/Draft EIR, Volume 1 (Draft FONSI/Executive Summary), pages ES-21 through ES-50, and in Volume 3, Appendix A. This summary recognizes that new information was provided during the public comment period for the EA/Draft EIR. A series of high-flow events resulted in changes to the bed and bank of the Trinity River in January 2006. Specifically, the left bank of the river in the vicinity of Conner Creek (riverine areas R-1 and R-2) was subjected to erosion and loss of riparian vegetation. This impact to private property resulted in landowners agreeing that the Proposed Action would be acceptable, which represents a reversal from the significant and unavoidable impact identified for Impact 3.14-1 for the Conner Creek site.

1.4 Environmental Review Process

The Regional Water Board initiated the public scoping process by forwarding a Notice of Preparation (NOP) of an EIR to the California State Clearinghouse on October 7, 2005. The NOP and agency comments on the NOP were included as Appendix B to the EA/Draft EIR.

The NOP was circulated to the public; to local, state, and federal agencies; and to other interested parties in order to solicit comments on the Proposed Action. The public scoping period was October 7, 2005, through November 7, 2005, and scoping comments were received through November 7, 2005. Reclamation and the Regional Water Board held a joint NEPA/CEQA scoping meeting on October 20, 2005, in Junction City, California. During this meeting, members of the public were asked what issues they felt should be addressed in the EA/Draft EIR. As the public comment period continued, the lead agencies received letters that helped identify areas of concern. These areas of concern and other oral comments received at the scoping meeting were considered during the preparation of the EA/Draft EIR. The scoping and public involvement process is also described in Appendix B of the EA/Draft EIR.

The following substantive issues associated with the Proposed Action were identified during the public scoping process:

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

The EA/Draft EIR was circulated for a 45-day public comment period from February 9 to March 27, 2006. Fifteen copies of the EA/Draft EIR were submitted to the State Clearinghouse for distribution to state agencies having jurisdiction over resources affected by the project. The only state agency that submitted comments to the State Clearinghouse was CDFG. The lead agencies distributed copies to federal and local agencies with similar jurisdiction.

A Notice of Availability of the EA/Draft EIR was published in the *Trinity Journal* on February 15 and February 22, 2006, and was posted on both the TRRP's website (<http://www.trrp.net>) and Reclamation's Mid-Pacific Region's website for Northern California Area Office environmental documents (http://www.usbr.gov/mp/nepa/nepa_base.cfm?location=ncao). The notice was also mailed to all interested members of the public who participated in the project scoping process, to adjacent landowners within 300 feet of the project boundaries, and to representatives of adjacent counties. The notice announced availability of the EA/Draft EIR, stated where the EA/Draft EIR and supporting documents could be obtained or reviewed, the dates of the comment period, and the deadline for receiving written comments.

1.5 Other Necessary Decisions

The filing of the Notice of Determination (NOD) completes the CEQA environmental review process. For this project, in accordance with standard procedures, the Regional Water Board, if it chooses to proceed with the portions of the project under its control, will certify the Final EIR portion of the EA/Final EIR, file the NOD(s), and forward these documents to Reclamation, the NEPA lead agency, along with a recommendation regarding what the Regional Water Board believes should be the preferred alternative. The NEPA process will be complete with the signing of a FONSI and issuance of a Decision Record by Reclamation.

As required under the federal Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.), implementation of the Proposed Action requires consultation with NMFS and the USFWS. Consultation for this project has recently been completed. Additionally, implementation of the project will require a number of permit and agency approvals under local, state, and federal laws. Agencies with potential permit and approval requirements include the Corps, CDFG, Caltrans, the Regional Water Board, and Trinity County.