Consultation and Coordination

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

5.1 Lead and Participating Agencies

The co-lead agencies for this EA/DEIR are Reclamation, 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
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- NOAA Fisheries
- California Department of Fish and Game
- California Regional Water Quality Control Board, North Coast Region
- Trinity County

5.2 Project Scoping

5.2.1 SUMMARY OF PUBLIC SCOPING MEETINGS

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

- Summer 2004 A Project Kick-Off meeting was held with representatives from Reclamation, DWR, BLM, CDFG, Trinity County, and the environmental consulting team to discuss the project, potential alternatives, the timing requirements for the environmental review process, the scope of technical studies, and potential permitting requirements.
- Winter 2004 A field review was conducted by members of the design team and the environmental consulting team. The review resulted in delineating the site boundaries for the proposed project and developing several conceptual rehabilitation themes for additional evaluation.
- May 2005 The Regional Water Board accepted the role as the CEQA lead agency and made the determination to prepare an EIR based on the potential controversy of the proposed project.
- Summer 2005 Reclamation conducted a meeting that included potential lead and cooperating agencies to discuss the type and degree of NEPA and CEQA compliance required by the project. The review resulted in revising the site boundaries for the proposed project and working with various stakeholders to refine design concepts. Reclamation staff met with local landowners and incorporated their concerns into project designs for development of Alternative 1.

- Fall 2005 A meeting that included staff from the TRRP, Yurok Tribe, USFS, USFWS, Corps, and members of the environmental consulting team was held in Weaverville to review restoration designs for the proposed project. The outcome of this meeting was direction to the design team regarding specific criteria to meet TRRP objectives.
- October 7, 2005 The Regional Water Board, the CEQA lead agency submitted an NOP to the State of California, Governors Office of Planning and Research, State Clearinghouse (SCH) for the proposed project. The NOP encouraged full public participation to promote open communication on the issues surrounding the proposed project. All federal, state, and local agencies and other persons or organizations were urged to participate in the scoping process.

In conjunction with the issuance of the NOP, a Public Notice was published on October 12 and October 19, 2005, in the *Trinity Journal*, the newspaper that serves Trinity County. The notice included information on the proposed project, as well as the date and location of the public scoping meeting.

October 20, 2005 – A Public/Agency Scoping Meeting was held at the Junction City Community Center in Junction City, California. The purpose of the meeting was to outline the objectives of the TRRP; identify the types of actions and alternatives that might be evaluated in the Joint NEPA/CEQA document; describe the nature, scope and timing of the environmental process; and solicit comments on the NOP. In addition to TRRP staff, 12 interested stakeholders residing in the Weaverville/Junction City community area attended this meeting.

5.2.2 COMMENTS ON THE NOTICE OF PREPARATION

On October 1, 2005, the Regional Water Board circulated an NOP to the public; and local, state, and federal agencies to solicit comments. The NOP is included in Appendix B. A list of agencies, groups, and individuals providing comments and/or comment letters on the NOP are listed below:

- California Department of Forestry and Fire Protection
- California Department of Transportation
- California Native American Heritage Commission .
- Trinity County Weed Management Cooperative

Additional information on the scoping process is provided in Appendix **B** (Public Involvement Process).

5.2.3 LIST OF AGENCIES AND ORGANIZATIONS CONTACTED

Following is a list of agencies and organizations consulted during the preparation of the environmental document. Chapter 6, References, under "Persons Contacted", lists the specific individuals who were contacted.

- California Air Resources Board
- . California Department of Fish and Game
- California Department of Transportation
- California Division of Mines and Geology
- California Native American Heritage Commission
- California State Lands Commission

- California Resources Agency
- California Water Quality Control Board, North Coast Region
- Junction City Volunteer Fire Department
- Junction City Elementary School
- NOAA Fisheries (Arcata)
- Trinity County Building and Development Services, Environmental Health Division
- Trinity County General Services Department
- Trinity County Transportation Department
- Trinity County Sheriff's Office
- U.S. Army Corps of Engineers (San Francisco District Eureka Field Office)
- U.S. Department of Transportation, U.S. Coast Guard
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service (Arcata Field Office)
- U.S. Forest Service (Shasta-Trinity National Forest)

5.3 Agency Consultation and Coordination

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

5.3.1 CONSISTENCY WITH ENVIRONMENTAL LAWS

Provided below is a discussion of how this EA/DEIR is consistent with the federal (NEPA) and state (CEQA) statutes.

National Environmental Policy Act

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

California Environmental Quality Act

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

comply with both laws so as to reduce redundancy while providing the necessary documentation for both processes.

5.3.2 DISCRETIONARY APPROVALS

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

U.S. Army Corps of Engineers

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

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

On July 8, 2004, the delineation was verified by the Corps (File No. 28083N) (see Appendix C). The jurisdictional wetland delineation report is intended for use by the Corps in determining the location and extent of Section 404 jurisdiction. Reclamation will continue to coordinate with the Corps to determine the appropriate permit for the project, as well as potential mitigation measures. It is anticipated that the proposed project will be permitted under Nationwide Permit Number 27 (Wetland and Riparian Restoration and Creation Activities).

U.S. Fish and Wildlife Service / NOAA Fisheries

Section 7 of the ESA requires federal agencies, in consultation with the Secretary of the Interior, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of designated critical habitat for these species. Reclamation, as the federal lead agency for this project, is required to consult with NOAA Fisheries concerning project effects to SONCC ESU coho salmon, which is federally listed as threatened, and its designated critical habitat. Based on discussions with NOAA Fisheries, certain non-flow measures, including the mechanical rehabilitation projects, were considered in the 2000 Biological Opinion prepared by NMFS for the Trinity River Mainstem Fishery Restoration for Reclamation and USFWS. In 2004, NOAA

Fisheries confirmed that the incidental take statement in the biological opinion was adequate and included the activities associated with the mechanical rehabilitation projects. In fact, these mechanical rehabilitation projects were specifically included as reasonable and prudent measures (RPM) in the opinion.

Additional RPMs described in Chapter 1 were incorporated into the project. As a result of the informal consultation between Reclamation and NOAA Fisheries, NOAA Fisheries determined that re-initiation of consultation was unnecessary.

Informal consultation with the USFWS concerning effects to listed terrestrial species such as the northern spotted owl was conducted by Reclamation. Based on this informal consultation, the USFWS determined that a biological assessment was not required since the proposed project would have no effect on northern spotted owl or its critical habitat.

NOAA Fisheries – Magnuson-Stevens Fishery Conservation and Management Act

The MSA, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance EFH for those species regulated under a federal FMP. For the Pacific Coast (excluding Alaska), there are three FMPs covering groundfish coastal pelagic species, and Pacific salmon. Reclamation, as the federal lead agency, will need to consider the impact of the Proposed Action on EFH for both SONCC ESU coho and Chinook salmon in the Trinity River, pursuant to the Pacific Coast Salmon FMP.

EFH refers to those waters and substrates necessary for the spawning, breeding, feeding, or growth to maturity. "Waters" include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; "substrate" includes sediment, hard bottom, structures underlying the waters, and associated biological communities; "necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and spawning, breeding, feeding, or growth to maturity covers a species' full life cycle. "Adverse effect" means any impact that reduces the quality and/or quantity of EFH, and may include direct, indirect, site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

The MSA requires federal agencies to consult with NOAA Fisheries on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH (MSA §305[b][2]). A component of this consultation process is the preparation and submittal of an EFH Assessment. The length of the EFHA will vary based on project complexity and magnitude of potential impacts to EFH, but all EFHAs must include the following information: 1) a description of the proposed action; 2) an analysis of the effects, including cumulative effects, of the proposed action on EFH, the managed species, and associated species, such as major prey species, including affected life history stages; 3) the federal agency's views regarding the effects of the proposed action on EFH; and 4) proposed mitigation, if applicable. In instances where MSA and ESA issues overlap, NOAA Fisheries encourages an integrated approach for consultation.

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

California Department of Fish and Game

California Endangered Species Act

State-listed species are fully protected under the mandates of the CESA. In 2000, the California Fish and Game Commission (Commission) received a petition to list coho salmon north of San Francisco as an endangered species under provisions of the California Endangered Species Act (CESA). The Commission required that a comprehensive, state-wide coho salmon recovery strategy and plan be developed while they considered the petition. The coho recovery plan was adopted by the Commission in February 2004 (California Department of Fish and Game 2004). However, the Commission declined to list the coho under CESA in June 2004 on a split vote, noting that existing federal protections and voluntary conservation measures and efforts guided by the recovery plan appear sufficient at this time to stem declines of coho in California. On August 5, 2004, the Commission voted to list the coho as threatened, from Punta Gorda north to the Oregon border. This listing is subject to a 60-day review period. In the event the status of this species changes during the public comment period for this EA/DEIR, the EA/Final EIR will incorporate any new information.

California Department Transportation

The California Department of Transportation (Caltrans) is responsible for activities within the right-of way (ROW) for SR 299. Any activities that occur within the ROW are subject to approval by Caltrans. Reclamation has identified an opportunity to place excavated materials within the Caltrans ROW at the Pear Tree Gulch site. This material may be incorporated into a new public access area under consideration by BLM. In the event that this material is placed within the ROW, an encroachment permit will be required. To date, Caltrans has met with TRRP staff to review and discuss the technical requirements that would be included in an encroachment permit.

California State Lands Commission

Since the State of California maintains ownership of the bed of the Trinity River, placement of structures in the river may require a public agency lease issued by the State Lands Commission (SLC). The SLC reviewed the NOP for the project in October 2005 during the scoping process. Since the state interest has not been defined (jurisdiction has not been determined for the project area), a lease application from the SLC project would not be required. The SLC did suggest that a retroactive lease application may be required if, in the future, jurisdiction is determined for the area in question. In short, no further action is necessary with the SLC for the proposed project.

California Regional Water Quality Control Board

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

Reclamation will prepare and submit to the Regional Water Board a request for water quality certification or waste discharge requirements based upon adoption of the environmental document under CEQA. The request will be submitted to the Regional Water Board when the pre-construction notification is sent to the Corps. A likely condition of the Regional Water Board is the preparation of an erosion and sedimentation control plan and spill prevention and containment plan.

California Reclamation Board

The Trinity River Basin does not have any flood control project levees and floodways within the watershed. As such, the California Reclamation Board does not have jurisdictional authority over the Trinity River. No encroachment permit will be required for this project.

Trinity County Ordinances

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

5.3.3 CONSISTENCY DETERMINATIONS

Provided below is a summary of governing laws for which a consistency determination will need to be made.

Federal Emergency Management Agency

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

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

for the proposed project, the County must receive engineering data to certify that the project will not negatively affect the BFE by more than 12 inches.

Section 106 of the National Historic Preservation Act

Section 106 of the NHPA requires federal agencies to evaluate the effects of federal undertakings on historical, archaeological, and cultural resources. Agencies are required, within the vicinity of proposed projects, to identify historical or archeological properties, including properties on the NRHP, and those that the agency and the SHPO agree are eligible for listing on the NRHP. If the federal project is determined to have an adverse effect on properties listed on the NRHP or those eligible for listing on the NHRP, the agency is required to consult with the SHPO and the ACHP to develop alternatives or mitigation measures to allow the project to proceed.

An archeological survey report and historic property survey report have been prepared for the proposed project. This report documents the findings of the cultural resources reconnaissance, which was conducted according to protocol outlined in the *Programmatic Agreement Among the U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, U.S. Bureau of Land Management, Hoopa Valley Tribe, California State Historic Preservation Office, and the Advisory Council on Historic Preservation Regarding Implementation of the Trinity River Mainstem Fishery Restoration.* The conclusion of this evaluation was that the features within the boundaries established for the proposed project do not meet the criteria of eligibility for inclusion on the NRHP. No cultural resources were identified within the project APE.

Federal Wild and Scenic Rivers Act

The federal WSRA designates qualifying free-flowing river segments as wild, scenic, or recreational. The WSRA establishes requirements applicable to water resource projects affecting wild, scenic, or recreational rivers within the National Wild and Scenic Rivers System, as well as rivers designated on the National Rivers Inventory. Under the WSRA, a federal agency may not assist in the construction of a water resources project that would have a direct and adverse effect on the free-flowing, scenic, and natural values of a wild or scenic river. If the project would affect the free-flowing characteristics of a designated river or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area, such activities should be undertaken in a manner that would minimize adverse impacts, and should be developed in consultation with the administering agency. The Trinity River is designated for its outstandingly remarkable anadromous fishery values and has been classified as a Recreational River from Cedar Flat to Lewiston Dam. Appendix D includes a Wild and Scenic River Section 7 Analysis and Determination, which concludes that the Proposed Action will not affect the free-flowing condition of this segment of the Trinity River and is therefore in compliance with BLM Resource Management Plan guidelines.

State Wild and Scenic Rivers Act

Under the California WSRA, the segment of the Trinity River associated with the proposed project is designated as "scenic" and "recreational." This classification was designated in 1980, a year prior to the federal designation. The *Public Resources Code* (5093.53[b]) defines "scenic rivers" as being "those

rivers or segments of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads." "Recreational rivers" are defined in the *Public Resources Code* (5093.53[c]) as being "those rivers or segments of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment of division in the past. There are no permits required specifically under the state WSRA. However, in conjunction the federal WSRA, other permits or agreements may be required to comply with other laws.

5.3.4 FEDERAL EXECUTIVE ORDERS

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

Executive Order 11990 for Wetlands

Executive Order 11990 requires federal agencies to prepare wetland assessments for federally funded projects located within or affecting wetlands. Agencies must avoid undertaking new construction located in wetlands unless no practicable alternative is available and the proposed action includes all practicable measures to minimize effects to wetlands. The Proposed Action as described in Chapter 2 will affect a small area of riparian wetland and riverine habitat that qualify as jurisdictional waters. The loss of wetland habitat will be addressed through avoidance, habitat restoration within areas temporarily disturbed during construction, and habitat creation for riparian wetland permanently lost. Reclamation will continue to coordinate with the Corps regarding the Section 404 permit and potential mitigation measures.

Executive Order 11988 for Floodplain Management

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

Executive Order 12898 for Environmental Justice

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

environmental justice, including details on federal responsibilities. The preliminary findings indicate the proposed project will not have an adverse effect on minority and low-income populations.

Executive Order 13007 for Indian Sacred Sites on Federal Land

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

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

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

Indian Trust Assets

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

References

6.1 Literature Cited

- Alabaster, J. S., and R. Lloyd. 1980. *Water quality criteria for freshwater fish*. Boston, Massachusetts: Buttersworth, Inc.
- Ashley, R.P., J.J. Rytuba, R. Rogers, B.B. Kotlyar, and D. Lawler. 2002. Preliminary report on mercury geochemistry of placer gold dredge tailings, sediments, bedrock, and waters in the Clear Creek restoration area, Shasta County, California: U.S. Geological Service.
- Berg, L., and T. G. Northcote. 1985. Changes in territorial, gill-flaring, and feeding behavior in juvenile coho salmon (*Oncorhynchus kisutch*) following short-term pulses of suspended sediment. *Can. J. Fish. Aquat. Sci.* 42:1410-1417.
- Bolt, Beranek, and Newman, Inc. 1971. Noise from construction equipment and operations, building equipment, and home appliances. Washington, D.C.: Prepared for the U.S. Environmental Protection Agency.
- Brown, L.R., P.B. Moyle, and R.M. Yoshiyama. 1994. Historical decline and current status of Coho Salmon in California. *North American Journal of Fisheries Management* 14(2): 237-261.
- Brown-Buntin. 2002. Draft noise element of the General Plan, Trinity County, California: Prepared for the Trinity County Planning Department.
- California Air Resources Board. 2005. *Ambient air quality standards*, May 06, 2005 [cited November 22 2005]. Available from http://www.arb.ca.gov/aqs/aaqs2.pdf.
- California Department of Conservation Division of Mines and Geology. 1999. Fault-rupture hazard zones in California Alquist-Priolo Earthquake Fault Zoning Act with index to earthquake fault zone maps: State of California.
- California Department of Education. 2005. Junction City elementary. Student ethnicity (2004-2005). Great Schools.net 2005 [cited October 25 2005]. Available from http://www.greatschools.net/cgibin/ca/other/7563.
- California Department of Fish and Game. 1986. Mammalian species of special concern in California, Oregon snowshoe hare.
- California Department of Fish and Game. 2000. Guidelines for assessing the effects of proposed projects on rare, threatened or endangered plants and natural communities.
- California Department of Fish and Game, and National Marine Fisheries Service. 2001. Final report on anadromous salmonid fish hatcheries in California. Long Beach, CA: Joint Hatchery Review Committee.

- California Department of Fish and Game. 2002. CWHR version 8.0 personal computer program: California Department of Fish and Game, California Interagency Wildlife Task Group.
- California Department of Fish and Game. 2004. Recovery strategy for California coho salmon. Sacramento, CA: Report to the California Fish and Game Commission. Native Anadromous Fish and Watershed Branch.
- California Department of Fish and Game. 2005. California natural diversity database (CNDDB).
- California Environmental Protection Agency. 2003. *Title 27 division 1 general functions and responsibilities; Subdivision 4 state delegation; Chapter 1 unified hazardous waste and hazardous materials management regulatory program*, November 19, 2003 [cited December 1, 2005]. Available from http://www.calepa.ca.gov/publications/Title27/.
- California Native Plant Society. 2001. *Inventory of rare and endangered vascular plants of California*. Edited by D. P. Tibor. 6th ed. Sacramento, California: California Native Plant Society.
- CELSOC. 2005. 2005 California Environmental Quality Act. CEQA guidelines. Sacramento, CA.
- Center for Economic Development. 2001. Trinity County 2001: economic and demographic profile. Chico, California: Chico Research Foundation, California State University, Chico.
- Center for Economic Development. 2004. Trinity County 2004 economic and demographic profile: California State University, Chico Research Foundation.
- CH2MHill. 2000. Appendix B of the Trinity River mainstem fishery restoration environmental impact statement/report: Prepared for U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Hoopa Valley Tribe, Trinity County.
- Craig, D., and P.L. Williams. 1998. Willow flycatcher (*Empidonax traillii*). In *The riparian bird conservation plan: a strategy for reversing the decline of riparian-associated birds in California:* California Partners in Flight.
- Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station.
- Federal Emergency Management Agency. 1996. Flood insurance study: Trinity County, California, and incorporated areas.
- Federal Highway Administration. 1983. Visual impact assessment for highway projects. Washington, D.C.
- Hampton, M. 1988. Development of habitat preference criteria for anadromous salmonids of the Trinity River. Sacramento, CA: U.S. Fish and Wildlife Service, Division of Ecological Services.
- Hassler, T.J. 1987. Species profiles: Life histories and environmental requirements of coastal fishes and invertebrates (Pacific Southwest)--coho salmon. U.S. Fish and Wildlife Service Biological Report 82(11.70).
- Jennings, M. R., and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. Rancho Cordova, California: California Department of Fish and Game, Inland Fisheries Division.

Jennings, M. R. 1995. Native ranid frogs in California. In Our living resources: a report to the nation on the distribution, abundance, and health of U.S. plants, animals, and ecosystems, edited by E. T. LaRoe, G. S. Farris, C. E. Puckett, P. D. Doran and M. J. Mac. Washington, D. C.: U.S. Department of the Interior, U.S. Geological Survey.

Jones, Alice Goen, ed. 1981. Trinity County historical sites. Weaverville, CA.

- Lawrence and Welch. 2005. Archaeological investigation of the Canyon Creek channel rehabilitation project area for the Trinity River restoration project, Trinity County, California: Bureau of Reclamation Mid-Pacific Region.
- Leidy, R.A., and G.R. Leidy. 1984. Life stage periodicities of anadromous salmonids in the Klamath River basin, Northwestern California.
- LSC Transportation Consultants, Inc. 2005. Trinity County 2005 regional transportation plan, technical memorandum one: Prepared for the Trinity County Transportation Commission.
- May, J. T., R. L. Hothem, W. G. Duffy, C. N. Alpers, and J. J. Rytuba. 2002. Mercury bioaccumulation from historical mining in the Trinity River Watershed, California. Paper read at Society of Environmental Toxicology and Chemistry National Meeting, November 16-20, 2002, at Salt Lake City, Utah.
- Mayer, K. E., and W. F. Laudenslayer Jr., eds. 1988. *A guide to wildlife habitats of California*. Sacramento: California Department of Forestry and Fire Protection.
- McBain and Trush. 1997. Trinity river maintenance flow study final report. Arcata, California.
- McBain and Trush. 2004. Trinity River Hocker Flat Bank Rehabilitation Project: Floodplain inundation flow determination using 1.5-year flood as inundation index. Unpublished.
- McFarland, Jeanne. 2003. Survey results for survey and manage nonvascular plants and fungi for rehabilitation sites on the Trinity River: BLM.
- Michney, F., and M. Hampton. 1984. Sacramento River, Chico Landing to Red Bluff Project, 1984 juvenile salmonid study. Sacramento, CA: U.S. Fish and Wildlife Service, Division of Ecological Services. Prepared for U.S. Army Corps of Engineers.
- Michney, F., and R. Deibel. 1986. Sacramento River, Chico Landing to Red Bluff Project, 1985 juvenile salmonid study. Sacramento, CA: U.S. Fish and Wildlife Service, Division of Ecological Services. Prepared for U.S. Army Corps of Engineers.
- Miller, S.L., and P.A. Herrera. 2005. Trinity River Restoration Program bird monitoring and statistical report: Redwood Sciences Laboratory report to the Trinity River Restoration Program.
- Miller, S.L., C.G. Ralph, and P.A. Herrera. 2003. Monitoring riparian and aquatic birds along the mainstem of the Trinity River (Trinity River Restoration Program Biannual Report 2003). Arcata, CA: USDA Forest Service.
- Moffett, J.W., and S.H. Smith. 1950. Biological investigations of the fishery resources of the Trinity River, California: U.S. Fish and Wildlife Service.
- Moyle, P. B. 2002. Inland fishes of California. Berkeley, California: University of California Press.

- Moyle, P. B., R.M. Yoshiyama, J.E. Williams, and E.D. Wikramanayake. 1995. Fish Species of Special Concern in California, 2nd Edition. Rancho Cordova, California: California Department of Fish and Game, Inland Fisheries Division.
- Myers, J.M., R.G. Kope, G.J. Bryant, D. Teel, L.J. Lierheimer, T.C. Wainwright, W.S. Grant, F.W. Waknitz, K. Neeley, S.T. Lindley, and R.S. Waples. 1998. Status review of chinook salmon from Washington, Idaho, Oregon, and California (NOAA Technical Memorandum NMFS-NWFSC-35).
- North Coast Regional Water Quality Control Board. 2001. Water quality control plan for the north coast region (Basin Plan), as Amended 28 June 2001.
- North Coast Unified Air Quality Management District. 1992. North Coast Air Quality Facts. Eureka, California.
- North Coast Unified Air Quality Management District. 1995. Particulate matter (PM₁₀) attainment plan: draft report. Eureka, California.
- North Coast Unified Air Quality Management District. 1997. Summary of monitoring data in the North Coast Unified Air Quality Management District. Eureka, California.
- North Coast Unified Air Quality Management District. 1998. Regulation 1 air quality control rules, adopted by the Basin Control Council of the California North Coast Air Basin. Eureka, California.
- North Coast Unified Air Quality Management District. 2005. Rules and Regulations. Eureka, California.
- North State Resources, Inc. 2003. 2003 northern spotted owl habitat assessment for the Trinity River Restoration Project. Redding, CA.
- North State Resources, Inc. 2004. Trinity River Mechanical Channel Rehabilitation Project Canyon Creek Suite draft delineation of "Waters of the United States," including wetlands. Redding, CA.
- Office of Environmental Health Hazard Assessment. 2005. Interim fish consumption notification for Trinity River Watershed (Trinity County): Available at: http://www.oehha.ca.gov/fish/so_cal/trinpress.html.
- Pacific Fisheries Management Council. 2000. Amendment 14 to the Pacific Coast Salmon Plan (1997), Appendix A. Portland, OR: Pacific Fisheries Management Council.
- Peterson, Mark D., William Bryant, A., Chris H. Cramer, Tianqing Cao, Michael Reichle, Arthur D. Frankel, James J. Lienkaemper, Patricia A. McCrory, and David P. Schwartz. 1996. Probabilistic seismic hazard assessment for the State of California: California Department of Conservation, Division of Mines and Geology and U.S. Geological Survey.
- Pevar, S.L. 1992. *The rights of Indians and Tribes: the basic ACLU guide to Indian and Tribal rights.* Second ed: Southern Illinois University Press.
- Powers, S. 1976. Tribes of California: contributions to North American ethnology vol III: Department of Interior, U.S. Geographical and Geological Survey of the Rocky Mountain Region, U.S. Government Printing Office, 1877 - reprinted by University of California Press.

- Sandercock, F.K. 1991. *Life history of coho salmon (Oncorhynchus kisutch)*. Edited by C. G. a. L. Margolis, *Pacific Salmon Life Histories*: UBC Press, Vancouver, Canada.
- Sinnen, W., Currier, M., and S. Borok. 2005. Annual Report: Trinity River basin salmon and steelhead monitoring project 2003-2004 season. Redding, California: California Department of Fish and Game, North Coast Region.
- Sommer, T., B. Harrell, M. Nobriga, R. Brown, P. Moyle, W. Kimmerer, and L. Schemel. 2001. California's Yolo Bypass: Evidence that flood control can be compatible with fisheries, wetlands, wildlife, and agriculture. *Fisheries. American Fisheries Society*. 26. (8): 6-16.
- Thelander, C.G., and M. Crabtree. 1994. *A guide to California's endangered natural resources: wildlife*. Santa Cruz, California: BioSystems Books.
- Trinity County. 1987. Junction City community plan.
- Trinity County. 2001. Trinity County general plan.
- Trinity County Planning Department. 2002a. Major evacuation routes, Trinity County general plan safety element. Weaverville, CA: Trinity County Planning Department.
- Trinity County Planning Department. 2002b. Fire start locations by cause, Trinity County general plan safety element. Weaverville, CA: Trinity County Planning Department.
- U.S. Army Corps of Engineers. 1976. Flood plain information, Trinity River, Lewiston Lake to Junction City, Trinity County, California.
- U.S. Bureau of Land Management. 1993. Redding Resource Management Plan and Record of Decision. Redding, California: U.S. Bureau of Land Management.
- U.S. Bureau of Land Management. 2003a. *Visual resource inventory (Manual H-8410-1)*, March 25, 2003a [cited November 2005]. Available from http://www.blm.gov/nstc/VRM/8410.html.
- U.S. Bureau of Land Management. 2003b. *Visual resource contrast rating (Manual 8461)* [web site], March 25, 2003b [cited November 2005]. Available from http://www.blm.gov/nstc/VRM/8410.html.
- U.S. Bureau of Land Management. 2005. *Special-status plants of the Redding Field Office*. Bureau of Land Management, January 4, 2005 [cited November 2, 2005]. Available from http://www.ca.blm.gov/pa/ssp/fo/redssp.htm.
- U.S. Bureau of Reclamation. 2003. Trinity River Restoration Program: Trinity River Bridges Project environmental assessment/environmental impact report: Trinity River Restoration Program.
- U.S. Bureau of Reclamation. 2004. *Trinity River Restoration Program: Hocker Flat Rehabilitation Site: Trinity River Mile 78 to 79.1.* Vol. November: Trinity River Restoration Program.
- U.S. Census Bureau. 2004 population estimates (geographies ranked by estimate). U.S. Census Bureau [cited October 19, 2005]. Available from http://factfinder.census.gov/servlet/GCTTable?_bm=y&-geo_id=04000US06&-_box_head_nbr=GCT-T1-R&-ds_name=PEP_2004_EST&-_lang=en&-format=ST-2S&-_sse=on.

- U.S. Census Bureau. 2000. 2004 population estimates (geographies ranked by estimate). U.S. Census Bureau 2000 [cited October 19, 2005]. Available from http://factfinder.census.gov/servlet/GCTTable?_bm=y&-geo_id=04000US06&-__box_head_nbr=GCT-T1-R&-ds_name=PEP_2004_EST&-_lang=en&-format=ST-2S&-_sse=on.
- U.S. Census Bureau. 2002. *Table 19. California race and Hispanic origin: 1850 to 1990*, September 13, 2002[cited October 24 2005]. Available from http://www.census.gov/population/documentation/twps0056/tab19.xls.
- U.S. Census Bureau. 2004. 2004 American community survey data profile highlights: California 2004 [cited October 24 2005]. Available from http://factfinder.census.gov/servlet/ACSSAFFFacts?_event=&geo_id=04000US06&_geoContext=01 000US%7C04000US06&_street=&_county=&_cityTown=&_state=04000US06&_zip=&_lang=en& _sse=on&ActiveGeoDiv=&_useEV=&pctxt=fph&pgsl=040.
- U.S. Census Bureau. 2005. *Population estimates*. U.S. Census Bureau, June 29 2005 [cited October 26 2005]. Available from http://www.census.gov/popest/estimates.php.
- U.S. Department of Agriculture. 1998. Soil Survey of Trinity County, California, Weaverville Area.
- U.S. Department of Agriculture, and U.S. Department of the Interior. 1994. Record of decision and standards and guidelines for amendments to Forest Service and Bureau of Land Management lead agency. Management planning documents within the range of the northern spotted owl.
- U.S. Department of Agriculture, and U.S. Department of Interior. 2001. Record of decision and standards and guidelines for amendments to the survey and manage, protection buffer, and other mitigation measures, standards, and guidelines.
- U.S. Department of Agriculture, and Department of the Interior. 2004. Record of decision to remove or modify the survey and manage mitigation measure standards and guidelines.
- U.S. Department of Interior. 2000a. Record of Decision. Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/Environmental Impact Report.
- U.S. Department of Interior. 2000b. Record of Decision. Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/Environmental Impact Report.
- U.S. Department of the Interior. 1995. Memorandum on Klamath Project operation plan (KPOP) regarding certain legal rights and obligations related to the U.S. Bureau of Reclamation, Klamath Project: U.S. Department of the Interior, Office of the Solicitor.
- U.S. Environmental Protection Agency. 2000. Water quality standards; establishment of numeric criteria for priority toxic pollutants for the State of California: U.S. Environmental Protection Agency.
- U.S. Environmental Protection Agency. 2001. Trinity River total maximum daily load for sediment. San Francisco, CA.
- U.S. Environmental Protection Agency. 2004. National recommended water quality criteria: Office of Water and Office of Science and Technology.

6-6

- U.S. Fish and Wildlife Service. 1980. Environmental impact statement on the management of river flows to mitigate the loss of the anadromous fishery of the Trinity River, California. Volumes I and II. Sacramento, CA: U.S. Fish and Wildlife Service, Division of Ecological Services.
- U.S. Fish and Wildlife Service. 1983. Final environmental impact statement: Trinity River Basin fish and wildlife management program (INT/FES 83-53). Sacramento, CA: U.S. Department of Interior, Fish and Wildlife Service.
- U.S. Fish and Wildlife Service. 1994. Rehabilitation of the mainstem Trinity River background report. Weaverville, CA: Trinity River Fishery Resource Office.
- U.S. Fish and Wildlife Service. 1995. Shasta-Trinity National Forests land and resource management plan. San Francisco, CA: U.S. Forest Service, Pacific Southwest Region.
- U.S. Fish and Wildlife Service, and Hoopa Valley Tribe. 1999. Trinity River flow evaluation final report.
- U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Hoopa Valley Tribe, and Trinity County. 1999. Draft environmental impact statement/report for the Trinity River mainstem fishery restoration.
- U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Bureau of Land Management, Hoopa Valley Tribe, California State Historical Preservation Officer, and Advisory Council on Historic Fishery Preservation. 2000a. Programmatic Agreement Regarding Implementation of the Trinity River Fishery Restoration.
- U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Hoopa Valley Tribe, and Trinity County. 2000b. Trinity River mainstem fishery restoration final environmental impact statement/environmental impact report.
- U.S. Office of Management and Budget. 1987. Standard industrial classification manual: Executive Office of the President, U.S. Office of Management and Budget.
- U.S. Soil Conservation Service. 1978. Procedure to establish priorities in landscape architecture. Washington, D.C.
- USDA Forest Service. 1995. Shasta-Trinity National Forest Land and Resource Management Plan (LRMP).
- USDA Forest Service, and Bureau of Land Management. 2003. Survey and manage mollusc species: survey of the mainstem Trinity River from Lewiston Dam to the North Fork Trinity (river mile 110 to 72) in spring 2002. Hayfork, CA: Watershed Research and Training Center.
- USDA Soil Conservation Service. 1981. Land resource regions and major land resource areas of the United States. Vol. AH 296. Washington, D.C.: U.S. Government Printing Office.
- Welsh, H., D. Ashton, and J. Bettaso. 2003. Pre-construction monitoring of herpetofauna at proposed restoration sites along the mainstem Trinity River: 2003 biannual report. Arcata, CA: Prepared for the Trinity River Restoration Program. USDA Forest Service, Pacific Southwest Region, Redwood Sciences Laboratory, and U.S. Department of the Interior, Fish and Wildlife Service.
- Western Regional Climate Center. 2005. *Trinity River hatchery, California (049026) climate summary,* 8/1/74 to 3/31/2005 [web site] 2005 [cited 2005]. Available from www.wrcc.dri.edu/summary/climsmnca.html.

- Zeiner, D. C., W. F. Laudenslayer Jr., K. E. Mayer, and M. White, eds. 1990a. *California's wildlife Volume II: Birds*. Sacramento, California: California Department of Fish and Game.
- Zeiner, D. C., W. F. Laudenslayer Jr., K. E. Mayer, and M. White, eds. 1990b. *California's wildlife Volume III: Mammals*. Sacramento, California: California Department of Fish and Game.
- Zeiner, D. C., W. F. Laudenslayer Jr., K. E. Mayer, and M. White, eds. 1990c. California's wildlife Volume I: Amphibians and reptiles. Sacramento, California: California Department of Fish and Game.

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List of Acronyms and Abbreviations

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

| CHP | California Highway Patrol |
|-----------------|--|
| CLOMR | conditional letter of map revision |
| CNDDB | California Natural Diversity Database |
| CNEL | community noise equivalent level |
| CNPS | California Native Plant Society |
| CO | carbon monoxide |
| CO ₂ | carbon dioxide |
| Commission | California State Fish and Game Commission |
| Corps | U.S. Army Corps of Engineers |
| County | Trinity County |
| CRA | California Resources Agency |
| CRHR | California Register of Historic Resources |
| CTR | California Toxics Rule |
| CUPA | Certified Unified Program Agency |
| CVP | Central Valley Project |
| CVPIA | Central Valley Project Improvement Act |
| CVP | Clean Water Act |
| d ₅₀ | mean diameter of channel bed material |
| dB | logarithmic decibel |
| dBA | "A-weighted" decibel scale |
| DEIS | draft environmental statement |
| DOI | U.S. Department of the Interior |
| DTSC | Department of Toxic Substances Control |
| DWR | California Department of Water Resources |
| EA | Environmental Assessment |
| EA/DEIR | Environmental Assessment/Draft Environmental Impact Report |
| EDD | California Employment Development Department |
| EFH | essential fish habitat |
| EFHA | Essential Fish Habitat Assessment |
| e.g. | for example |
| EIR | Environmental Impact Report |
| EIS | Environmental Impact Statement |
| EPA | U.S. Environmental Protection Agency |
| ESA | Endangered Species Act |
| ESU | Evolutionarily Significant Unit |
| et al. | and others |
| et seq. | the following ones |
| FDA | Food and Drug Administration |
| FEIS/EIR | Final Environmental Impact Statement/Environmental Impact Report |
| FEMA | Federal Emergency Management Agency |
| FHO | Flood Hazard Overlay |
| FIRM | Flood Insurance Rate Maps |
| FMP | Fishery Management Plan |
| FONSI | Finding of No Significant Impact |

| FR | Federal Register |
|------------------|--|
| FY | fiscal year |
| GIS | geographic information system |
| H ₂ S | hydrogen sulfide |
| HEC-RAS | Hydraulic Engineering Center River Analysis System |
| Hg | mercury |
| HVT | Hoopa Valley Tribe |
| i.e. | that is |
| ISMS | Interagency Species Management System |
| JCVFD | Junction City Volunteer Fire Department |
| KFMC | Klamath Fishery Management Council |
| kg | kilogram |
| KMP | Klamath Mountains Province |
| KOP | key observation point |
| L _{dn} | day-night average sound level |
| L _{eq} | equivalent noise levels |
| LOMP | letter of map revision |
| LRMP | Land and Resource Management Plan |
| LWD | large woody debris |
| m | meter |
| MBTA | Migratory Bird Treaty Act |
| maf | million acre-feet |
| MCE | maximum credible earthquake |
| MCL | maximum contaminant level |
| MDBM | Mount Diablo Base and Meridian |
| mg | milligram |
| ml | milliliters |
| MMRP | Mitigation Monitoring and Reporting Program |
| MOU | memorandum of understanding |
| mph | miles per hour |
| MSA | Magnuson-Stevens Fishery Conservation and Management Act |
| msl | mean sea level |
| NAAQS | National Ambient Air Quality Standards |
| NAD | North American Datum |
| NAHC | Native American Heritage Commission |

| NCAB NCRWQCB NCUAQMD NEPA NHPA NMFS NOAA NOI NOA NOI NO2 NOD NOD NOP NPDES NRCS NRHP | North Coast Air Basin North Coast Regional Water Quality Control Board North Coast Unified Air Quality Management District National Environmental Policy Act National Historic Preservation Act National Marine Fisheries Service (now NOAA Fisheries) National Oceanic and Atmospheric Administration Notice of Intent nitrogen oxide gases nitrogen dioxide Notice of Determination Notice of Preparation Notice of Preparation National Pollutant Discharge Elimination System Natural Resource Conservation Service National Register of Historic Places |
|--|---|
| NSR | North State Resources, Inc. |
| NTU | nephelometric turbidity unit |
| O3 OEHHA OES | ozone Office of Environmental Health Hazard Assessment |
| OHP | Office of Emergency Services Office of Historic Preservation |
| ORVs | |
| OSHA | Outstandingly Remarkable Values |
| USHA | Occupational Safety and Health Administration |
| PA Pb | Programmatic Agreement Lead |
| PFMC | Pacific Fishery Management Council |
| | peak ground acceleration |
| pga n m | night |
| p.m. PM _{2.5} | fine particulate matter (particulate matter less than 2.5 microns in aerodynamic |
| PM_{10} | diameter) particulate matter less than 10 microns in aerodynamic diameter |
| ppb | parte unater less than to merons in acrodynamic transfer |
| | parts per million |
| ppm | parts per minion |
| 0 | flow rate (typically expressed in cfs) |
| Q Q ₅₀ | 50-year flood flow |
| $Q_{50} Q_{100}$ | base or 100-year flood flow |
| Q_{100} Q_{max} | maximum unobstructed flow |
| Q _{max} Q _{MCR} | maximum unoostitucted now maximum controlled-flow release |
| Qmcr Q ₁₉₉₇ | estimated flow during 1/1/97 |
| ORV | outstandingly remarkable values |
| | outsummingly temarkable values |
| PA | Programmatic Agreement |
| PFMC | Pacific Fishery Management Council |
| PL | Public Law |
| | |

| RCRA | Resource Conservation and Recovery Act |
|--|--|
| Reclamation | U.S. Bureau of Reclamation |
| REIS | Regional Economic Information System |
| Regional Water Board | North Coast Regional Water Quality Control Board |
| RM | River Mile |
| RMP | Resource Management Plan |
| ROD | Record of Decision |
| ROW | right-of-way |
| RPM | reasonable and prudent measures |
| RSL | Redwood Science Laboratory |
| RVD | Recreational Visitor Day |
| RWQCB | Regional Water Quality Control Board |
| SCH | State Clearinghouse |
| Sec | section |
| SEIS | Supplemental Environmental Impact Statement |
| SHPO | California State Historic Preservation Officer |
| SLC | California State Lands Commission |
| SO ₂ | sulfur dioxide |
| SMARA | Surface Mining and Reclamation Act |
| SONCC | Southern Oregon/Northern California Coasts |
| SR | State Route |
| SRA | shaded riverine aquatic |
| State Water Board | State Water Resources Control Board |
| STNF | Shasta-Trinity National Forest |
| SWPPP | Storm Water Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TCLP TCRCD TCSD TMC TMDL TRD TRFE TRFES TRMFR TRRP TRSSH | Toxicity Characteristic Leaching Procedure Trinity County Resource Conservation District Trinity County Sheriff's Department Trinity Management Council Total Maximum Daily Load Trinity River Diversion Trinity River Flow Evaluation Trinity River Flow Evaluation Trinity River Flow Evaluation Study Trinity River Mainstem Fishery Restoration Trinity River Restoration Program Trinity River Salmon and Steelhead Hatchery |
| USC | United States Code |
| USDA | U.S. Department of Agriculture |
| USFS | U.S. Forest Service |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |

| VAU | visual assessment unit |
|------|--|
| VRM | Visual Resource Management |
| WCB | California Wildlife Conservation Board |
| WDRs | Waste Discharge Requirements |
| WMA | Weed Management Area |
| WQC | Water Quality Certification |
| WSE | water-surface elevation |
| WSRA | Wild and Scenic Rivers Act |

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Distribution List

9.1 Federal Agencies

- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Department of Interior, Bureau of Land Management
- NOAA Fisheries
- U.S. Forest Service
- Natural Resource Conservation Service

9.2 State Agencies

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

9.3 Local Agencies

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

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