

Watershed Restoration in the Foundational Documents
of the Trinity River Restoration Program

Prepared by Jeffrey Hayes

September 2012

The Trinity River Record of Decision directs the Department's agencies to implement the Preferred Alternative as described in the FEIS/R (ROD, pg 2, paragraph 3). The Preferred Alternative is the Flow Evaluation Alternative combined with the watershed protection component of the Mechanical Restoration Alternative (DEIS/R*, pg 2-3, paragraph 2). An explanation of this combination is given below:

“The watershed protection component of the Mechanical Restoration Alternative was included within the Preferred Alternative because the lead agencies believe it would enhance the benefits derived from the Flow Evaluation Alternative (although the model used to evaluate changes in fish production did not detect a measurable increase). Furthermore, the proposed watershed protection activities were included as part of the Preferred Alternative because (1) they have been determined in the past to help restore fish habitat by reducing sediment inputs to the Trinity River mainstem; (2) they are consistent with the ROD for the Northwest Forest Plan and its Aquatic Conservation Strategy to reduce upslope sediment production by improving drainage on necessary roads, while also decommissioning roads that no longer serve management purposes; (3) they are consistent with the Total Maximum Daily Load (TMDL) process established under the Clean Water Act, which has identified the Trinity River as a waterbody impaired by sediment and in need of remedial measures; and (4) a broad range of interest groups (e.g., environmentalists and Central Valley water users) specifically requested that non-flow watershed protection measures be fully considered for inclusion into the Preferred Alternative” (DEIS/R, pg 2-4, paragraph 1).

The Record of Decision concurs with the DEIS about watershed restoration:

“This decision recognizes that restoration and perpetual maintenance of the Trinity River's fishery resources require rehabilitating the river itself, restoring the attributes that produce a healthy, functioning alluvial river system. Therefore, the components of the selected course of action include: Watershed

*All DEIS references in this report are unchanged in the FEIS.
restoration efforts, addressing negative impacts which have resulted from land use practices in the Basin” (ROD, pg 2, paragraph 5 and pg 3, bulleted list).

The Mechanical Restoration Alternative includes accelerated road decommissioning, road maintenance, and road rehabilitation on public and private lands (DEIS/R, pg 2-29, paragraph 1). More specifically:

“Road decommissioning would consist of removing culverts, out-sloping, and ripping roads (primarily Level 1 roads) that cannot be maintained with existing and foreseeable budgets. Many of the roads are already closed to public traffic, but pose potential and ongoing erosion problems. Rehabilitation of the remaining roads would consist of resurfacing or culvert replacement over 22 years to support ongoing USFS, county, and private efforts, which are currently very limited due to funding and staffing. Annual maintenance, which is primarily grading and some placing of rock, would ensure that all drainage structures perform as designed” (DEIS/R, pg 2-29, paragraph 3).

Details on estimated volumes of sediment removed are included in the DEIS/R on page 2-29, paragraphs 4.

The location of watershed restoration,

“Would primarily be focused on public lands within Trinity National Forest watershed (South Fork and mainstem areas below Lewiston Dam), which contains approximately 3,450 miles of mostly unpaved roads. The area would also include a small portion of the Six Rivers National Forest in the lower South Fork and lower mainstem watersheds, as well as the private lands and county roads within the entire Trinity River watershed” (DEIS/R, pg 2-29, paragraph 2).

The Record of Decision identifies who will guide the watershed restoration efforts and corroborates the DEIS/R locations of where this can take place:

“The Trinity Management Council will guide an upslope watershed restoration program to address the problems of excessive sediment input from many of the tributaries of the Trinity River resulting from land use practices. The watershed protection program of the Preferred Alternative includes road maintenance, road rehabilitation and road decommissioning on private and public lands within the Trinity River basin below Lewiston Dam, including the South Fork Trinity River basin” (ROD, pg 14, paragraph 2).

Furthermore,

“Nothing in this ROD is intended to preclude watershed restoration and monitoring, provided funding is available, below the confluence of the Trinity and Klamath Rivers. Because the TRFES and ROD focus on the Trinity River mainstem and Trinity Basin, watershed restoration and monitoring that benefit Trinity River fisheries below the confluence of the Trinity and Klamath Rivers may be considered by the Trinity Management Council” (ROD, pg 15, paragraph 4).

The estimated costs of the watershed work were as follows:

“The road maintenance cost is estimated at \$1,781,000 for the first year. Road decommissioning is expected to lower this cost by approximately 40 percent to \$1,069,000 by year 22 (average annual cost across the first 22 years is \$1,425,000). Perpetual road maintenance at the \$1,069,000 level is expected after reaching the 22-year mark” (DEIS/R, pg 2-31, paragraph 2).

“Road decommissioning/rehabilitation is planned for only the first 22 years, at an average annual cost of \$1,123,000. Total road decommissioning/rehabilitation over the 22-year period would cost approximately \$24.7 million” (DEIS/R, Page 2-31, paragraph 3).

The Implementation Plan for the Preferred Alternative of the Trinity River EIS/EIR located in Appendix C of the FEIS/R also details the upslope watershed restoration component (FEIS/R, pg C-1, paragraph 1). The background, description of work activities, prioritization, and funding sources of the watershed protection program are detailed from pages C-13 to C-17 (sections 5.1 to 5.4). Table 6 projects funding for ROD Implementation (pg C-30). “For watershed restoration, \$2 million annually for roughly 20 years is necessary” (footnote to Table 6, page C-30). The Implementation Plan recommended the following criteria for prioritizing watershed restoration:

1. “Tributary watersheds located between the North Fork Trinity confluence and Lewiston Dam shall be the highest priority.
2. Key watersheds designated pursuant to the Northwest Forest Plan
3. Refugia stream reaches noted for accommodating wild stocks of salmon and steelhead and/or listed species pursuant to/under the Endangered Species Act.
4. Roaded stream crossings at risk of catastrophic failure or migration barriers for anadromous fish.

5. Lands that are available for restoration because of landowner permission and/or completion of environmental compliance and permitting (Watershed Analysis, NEPA/CEQA/CWA 404, 401, etc.).
6. Projects that provide a cost share from the landowner/agency or other funding sources.
7. Sub-watersheds identified as priorities through the TMDL, as well as State and Tribal Water Quality Control Plan processes and monitoring programs.
8. Projects that allow continued collaboration through the restoration infrastructure of TCRC and NRCS" (FEIS/R, C-15-16, numbered list).

In summary, the Trinity River Record of Decision and the Trinity River Mainstem Fishery Restoration FEIS/R are in agreement that watershed restoration is to be conducted. The ROD specifically says this is to be done by "the Department's agencies" (The U.S. Fish & Wildlife Service and the Bureau of Reclamation). The ROD and the FEIS/R both say this is to be accomplished by reducing sediment input from land use practices, specifically targeting roads. Both documents say this work can take place anywhere in the Trinity River watershed, and the ROD says work can be considered downstream of the Trinity and Klamath River confluence. The FEIS/R estimates road maintenance costs to average \$1,425,000/yr for the first 22 years, and \$1,069,000/yr after that. Road decommissioning/rehabilitation cost estimates are \$1,123,000/yr for 22 years. The Implementation Plan reduces the average annual cost estimates and number of years contained earlier in the FEIS/R from \$2,548,000/yr for the first 22 years to \$2,000,000/yr for 20 years. The Implementation Plan then provides a list of criteria for prioritizing projects. The ROD calls upon the Trinity Management Council to guide this effort.

References

(DEIS) U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Hoopa Valley Tribe, and Trinity County. October 1999. Trinity River Mainstem Fishery Restoration Environmental Impact Statement/Report. Public Draft.

(FEIS) U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Hoopa Valley Tribe, and Trinity County. October 2000. Trinity River Mainstem Fishery Restoration Environmental Impact Statement/Report. Final. State Clearinghouse No. 1994123009.

(ROD) U.S. Department of the Interior. December 2000. Record of Decision, Trinity River Mainstem Fishery Restoration, Final Environmental Impact Statement/Environmental Impact Report.