

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

Mr. Michael J. Spear  
California- Nevada Operations Office  
U.S. Fish & Wildlife Service  
Department of the Interior  
2800 Cottage Way, W-2606  
Sacramento, CA. 95825-1846

1/20/2000

Dear Mr. Spear:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the project entitled **Trinity River Mainstem Fishery Restoration, Trinity County, California**. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The US Fish and Wildlife Service (FWS), US Bureau of Reclamation (BOR), Hoopa Valley Tribe, and Trinity County propose to implement recommendations for permanent instream fishery flow requirements, habitat restoration projects, and operating criteria and procedures for the Trinity River Division (TRD) of the Central Valley Project (CVP), California, necessary for the restoration and maintenance of natural production of anadromous fish in the Trinity River. These recommendations are required by the January 14, 1981, Secretarial Decision that initiated the Trinity River Flow Evaluation Study; the Trinity River Basin Fish and Wildlife Management Act (Public Law 98-541); and the Central Valley Project Improvement Act (CVPIA)(Public Law 102-575). EPA provided written comments on the Notice of Intent to prepare the DEIS on December 1, 1994.

In 1955, Congress authorized the construction of Lewiston and Trinity Dams on the Trinity River, and associated structures to export "surplus" Trinity River water into the Central Valley and to adopt appropriate measures to insure the preservation and propagation of fish and wildlife in the Trinity River Basin. From 1965-97 approximately 75 percent of Trinity River water above Lewiston was exported. The dramatically reduced instream flows resulted in substantial detrimental changes to the river, with associated declines in anadromous fish production. In 1981, the Secretary of the Interior (Secretary) directed FWS to conduct a study of the effectiveness of increased flows in restoring salmon and steelhead populations. The 1992 CVPIA increased the interim instream releases from 120,500 af/yr to 340,000 af/yr and directed the Secretary to develop recommendations for permanent instream flow requirements, TRD operating criteria, and procedures for restoring and maintaining the Trinity River fishery.

Six alternatives are evaluated: 1) No Action - the future condition in the year 2020, 2) Maximum Flow - operation of TRD solely for Trinity River flows with no water exports to the CVP, 3) Flow Evaluation - the alternative based on recommendations of the Trinity River Flow Evaluation Study (Flow Evaluation Study), 4) Percent Inflow - operation of TRD to approximate natural flow patterns at a reduced rate of 40 percent of the previous weeks inflow into Trinity Reservoir, 5) Mechanical Restoration - reliance on existing flow management and additional channel rehabilitation and restoration projects, and 6) State Permit - operation of TRD in accordance with the minimum flow of 120,500 af/yr under BOR's existing water permit with the State Water Resources Control Board (SWRCB).

The Flow Evaluation alternative, coupled with additional watershed protection efforts (e.g., accelerated road decommissioning, road maintenance), was identified as the Preferred Alternative by project proponents because it best meets the purpose, need, goals, and objectives, while also minimizing adverse impacts. According to the DEIS, the preferred alternative substantially increases natural production of anadromous fish on the Trinity River mainstem, substantially restores inriver and ocean fishing opportunities, improves tribal access to trust resources, balances environmental and social beneficial and adverse impacts across the Trinity River Basin, Lower Klamath River Basin/Coastal Area, and the Central Valley, allows for the continued operation of the TRD including water exports, and limits flooding impacts on the Trinity River. The Preferred Alternative would significantly reduce water quality standard violations on the Trinity River.

We commend the scientifically-based approach which focuses on restoration of river fluvial processes and channel morphology of a healthy alluvial river (Flow Evaluation Study, Chap. 8; DEIS, Chap. 3.2). Of special note is the Adaptive Management proposal and the decision to integrate the watershed protection measures into the Flow Evaluation alternative in order to maximize benefits of the Preferred Alternative.

We strongly support the Preferred Alternative and urge approval, funding, and implementation of this alternative as soon as possible. It is obvious from the DEIS evaluation that the Preferred Alternative will provide significant benefits to fisheries, water quality, Tribal trust assets, vegetation, wildlife, and wetlands. As noted as early as 1981, the Trinity River is highly degraded and in urgent need of restoration. We also support the proposal to amend the BOR's existing SWRCB water permit to be consistent with the decision made to ensure there is no question regarding minimum instream flows, minimum reservoir storage, and TRD operational requirements.

While we strongly support the Preferred Alternative, we believe additional measures are needed to ensure full protection of the environment, such as creation and restoration of cold-water pool refugia and other cold water habitats. Therefore, we have rated the Preferred Alternative as category EC-2, Environmental Concerns - Insufficient Information (see attached "Summary of the EPA Rating System"). Our detailed comments are enclosed.

The DEIS indicates that the State Permit alternative would have significant adverse effects on the Trinity River ecosystem, associated fisheries, and water quality. Furthermore, while the No Action, Percent Inflow, and Mechanical Restoration alternatives would provide minimal benefits, they may also perpetuate the negative ecosystem and fishery trends in the Trinity River. Thus, as currently described in the DEIS, we would object to implementation of these alternatives, and recommend that they not be carried forward as a preferred alternative in the Final EIS.

We appreciate the opportunity to review the DEIS. Please send three copies of the Final EIS to the above letterhead address at the same time it is officially filed with our Washington D.C. Office. If you have any questions, please call me at (415) 744-1584, or Laura Fujii, of my staff, at (415) 744-1601.

Sincerely,

David Farrel, Chief  
Federal Activities Office

Enclosure: Detailed Comments, 5 pages  
Attachment A Iron Mtn Superfund Site Information  
EPA Rating Summary

Filename: trinitydeis.wpd  
MI002317

cc: Joe Polos, US Fish and Wildlife Service  
Russell Smith, Bureau of Reclamation  
Jim Bybee, National Marine Fisheries Service  
James M. Stubchaer, Chairman, California SWRCB  
Robert Franklin and James Roble, Hoopa Valley Tribe  
Mike Belchik, Yurok Tribe  
Tom Stokely, Trinity County

## **COMMENTS**

### **Water Quality**

1. The DEIS states that high summer water temperatures in the Trinity River are a potential fishery problem. This problem is due, in part, to the loss of cold water habitat above Lewiston Dam and the lack of flushing flows to maintain cold-water pool refugia. While the Preferred Alternative substantially reduces the frequency of Trinity River temperature violations, problems from high water temperature could still occur during dry

years. (Executive Summary, pg. xii; DEIS Chap. 3, pg. 3-1442). Restoration of cold-water pool refugia and other cold water habitats does not appear to be considered in the Preferred Alternative. Given the urgent need for cold water refugia, we urge you to identify additional habitat restoration measures, including dredging of pools as part of the fish habitat management measures, assuming that: 1) no feasible flow or watershed restoration alternatives would otherwise result in adequate scouring of pools to re-establish cold water refugia habitat, and 2) dredging activities will be done in a manner that minimizes fine sediment impacts and potential water quality violations (e.g., increased turbidity) downstream.

2. Channel rehabilitation projects and spawning gravel placement are key components of the Preferred Alternative which help ensure significant fishery benefits. We note that these projects are included in the Preferred Alternative to compensate for the fact that full historical flows will not be restored to the basin. Without full historical flows, restoration of healthy alluvial river characteristics cannot be achieved without use of mechanical means. These restoration projects are very expensive and will require a large dedicated funding source. Without adequate and assured funding, there may be no restoration nor their associated fishery benefits. In the absence of rehabilitation projects and spawning gravel placement, it is possible the fishery could continue to decline even with the increased instream flows and modified water export pattern. We strongly recommend that the FEIS and Record of Decision (ROD) include a default provision which would ensure additional water for flows to the Trinity River, adequate to accomplish the Trinity River restoration goals, to compensate for the lack of funds for rehabilitation projects. The FEIS should also describe in detail all proposed funding mechanisms, the reliability of these funding sources, and other fallback options in case adequate appropriations are not received.

3. The executive summary of the DEIS (pg. v) states that the watershed protection activities (e.g., road maintenance) are consistent with the Total Maximum Daily Load (TMDL) process. Certainly sediment reduction efforts will assist the TMDL effort. Since the TMDL for the Trinity River Mainstem has not been developed yet, it cannot be determined if the sediment reduction actions called for will fully achieve TMDL requirements. To ensure full consistency with the TMDL process, we urge the project proponents to work closely with EPA when the TMDL for the Trinity River Mainstem is developed. The EPA Trinity River Mainstem TMDL contact is Chris Heppe at 707-825-2311.

4. The DEIS (pg. v, executive summary) also states that the watershed protection activities are consistent with the Northwest Forest Plan. Sediment reduction efforts (e.g., road decommissioning) by the US Forest Service under the Aquatic Conservation Strategy of the Northwest Forest Plan have not always been completely successful or adequate. Therefore, project proponents should not assume that watershed protection and restoration will be achieved on federal lands in the Trinity River Basin given the lack of sufficient funding and resources for the US Forest Service to complete this work. Again, we recommend default provisions in the FEIS and ROD to ensure Trinity River restoration goals are met in the event that these watershed protection activities are not implemented or fully successful.

5. The DEIS appears to lack an outline for monitoring the effects of the proposed project on the ecosystem. Monitoring is a critical component of the project, especially given the proposed adaptive management program. While the Flow Evaluation Study's Appendix O: AEAM Tasks for Improving Understanding of the Alluvial River Attributes and Biological Responses in the Trinity River helps describe what could be done, it does not clearly state how effects will be measured and evaluated. The FEIS should provide a detailed monitoring plan which clearly states what will be measured, where, when, and by whom, and how this information will be provided to Federal, State, and Tribal entities.

6. The DEIS states that the adaptive management program would assess the effects of reservoir operations, instream flows and mechanical habitat manipulations on biotic resources of the Trinity River. Specifically, the program would:

(1) define objectives in measurable terms;

(2) develop hypotheses, build models, compare options and design system manipulations and monitoring programs;

(3) propose modifications to operations that protect, conserve and enhance biotic resources, and;

(4) implement research and monitoring programs to examine how selected management actions meet resource management objectives.”

We recommend the FEIS provide more specifics concerning how the above assessments will be done and by whom. We also recommend the adaptive management program provide details on how, when, and by whom changes in project operations and flows would be “triggered”, if necessary, based upon monitoring and future assessments.

7. The Water Management Section (pgs. 2-17, 2-18) of the DEIS lists the North Coast Regional Water Quality Control Board (NCRWQCB) temperature standards for summer and fall for the Trinity River at Douglas City. The DEIS then states: “Generally, flows of 450 cfs would be required during these periods to meet these temperatures.” It should be clear that the Preferred Alternative was designed to meet the temperature standards adopted by the NCRWQCB (and approved by the State and EPA) which apply between Lewiston Dam and Douglas City. We note that problem temperatures could continue to occur further downriver and should be addressed via activities such as creating and enhancing cold water refugia (please refer to Water Quality Comment #1 above).

## **Alternatives**

EPA supports the return of sufficient flows to the Trinity River to ensure full restoration of healthy alluvial river attributes and restoration and maintenance of natural production of an anadromous fishery. The DEIS appears to evaluate in detail only a few flow alternatives significantly greater than existing flows: the Flow Evaluation alternative which would return approximately 50% of historical flows and the Maximum Flow alternative which would return 100% of historical flows. It is not clear whether intermediate flows (e.g., those between 50% to 100% return of historical flows) or different seasonal flows (e.g., pre-dam natural flow distribution), were evaluated. Nor is it clear what percent of historical flows or flow distributions would maximize restoration of healthy alluvial river attributes and restoration and maintenance of natural production of an anadromous fishery. We recommend the FEIS include additional information either evaluating the return of other

percentages of historical flows (e.g., 70% return) and different seasonal flows or, if such evaluations have already been done, providing a description of the results of these evaluations and the justification of why the specific alternative flows were chosen for detailed evaluation in the DEIS.

### **Groundwater Resources**

It is assumed in the DEIS that the cumulative decrease in available CVP water supply may result in increased groundwater pumping and the potential for groundwater overdraft and land subsidence in the Central Valley (DEIS Chap 3., pg. 3-119). Proposed mitigation includes development of demand- and supply-related water supply programs (e.g., CALFED, CVPIA). We also recommend a discussion of the feasibility of developing groundwater management plans, more stringent regulation of groundwater aquifers, and, where appropriate (e.g. high selenium lands), accelerated land retirement and fallowing.

### **Water Supply**

We note that cumulative impacts of increased 2020 population and water demands, 2020 development and growth, other environmental requirements (e.g., CVPIA, Biological Opinions), and reduced CVP system flexibility (Pg. 4-29), will result in decreased surface-water supplies, especially for CVP agricultural service contractors during dry and critically dry years. The DEIS clearly states that the proposed Trinity River Mainstem Fishery Restoration Project would result in only a minor reduction in surface-water supplies. Given the benefits gained from our world renowned agricultural industry, we believe the BOR and CVP should help assure water supply reliability to the best of their ability. Thus, we urge the project proponents to work closely with CALFED and local, state, and Federal entities in utilizing all water supply management tools and in developing demand- and supply-related programs to provide additional CVP system flexibility and alternative water supplies.

### **Environmental Justice**

1. Potential adverse impacts to minority and low income populations are identified due to the possible cumulative reduction of agricultural activities in the Central Valley (e.g., land retirement or fallowing, change in cropping patterns) (DEIS Chap. 3, pg. 3-427). We urge project proponents help develop programs, such as retraining or job placement programs, which would minimize these adverse impacts.

2. The DEIS clearly describes the cultural, social, economical, and religious importance of the Trinity River and its resources to Hoopa Valley and Yurok Tribes (DEIS, Section 3.6). In support of the Tribal Trust, we recommend the Tribes be fully involved in the selection and restoration of channel rehabilitation sites and additional measures that may be necessary to ensure downstream water quality standards are met. If appropriate, restoration should also include restoration of traditional fishing sites and other key culturally significant sites along the river.

## **General Comments**

1. The Trinity River Flow Evaluation Study provides a basis for the Preferred Alternative and DEIS evaluation. Flow recommendations in the Flow Evaluation Study are most often stated as the amount of cubic feet per second (cfs) discharge to the Trinity River. On-the-other-hand, the DEIS describes flow recommendations for each alternative in terms of acre-feet per year (af/yr). It is difficult to compare the two documents to ensure the flow recommendations are consistent. We understand that the use of different units may be a result of describing annual flows versus daily flows. We recommend the FEIS provide a table which compares the Flow Evaluation Study recommendations and the recommendations for each proposed alternative. The table should utilize the same flow designations (e.g., cfs or af/yr) and/or describe which values are addressing annual flows and those referring to daily flows. The table should also show all the different flows studied and their relative fishery benefits to allow comparison and to help answer questions such as “What percent of return of Trinity water maximizes fishery benefits?”.
2. We note that funding for land use and flooding mitigation is not available. We strongly urge project proponents to pursue such funding and to consider flexible, creative funding mechanisms. Funding options for land use and flooding mitigation should be fully described in the FEIS.
3. We also recommend the FEIS include a comparative description of the benefits provided by increased flows versus the channel rehabilitation projects. For instance, if funding is limited, would it be best to focus on increasing instream flows or on implementation of the channel rehabilitation projects?
4. The FEIS should describe the current status of Endangered Species Act consultations with the National Marine Fisheries Service.

## **Iron Mountain Mine Superfund Site**

Project proponents have asked the EPA Superfund Program for information about the potential availability for reprogramming of Trinity River waters which are currently discharged through the Spring Creek Power House (SCPH) and relied on to dilute discharges from the Iron Mountain Mine (IMM) Federal Superfund Site. This information is enclosed in Attachment A.

### Summary Paragraph for HQ OFA

EPA urged approval, funding, and implementation of the Preferred Alternative as soon as possible and the amendment of BOR's existing SWRCB water permit to be consistent with the minimum instream flows, minimum reservoir storage, and TRD operational requirements of this alternative.

cc:

Joe Polos, US Fish and Wildlife Service, 1125 16th St. Room 209, Arcata, CA. 95521, 707-822-7201, -Joe-C-Polos@fws.gov

Jim Bybee, National Marine Fisheries Service, 777 Sonoma Ave, Room 325, Santa Rosa, CA. 95404

James M. Stubchaer, Chairman, State Water Resources Control Board (SWRCB), PO Box 100, Sacramento, CA. 95812

Robert Franklin and James Roble, Hoopa Valley Tribe, Hoopa Tribe Fisheries Department, P.O. Box 417, Hoopa, CA. 95546  
Fax: 530-625-4995

Mike Belchik, Yurok Tribe, 15900 Highway 101 North, Klamath, CA. 95548

Tom Stokely, Trinity County Natural Resource Division (of the Planning Department), Trinity County, PO Box 156, Hayfork, CA. 96041-0156, fax 530-628-5800.

**bc: Fujii will send bc's via email to those below**

EDF

Enrique Manzanilla, CMD -1

Suesan Saucerman, WTR-5

Philip Woods, WTR -5

Janet Parrish, WTR -2

Richard Sugarek, SFP -7-2

Tom Bloomfield, ORC-3

Tim Wilhite, CMD-3

Linda Powell, WTR -10

David Farrel, CMD -2

Deanna Wieman, CMD-1

Chris Heppe, WTR-3

Karen Schwinn, WTR-1

Bruce Herbold, WTR-3

Carolyn Yale, WTR-3

Gail Louis, WTR-3



## **Attachment A - Iron Mountain Mine Superfund Site Information**

Project proponents have asked the EPA Superfund Program for information about the potential availability for reprogramming of Trinity River waters which are currently discharged through the Spring Creek Power House (SCPH) and relied on to dilute discharges from the Iron Mountain Mine (IMM) Federal Superfund Site.

At this time, given the available data and analysis, it is probably too optimistic to anticipate availability of Trinity River waters for reprogramming from its current Superfund use. EPA expects that the Superfund remedy will directly reduce the IMM copper, zinc and cadmium discharges to the Sacramento River by 95% or more, and will significantly alter

the pH of the IMM contaminated Spring Creek surface waters. However, the extent to which the SCPH waters may still need to be relied on to dilute the remaining IMM discharges will continue to be uncertain until the next phase of the IMM remedy is constructed and data can be collected.

Water from the Trinity River is currently regularly discharged through the SCPH to dilute and flush IMM contaminants (copper, zinc, cadmium) out of the Spring Creek arm of Keswick Reservoir. It may be possible to reprogram some/most/all of these waters in the future, but the extent to which this can be accomplished depends on the effectiveness of the next phase of the IMM remedy and corollary effects on downstream surface water chemistry in Spring Creek Reservoir. The next phase of the remedy is expected to go into effect in one to two years. EPA will then need two to three years to monitor to see how things are going.

Based upon our current understanding, EPA believes that there is a significant probability, but not a certainty, that the water chemistry of the IMM contaminated Spring Creek watershed will be significantly altered by the Superfund remedy beyond the projected overall metal reductions discussed above. EPA expects that the remaining 5% of the IMM metal loads may be reduced by metal precipitation in Spring Creek Reservoir related to pH effects. If this projected metal precipitation is significant, it would further lessen the need to rely on SCPH waters to dilute or flush IMM contaminants from the Spring Creek arm of Keswick Reservoir. However, the surface water chemistry of these highly contaminated Spring Creek surface waters is complex and EPA needs to acquire data to confirm whether or not significant metal precipitation will occur once the Superfund remedy is constructed.

The availability of Trinity River waters that are currently relied on for diluting IMM discharges for reprogramming is therefore uncertain until the next stage of the remedy goes into place and there is a chance to monitor its effects on downstream water quality. Based upon the time line discussed above, it would not be feasible to state with any certainty the extent to which these waters can be reprogrammed until three to five years from now.